



U.S. SECURITIES AND EXCHANGE COMMISSION

ORGANIZATIONAL STUDY AND REFORM

March 10, 2011

The information, approaches, methodologies and know how contained in all pages of this report represent the valuable, exclusive property of The Boston Consulting Group. Except as expressly agreed by The Boston Consulting Group in writing, nothing herein shall be construed to grant any ownership interests in or license to The Boston Consulting Group's trademarks, copyrights, patents, trade secrets, methodologies, know how, or any other intellectual property.

The Boston Consulting Group does not provide, or purport to provide, legal advice. Nothing in this report should be construed as an attempt to offer or render a legal opinion or otherwise engage in the practice of law.

The material contained in this document is being furnished pursuant to Contract No. SECHQ1-11-F-0001, and solely for the limited purposes described in that Contract. Third-parties may not, and it is unreasonable for any third-party to, rely on these materials for any purpose whatsoever. To the fullest extent permitted by law (and except to the extent otherwise agreed in a signed writing by BCG), BCG shall have no liability whatsoever to any third-party, and any third-party hereby waives any rights and claims it may have at any time against BCG, with regard to this document or other materials, including the accuracy or completeness thereof. Receipt and review of this document shall be deemed agreement with and consideration for the foregoing.

Table of Contents

1 Executive summary	5
2 Scope and approach	11
2.1 Overview	11
2.2 Selection of The Boston Consulting Group	11
2.3 Matters for study	11
2.4 Project scope.....	12
2.5 Project approach	13
2.6 Methodologies and tools	14
3 Context.....	19
3.1 Overview of the SEC	19
3.2 Reliance on self-regulatory organizations	20
3.3 The SEC’s external environment.....	26
3.3.1 Regulatory landscape	26
3.3.2 Capital markets trends	28
3.4 Constraints impacting the SEC.....	33
3.4.1 Congressional requirements	33
3.4.2 Governance requirements.....	37
3.4.3 Civil service laws and related factors	38
3.4.4 Funding predictability and funding levels	39
4 Assessment.....	42
4.1 Organization design	42
4.2 Personnel and resources	52
4.3 Technology and resources	58
4.4 Relationships with SROs	63
5 Strategic direction for the SEC	68
5.1 Structural disconnects to address.....	68
5.2 Overcoming disconnects	69
5.2.1 Relaxation of select constraints	70
5.2.2 Development of forward looking capabilities.....	70
6 Recommended initiatives.....	75
6.1 “No regrets” optimization.....	77
6.1.1 Reprioritize regulatory activities	79
6.1.2 Reshape the organization.....	84
6.1.3 Invest in enabling infrastructure	107
6.1.4 Enhance SRO engagement model	133
6.1.5 Implementation plan.....	141
6.2 Choice 1: Relax funding constraints to better fulfill current role	147
6.3 Choice 2: Change current role to fit available funding.....	150
7 Appendix	155
7.1 Organization design	155
7.1.1 Approach.....	155
7.1.2 Structure: Overview.....	156
7.1.3 Structure: Operating divisions and exam program	159
7.1.4 Structure: Operations management and support offices	163
7.1.5 Structure: Dodd-Frank mandated offices.....	165
7.1.6 Balance between regional offices and headquarters	169
7.1.7 Shape of the organizational pyramid	177
7.1.8 Communication and collaboration.....	178

7.1.9	Roles and accountabilities.....	181
7.1.10	Commission and staff interaction processes and delegation.....	182
7.2	Personnel and resources.....	182
7.2.1	Approach.....	182
7.2.2	Capabilities and competencies.....	183
7.2.3	Workload capacity.....	188
7.2.4	People pipeline and supporting HR processes.....	199
7.2.5	Workforce engagement.....	209
7.3	Technology and resources.....	212
7.3.1	Overview.....	212
7.3.2	Technology systems.....	213
7.3.3	OIT’s ability to deliver IT services.....	222
7.4	Relationship with SROs.....	232
7.4.1	Approach.....	232
7.4.2	SEC acting as a co-regulator.....	233
7.4.3	SEC acting as an oversight body.....	236
7.5	Additional analyses requested in Statement of Work.....	242
7.5.1	Exam program comparison.....	242
7.5.2	High-frequency trading assessment.....	257
7.6	Glossary.....	261

1 Executive summary

Section 967 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank or the Act) directed the Securities and Exchange Commission (hereinafter referred to as the “SEC” or “the agency”)¹ to engage an independent consultant to examine the internal operations, structure, and the need for reform at the SEC. The Boston Consulting Group (BCG) was selected for this study, which focused on four matters identified in the Statement of Work: organization structure, personnel and resources, technology and resources, and relationships with self-regulatory organizations (SROs). We have not examined the regulatory philosophy behind the SEC’s authorizations, whether the current statutory framework is optimal for regulating the US securities markets, or other related topics.

BCG conducted this study from October 2010 to March 2011. BCG leveraged a number of proprietary methodologies and tools, reviewed extensive documentation, undertook analyses, and conducted more than 425 discussions with the SEC, former SEC officials, regulated entities, peer regulators, SROs, and industry groups.

BCG recognizes that the SEC has recently undertaken several initiatives to increase its efficiency and effectiveness (including, for example, the reorganization of the Division of Enforcement (Enforcement) and the Office of Compliance Inspections and Examinations (OCIE), the rollout of the new Tips, Complaints, and Referrals program (TCR), and the hiring of a Chief Operating Officer (COO) and a new Chief Information Officer (CIO)). These initiatives were, in our opinion, necessary and are proving effective.

That said, our findings lead us to the following two key conclusions. One, the agency has significant opportunity to further optimize its available resources through implementing the initiatives recommended in this report. Two, Congress should reflect on whether or not such optimization adequately meets its expectations for the agency’s efficiency and effectiveness. If not, it should consider two further choices:

- Relax funding constraints to allow the SEC to better fulfill its current role
- Change the SEC’s role to fit available funding

The optimization initiatives we recommend fall into four major categories:

Reprioritize regulatory activities: The SEC should engage in a rigorous assessment of its highest-priority needs in regulatory policy and operations, and reallocate resources accordingly. The agency’s various divisions and offices have identified several high-priority regulatory activities they deem necessary to

¹ Reference to the “SEC” or “the agency” is not intended to include nor should it be construed to include the Commission or its Commissioners.

initiate or expand. Given that at least some of these activities are of greater priority than current activities (as suggested by the divisions and offices, themselves), this will enable the agency to reallocate its resources in a more effective manner.

The SEC is already making some difficult activity trade-offs, and this will need to continue, given the dynamic evolution of the securities markets. The agency should undertake a structured agency-wide process to evaluate and reprioritize its mission critical activities and re-align resources accordingly. In order to accomplish this, each division and office should classify its respective mission critical activities into the following categories:

- High-priority activities that SEC management deems critical to strengthen or commence
- Activities that the SEC could, if necessary, scale back or stop entirely
- Activities where the SEC could consider delegating responsibilities externally, e.g., to SROs
- Mandated activities where SEC management could request implementation flexibility

Reshape the organization: The SEC should reshape its organization structure, roles, and governance to maximize efficiency, effectiveness, and collaboration, as well as to drive continuous improvement.

- *Systematically redesign the organization:* The SEC should undertake a disciplined and transparent cascading process to re-design the organization, roles, accountabilities and decision rights to address the structural design of the operating divisions and support offices, as well as the strategy, design, and footprint of the regional model. This redesign must also take into account the reprioritization of activities and reallocation of resources described above, as well as the opportunity to streamline the management structure
- *Seek flexibility from Congress on certain Dodd-Frank mandated offices:* The SEC should seek flexibility from Congress to design its organization structure in a manner consistent with the activities required to be performed by the Dodd-Frank-mandated offices while avoiding unnecessary duplication
- *Review Commission- staff interaction processes and delegation of authority:* The SEC should review the Commission-staff interaction processes to provide clarity on delegated authority, increase transparency for the Commission in areas that are delegated, and increase efficiency in Commission-staff interactions where authority is retained by the Commission
- *Implement a continuous improvement program:* The SEC should undertake an ongoing initiative to systematically reduce costs throughout the organization through levers such as demand management, sourcing, and business process optimization

Invest in enabling infrastructure: The SEC should invest in key enabling infrastructure, including technology, human resources, risk management, and high-priority staff skills. In particular, the SEC should:

Technology

- *Enhance or develop key systems:* The SEC should enhance its existing technology and develop a new suite of systems to drive internal efficiency (e.g., by deploying workflow tools) and enable critical functionality (e.g., improve the availability of information by deploying a knowledge management system and sharing data across applications)
- *Enhance the Office of Information Technology's (OIT) ability to deliver technology solutions:* The SEC should undertake a multi-faceted transformation of OIT, which will improve the effectiveness of the information technology (IT) function to develop key technology capabilities
- *Establish a Technology Center of Excellence:* The SEC should establish a Technology Center of Excellence to institutionalize an awareness of the impact of technology on the securities markets (e.g., the effect of high-frequency trading on market structure) and improve the adoption of new technology at the agency (e.g., market data analytics)

Human resources

- *Execute the planned Office of Human Resource (OHR) redesign:* The SEC should undertake a multi-faceted transformation of OHR, through the execution of its restructuring plans, including a build out of the new HR Manager role, centralization of the SEC's training function, the development of a targeted recruiting process, and an enhancement of OHR's capability to support more effective people management processes within the agency
- *Complete roll-out of the new performance management system:* The SEC should accelerate the implementation of OHR's new performance management system; in concert, the agency should develop and link performance to a meaningful compensation strategy
- *Create a surge capacity plan:* The SEC should develop a short-term staffing plan that would enable the agency to navigate short-term surges in workload, particularly with respect to the Division of Investment Management and TM

High-priority staff skills

- *Enhance risk management:* The SEC should further develop and embed its risk management capabilities in the line organizations to better track key market trends and developments in a timely and actionable manner
- *Hire staff to build high-priority staff skills:* The SEC should fill vacancies caused by attrition with employees who meet high-priority skill needs

Enhance SRO engagement model: The SEC should implement initiatives to enhance its role as both an overseer of, and co-regulator with, SROs.

- *Strengthen oversight of SROs:* The SEC should enhance the disclosures SROs make about their regulatory activities, develop metrics and standards that SROs can be measured against, and enhance oversight of the Financial Industry Regulatory Authority (FINRA)
- *Centralize and coordinate approach to SRO interactions:* The SEC should create a central, coordinating point of contact for SRO interactions and implement structural measures that foster dialogue with SROs on market trends and related issues
- *Strengthen processes for SRO rule proposals:* The SEC should institute clearer processes for SRO rule proposals and the SEC’s review thereof

To drive disciplined implementation of these initiatives, the SEC should establish a dedicated Project Management Office with robust initiative progress reporting, as well as strong governance and oversight to enable rapid course correction in the event of progress being stalled. The initiatives are described in detail in Chapter 6, including benefits, implementation approach, costs, and risks.

Successful implementation of these initiatives will help drive both efficiencies and enhance capabilities. These efficiencies will be meaningful. Indeed, two of them—the continuous improvement effort and the organizational redesign—could release approximately \$50 million in resources on a run-rate basis that the agency can then re-deploy.

In addition, the initiatives will allow the SEC to strengthen five core capabilities, which are becoming increasingly important:

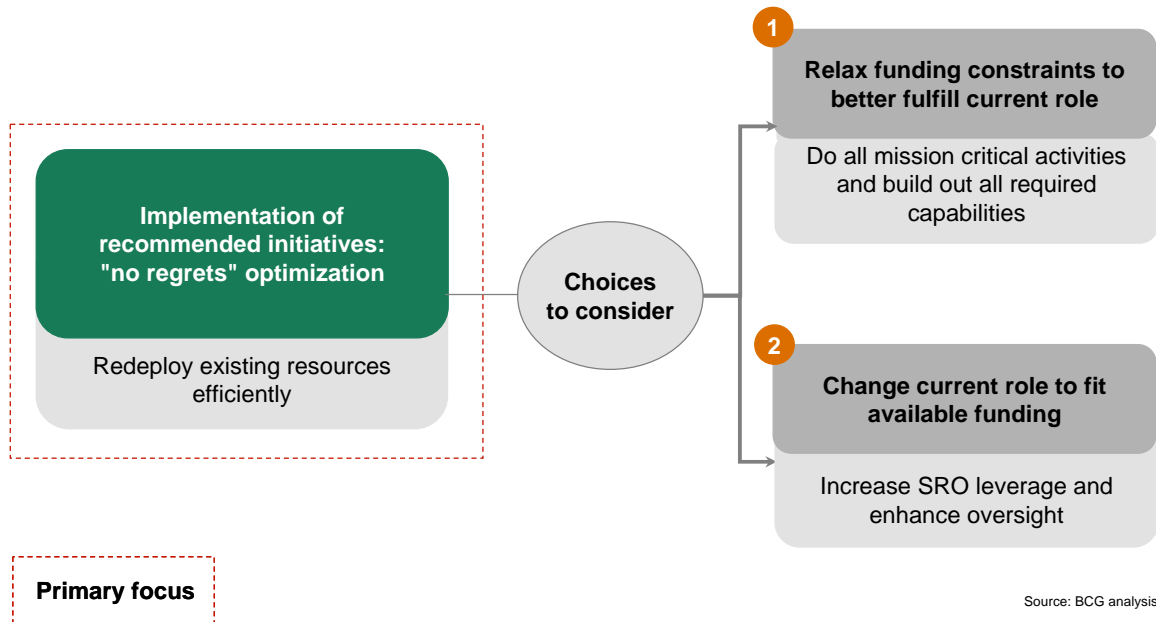
- **Risk IQ:** Understanding, monitoring and evaluating external and enterprise-wide risks—“connecting the dots”— and providing actionable transparency to appropriate levels of the organization
- **Ability to adapt:** Maintaining the ability to deliver on the mission effectively in a rapidly changing marketplace, e.g., through internal collaboration, faster decision-making processes, and efficient/flexible resource deployment
- **Leveraging communities of aligned interest:** Enhancing efficiency and effectiveness through alignment and collaboration with external partners (e.g., peer regulators and government agencies, SROs, auditors, academia etc.)
- **Technology sophistication:** Maintaining awareness of technology advances in the securities markets and deploying advanced technology capabilities that increase the SEC’s efficiency and effectiveness

- **Strong credibility:** Credibly demonstrating the SEC’s presence, power, and influence to all relevant stakeholders

However, these recommended initiatives will only take the agency so far, partly due to real constraints it faces: notably, Civil service laws limit the agency’s ability to attract, retain and manage personnel. There are also governance challenges inherent in the commission structure itself, which can slow decision-making and limit productive interaction between Commissioners and staff. In addition, some Congressional requirements (e.g., new Dodd-Frank mandated offices) limit the agency’s flexibility. Finally, given the highly dynamic nature of the market the SEC regulates, its dependence on the appropriations cycle has meaningful impact on its planning process.

Perhaps the bigger issue, however, is the inherent gap in capabilities that must be filled, and the change management challenge this poses to the agency. It is also likely that, even with reprioritization of regulatory activities, the agency may not be able to execute upon all the activities it deems necessary. Thus, even after the agency has implemented the recommended optimization initiatives, Congress may wish to consider two further options illustrated below:

Exhibit 1.1: Two choices for Congress to consider



The recommendations outlined above create real efficiency and effectiveness improvement for the agency. We would recommend that they be implemented immediately and rigorously on a “no regrets” basis, because they are foundational to the agency’s future and should, in any case, be the first major set of initiatives to be launched, whichever of the two further choices Congress may eventually make. This sequence is particularly important if only to reduce the net funding requirement were Congress to select Choice 1. A precise estimate

of the funding need can only be determined by an in-depth analysis of specific investment initiatives that target long-standing capability needs, future increases in market-driven workload, and the results of the optimization initiatives. Alternatively, in Choice 2, Congress could redefine the role of the SEC to better match its available funding.

* * *

Carrying out the SEC's mission requires both a regulatory framework with clear authorizations and a robust set of internal capabilities to deliver against these authorizations; our study addresses only the second of these factors. Ultimately, BCG recommendations on the latter should be considered together with the former for their collective impact on the agency's mission. While we recognize the inherent difficulty in developing metrics to measure performance against mission, true accountability is hard to attribute absent a thoughtful set of outcome-oriented metrics. If designed well, these metrics could then be cascaded through the agency to establish clear alignment at the division/office, manager, and individual contributor levels. The SEC already utilizes a set of performance measures that it reports on annually in its Performance Accountability Report, but BCG recommends that the SEC should conduct a study on the feasibility of more outcome-oriented metrics.

In the final analysis, however, it may be that the most important measure of success will be how effectively the agency addresses three chronic, structural disconnects it has historically faced and continues to face today; namely:

- Between stakeholder expectations and its legal authorizations,
- Between its authorizations and available resources, and
- Between the dynamism of the markets it oversees and the rigidities from its constraints and culture.

Excellence in the five core capabilities described earlier will go a long way towards addressing these disconnects.

2 Scope and approach

2.1 Overview

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank or the Act) was signed into law in July 2010.² As part of this reform, Congress directed the SEC to engage an “independent consultant of high caliber” to study the agency’s structure and operations, among other areas, and to propose alternatives and improvements.³

As enumerated in the Act, Congress identified the following means to address that goal: 1) eliminating unnecessary/redundant units at the SEC; 2) improving communication among the SEC’s offices and divisions; 3) establishing a clear chain-of-command, especially with respect to enforcement investigations and compliance inspections; 4) responding to high-frequency trading and other technological advances in the market; 5) refining the SEC’s hiring, workplace, and personnel policies by streamlining the hiring process for employees with non-traditional skill sets, further reforming compensation policies, and diversifying employee skill sets as necessary; and 6) evaluating the SEC’s relationship with self-regulatory organizations (SROs) and adjusting that relationship as appropriate.⁴

2.2 Selection of The Boston Consulting Group

The Boston Consulting Group (BCG) was selected to perform this study based on our knowledge and experience in securities markets, organizational design, people management, and technology—for both public and private sector clients. The former include other regulators and the latter span the range of registrants the SEC oversees.

2.3 Matters for study

The SEC specified four matters for study, consistent with Dodd-Frank:⁵

- 1) Organization structure
- 2) Personnel and resources
- 3) Technology and resources
- 4) Relationships with SROs

² United States. Cong. Senate. *Dodd-Frank Wall Street Reform and Consumer Protection Act*. 111st Cong., 2nd sess. Washington: GPO, 2010. Print.

³ *Dodd-Frank Wall Street Reform and Consumer Protection Act*. S 967(a)(1).

⁴ *Dodd-Frank Wall Street Reform and Consumer Protection Act*. S 967(a)(2)(A)-(G).

⁵ United States. U.S. Securities and Exchange Commission. *Statement of Work Form SECHG1-11-F-0001*. 13 Oct. 2010. Print.

Organizational structure: BCG analyzed the SEC’s existing organizational structure, with an emphasis on making recommendations and providing options for improving efficiency.⁶

Personnel and resources: BCG examined the SEC’s hiring authorities, personnel processes and practices, and the diversity of staff expertise and skills. BCG also evaluated the adequacy of existing resources devoted to personnel compensation and training.⁷

Technology and resources: BCG examined the SEC’s existing information technology personnel, resources, systems, and skill sets and assessed whether these are capable of meeting current and emerging technology needs. In addition, BCG assessed the effect on the securities markets of high-frequency trading and other technological advances, and determined what capabilities the SEC requires to monitor the effect of such advances on the markets.⁸

Relationships with SROs: BCG examined the SEC’s relationship with and reliance on SROs and similar entities that operate under the SEC’s oversight and are relevant to the regulation of securities and the protection of securities investors.⁹

2.4 Project scope

To carry out its mission, the SEC requires both a regulatory framework with clear authorizations, as well as a robust set of internal capabilities to fulfill this mandate. This study focuses on the latter.¹⁰ An analysis of the legal framework, regulatory philosophy, or performance of the SEC against its mission is beyond the scope of this study.

⁶ Ibid 6.

⁷ Ibid 6-7.

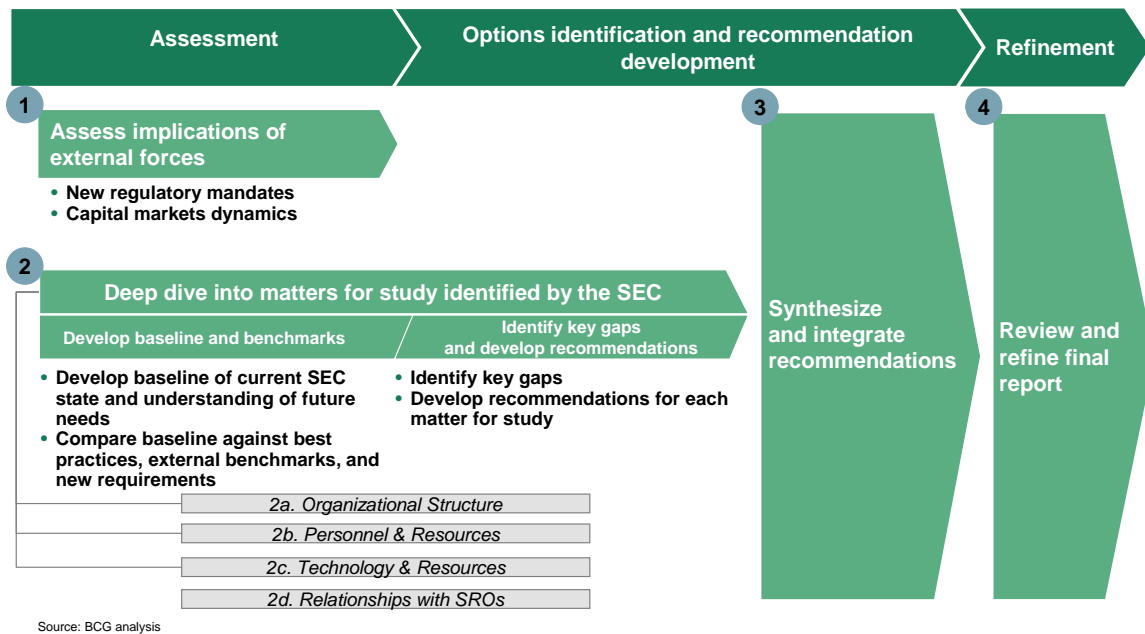
⁸ Ibid 8.

⁹ Ibid 9.

¹⁰ *Dodd-Frank Wall Street Reform and Consumer Protection Act*. S 967(a).

2.5 Project approach

Exhibit 2.5-1: Four modules in BCG's approach



Module 1: Assess implications of external forces

This module studied the business and regulatory context in which the SEC operates. The perspectives developed during this module informed subsequent modules of the project. We supplemented our experience in securities markets and financial regulation with targeted research and analysis to identify the key external factors affecting the SEC—for example, the emergence of high-frequency trading, the growth in the size, complexity, and global interconnectedness of securities markets, the evolution of risks in recent years, as well as the expansion of the SEC's mandate resulting from Dodd-Frank. An understanding of these external forces was critical to assessing the capabilities that the SEC needs.

Module 2: Deep dive into matters for study identified by the SEC

This module established a baseline assessment of the SEC along the four matters for study: organizational structure, personnel and resources, technology and resources, and relationships with SROs. This module also identified key gaps and developed recommendations for each matter for study.

Module 3: Synthesize and integrate recommendations

Recognizing the interconnectedness of the four matters for study, BCG approached them both collectively and as standalone topics. In this module, we synthesized the analysis and recommendations across the four matters for study. A draft version of the final report was completed during Module 3.

Module 4: Review and refine final report

In this module, we refined our analysis, recommendations, and final report.

2.6 Methodologies and tools

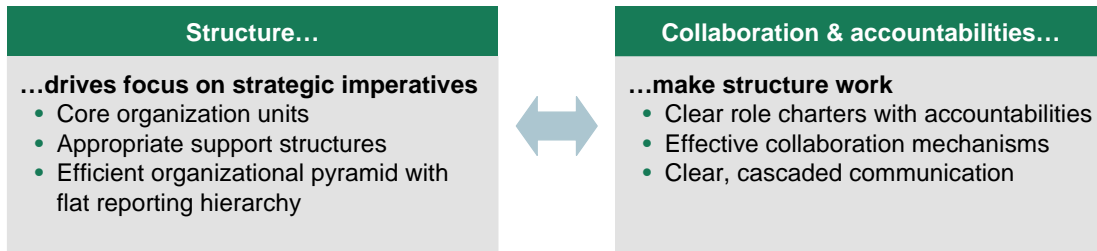
BCG conducted this study from October 2010 to March 2011. Per standard practice, BCG primarily worked on-site at the SEC's headquarters in Washington, DC. In addition, we engaged with the SEC's regional offices. BCG reviewed extensive documentation, undertook analyses, and conducted more than 425 discussions with the SEC, former SEC officials, regulated entities, peer regulators, SROs, and industry groups.

BCG used a number of proprietary methodologies and tools throughout the study to develop our findings. In particular:

Organization design: BCG undertook an assessment of the SEC's organization design using an adapted version of the proprietary methodology, *Designing for Performance* (see Exhibit 2.6-1). This methodology helped us assess the SEC's organizational structure as well as its collaboration mechanisms and accountabilities. For example, we mapped the reporting lines for each SEC employee in the five divisions and OCIE and assessed the shape of the organizational pyramid utilizing proprietary BCG methodologies. To complement the methodology, BCG conducted baseline interviews with the directors of each division and office at the SEC, including interviews with members from selected regional offices. These interviews were followed by multiple in-depth discussions with staff of key organizational units. Additionally, we leveraged various studies and reviewed organizational charts and key agency-wide processes, including the strategic planning and budget processes.

Exhibit 2.6-1: Designing for performance

High-performance organizations align building blocks of design with strategic imperatives

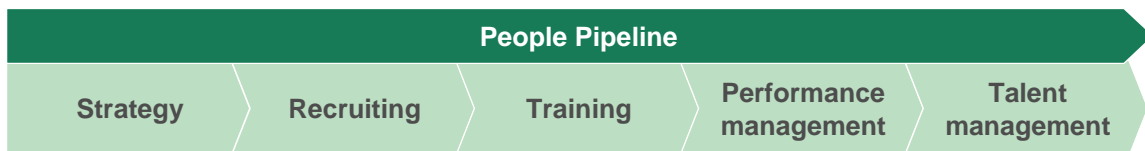


Source: BCG analysis and experience

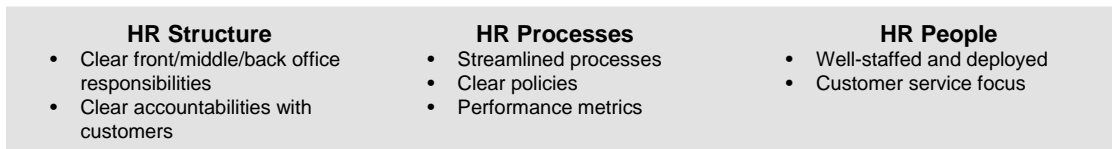
Personnel and resources: To assess the SEC’s personnel and resources, BCG used the approach described in Exhibit 2.6-2. As part of this effort, we conducted interviews, reviewed documentation, analyzed data, and gathered input from relevant stakeholders. We reviewed the SEC’s people pipeline and supporting human resources processes—including existing strategies, hiring authorities, recruiting processes, contracting processes, training resources and planning, performance management, and talent management. BCG also conducted a capability/competency assessment to collect feedback on staff skill sets, completed a workload modeling exercise designed to detail agency capacity, and employed our proprietary *Engaging for Results* methodology to assess employee engagement.

Exhibit 2.6-2: Approach to evaluating personnel and resources

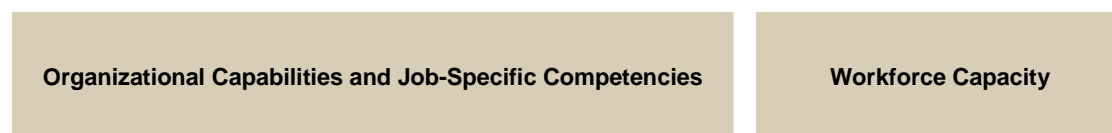
High-performance organizations require a robust people pipeline...



...supported by a well-functioning Human Resources organization...



...that can deliver the required skills and capacity to enable mission success...



...contributing to an engaged workforce

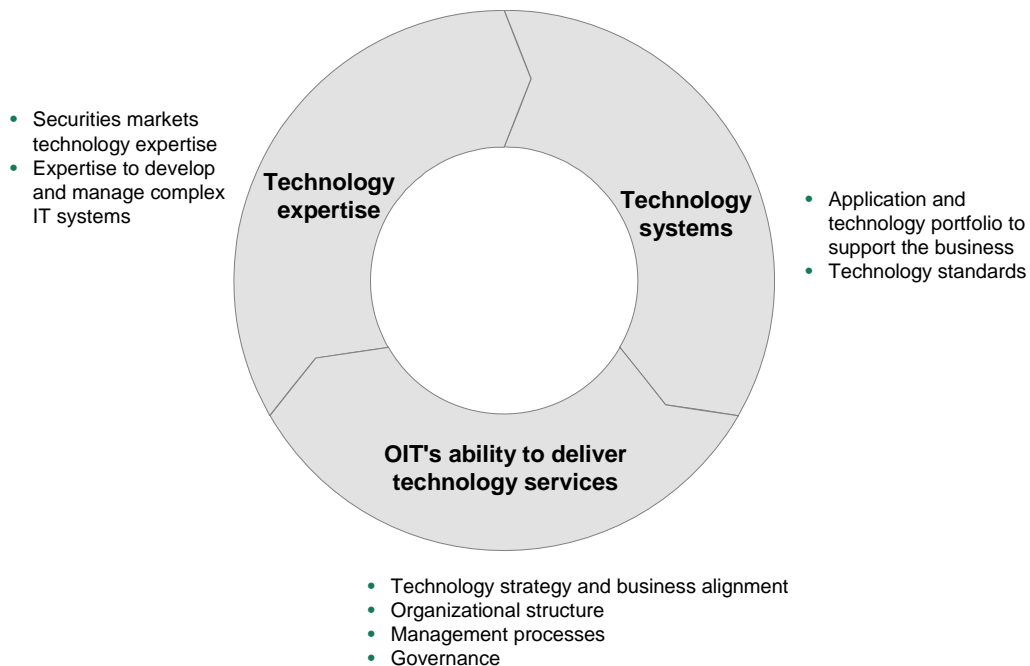
Source: BCG analysis and experience

Technology and resources: BCG conducted a targeted assessment of the SEC’s existing technology capabilities relative to its changing technology needs (see Exhibit 2.6-3). We focused on three aspects of technology:

- **Technology systems**, including the current capabilities and extensibility of the full range of technology services. The scope also included specific areas where technology investments are merited to reflect ongoing and emerging needs
- **The Office of Information Technology’s (OIT) ability to deliver information technology (IT) services**, including its process for addressing the SEC’s technology priorities, and its organizational structure, governance, management processes, and tools to support solution delivery
- **Technology expertise**, including expertise in existing and emerging securities markets technologies, the development and management of complex technology systems, and data analytics

Our review included the capabilities of both the SEC’s central IT group—OIT—and the “shadow” IT groups embedded in the agency’s various offices and divisions. During the course of this review, we conducted interviews with the OIT leadership team and managers, and representatives from the SEC’s divisions and offices, reviewed documentation for a targeted set of the SEC’s approximately 200 existing technology solutions and applications, and analyzed internal agency data.

Exhibit 2.6-3: Technology and resources assessment approach

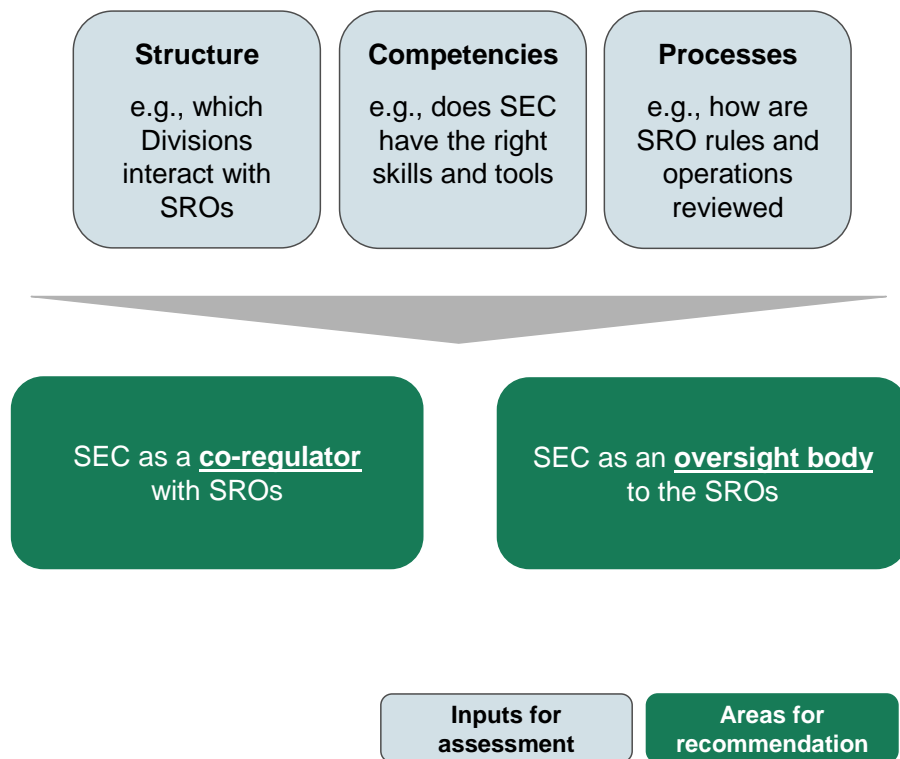


Source: BCG analysis and experience

Relationships with SROs: To examine the SEC’s relationships with SROs, BCG conducted interviews with SROs¹¹ and relevant peer regulators. We also interviewed SEC staff, primarily in the Division of Trading and Markets (TM) and Office of Compliance Inspections and Examinations (OCIE). BCG leveraged studies, articles, and memoranda drafted by the SEC, other regulatory agencies, and individuals and firms in the private sector. We reviewed documents and content available on the public websites of several broker-dealers, investment advisers, clearing agencies, and other regulated entities.

BCG assessed the SEC’s role as a co-regulator and oversight body for the SROs by evaluating the agency’s structure, competencies, and processes as they relate to SROs (see Exhibit 2.6-4).

Exhibit 2.6-4: Approach for evaluating SRO relationships



Source: BCG analysis

¹¹ NYSE Euronext, NASDAQ-OMX Group, Inc., Direct Edge Holdings, LLC, BATS Global Markets, Inc., International Securities Exchange Holdings, Inc., CBOE Holdings, Inc., Chicago Stock Exchange, Inc., The Financial Industry Regulatory Authority (FINRA), the Municipal Securities Rulemaking Board (MSRB), the Public Company Accounting Oversight Board (PCAOB), Depository Trust & Clearing Corporation (DTCC), and Options Clearing Corporation.

* * *

To recap, BCG used these tools and methodologies to assess the SEC across the four matters for study. We synthesized these assessments into the findings described in this report. Our approach considered the history of the SEC as well as recent improvement initiatives already undertaken by the agency. Wherever possible, we adopted a forward-looking perspective, evaluating the SEC in the context of the increasing demands and the constraints under which it operates.

3 Context

3.1 Overview of the SEC

Congress created the SEC under the Exchange Act of 1934 (the Exchange Act),¹² which together with the Securities Act of 1933 (the Securities Act),¹³ established the first substantive federal securities laws in the United States. The SEC's mission is threefold: protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation. While this mission has remained largely unchanged, the agency's regulatory authorities, along with the securities markets it oversees, have evolved.

Today, the SEC oversees a large, highly complex, and rapidly changing market in securities with a wide range of registrants including over 5,000 broker-dealers, over 11,000 registered investment advisers, investment companies, SROs (including exchanges and clearing houses), ratings agencies,¹⁴ public companies, and accounting and auditing firms. The equity market alone has a market capitalization of approximately \$14 trillion. Each year, the SEC adopts between 25 and 30 rules packages,¹⁵ brings between 575 and 675 enforcement actions,¹⁶ conducts over 1,500 exams, processes tens of thousands of requests for information from investors¹⁷ and over 1 million securities filings, considers over 2,000 SRO rule filings, and conducts training sessions for approximately 2,000 foreign financial regulators.

Dodd-Frank imposes significant new requirements on the agency, including mandatory organizational changes and the expansion of the SEC's scope of responsibility. It directs the SEC to create five new offices, four of which are to report directly to the Chairman. It also expands the SEC's mandate to include previously unregulated over-the-counter (OTC) swaps, derivatives markets, advisers to private funds, and municipal securities advisers.

Today, the SEC employs approximately 2,300 employees at its Metro DC offices, along with about 1,600 employees in 11 regional offices spread throughout the US. The Commission itself consists of five Presidentially-appointed Commissioners, each of whom serves a staggered five-year term. One Commissioner is designated by the President as Chairman, and no more than three of the Commissioners may belong to the same political party. The SEC staff

¹² 15 USC. Sec. 78a. 1934. Print.

¹³ 15 USC. Sec. 77a. 1933. Print.

¹⁴ Also known as Nationally Recognized Statistical Rating Organizations (NRSROs).

¹⁵ *SEC Final Rules*. U.S. Securities and Exchange Commission. Web. 1 Feb. 2011.

¹⁶ United States. U.S. Securities and Exchange Commission. *In Brief FY 2005 – 2010 Congressional Justification*. Washington: GPO, 2005 - 2010. Print; United States. U.S. Securities and Exchange Commission. *2010 Performance and Accountability Report*. Washington: GPO, 2010. Print.

¹⁷ United States. U.S. Securities and Exchange Commission. *In Brief FY 2012 Congressional Justification*. Washington: GPO, 2011. Print.

is grouped into five divisions and eighteen offices, 20 of which report directly to the Chairman. Three of the five divisions are organized based upon the primary body of law and types of regulated entities for which they are responsible: the Division of Trading and Markets (TM) regulates broker-dealers, transfer agents, and SROs for compliance with applicable Exchange Act provisions; the Division of Investment Management (IM) oversees investment advisers and investment companies for compliance with the Investment Advisers Act of 1940¹⁸ and the Investment Company Act of 1940;¹⁹ and the Division of Corporation Finance (CF) is responsible for enforcing the provisions of the Securities Act and the Exchange Act relating to public companies' disclosure requirements. The remaining divisions are organized according to their functional expertise: the Division of Risk, Strategy, and Financial Innovation (RSFI) oversees risk and financial analysis, strategic research, and financial innovation; and the Division of Enforcement (Enforcement) oversees all investigation and enforcement actions. The 18 offices oversee various internal and external functions, which range from examining regulated entities and liaising with the SEC's foreign counterparts to providing human resource and information technology support for the agency. The largest of these, the Office of Compliance Inspections and Examinations (OCIE), conducts examinations of various registrants and SROs.

The SEC is responsible for a comprehensive, end-to-end set of regulatory activities for the securities markets, including: 1) registering participants; 2) reviewing disclosures; 3) reviewing policy and rule proposals; 4) writing and interpreting rules; 5) assisting with monitoring the markets for systemic risk; 6) surveilling trading activity; 7) examining market participants; 8) overseeing securities clearing; and 9) enforcing the securities laws.

To carry out these responsibilities, the SEC deploys approximately 200 technological solutions. Three systems are of particular note: 1) EDGAR, which is a filing solution that supports the receipt and review of public filings; 2) Hub, which is a case management system supporting the enforcement of the securities laws; and 3) TCR (tips, complaints, and referrals), which is a tracking system for managing triage of tips, complaints, and referrals.

3.2 Reliance on self-regulatory organizations

Overview

To oversee the securities markets, the SEC leverages its own capabilities as well as those of SROs. These SROs are endowed by statute with regulatory authority over specific segments of the market. As discussed earlier, the SEC conducts market-wide regulation including policymaking, coordination with peer regulators, and systemic risk anticipation. To supplement these efforts, SROs conduct activities including registration of market participants, market surveillance, and the creation of rules to govern their respective jurisdictions. In

¹⁸ 15 USC. Sec. 80b. 1940. Print.

¹⁹ 15 USC. Sec. 80a. 1940. Print.

all cases, the SEC oversees these activities closely. The result is that the SEC supervises the SROs in some contexts (e.g., when inspecting SROs or approving SRO rule proposals) and regulates alongside them in others (e.g., when pursuing joint enforcement actions).

Throughout the study, we used a functional approach in determining what entities to classify as SROs, one that is broader than the statutory definition but better reflects the realities of securities regulation. We included as SROs all non-government entities that aid the SEC in fulfilling its mission and are subject to the SEC as their primary oversight body. For purposes of this report, we group the SROs into three broad categories:

- **Exchanges:** Nine companies—NYSE Euronext; NASDAQ-OMX Group, Inc.; Direct Edge Holdings, LLC; BATS Global Markets, Inc; International Securities Exchange Holdings, Inc; CBOE Holdings, Inc; National Stock Exchange; Chicago Stock Exchange, Inc; and Boston Options Exchange—have registered securities exchanges with the SEC. Many, such as NASDAQ-OMX, operate multiple exchanges while others, such as International Securities Exchange Holdings, LLC, operate only one. Although the holding companies themselves have no direct regulatory obligations to the SEC, their subsidiary exchanges do: under the Exchange Act, all exchanges are responsible for regulating their members for compliance with the securities laws and with the exchanges' own rules
- **Oversight organizations:** The Financial Industry Regulatory Authority (FINRA), the Municipal Securities Rulemaking Board (MSRB), the Public Company Accounting Oversight Board (PCAOB), and the Financial Accounting Standards Board (FASB) perform a range of regulatory activities for the organizations falling under their purview. Except with regard to the FASB, this range includes rulemaking, exams and enforcement (except with respect to the MSRB). The PCAOB and FASB are also standard-setting bodies
- **Clearing corporations²⁰:** The SEC has authority over nine clearing organizations under the Exchange Act, including the Depository Trust Company, the National Securities Clearing Corporation and the Options Clearing Corporation.²¹ These companies undertake significant regulatory duties

²⁰ Clearing agencies comprise both clearing corporations and depositories, per the SEC's definition; *Clearing Agencies*. U.S. Securities and Exchange Commission. Web. 1 Feb. 2011.

²¹ There are four additional entities that perform a similar function for swaps and derivatives and that have been exempted from registration, though they are subject to SEC oversight in different ways.

The SEC's reliance on SROs over time

While the core role of SROs has remained relatively constant, the nature of responsibilities granted to them has varied over the years. We measured the SEC's reliance on SROs based primarily as a function of two core metrics: the range of regulatory activities they undertake, and the entities for which they oversee those activities, as shown below in Exhibit 3.2-1.

In the years immediately following passage of the Exchange Act in 1934, SROs performed a more limited set of regulatory activities than today. The SEC's three key activities during this period were promulgating and approving rules, reviewing disclosures by public companies, and prosecuting violations of the securities laws. The two key SROs of this era—the National Association of Securities Dealers (NASD) and the New York Stock Exchange (NYSE)—wrote rules to govern market participants and conducted enforcement but did not (and to this day, do not) assist with reviews of issuers' public disclosures. Due to technological and legal limitations, regulators were not conducting surveillance in any comprehensive sense, and regular exams of market participants were not yet at today's levels.

Following a string of regulatory failures by the SROs, Congress passed the 1975 amendments to the Exchange Act. These amendments strengthened the SEC's oversight of the SROs considerably, and brought new regulated entities within the SEC's jurisdiction. Any new SRO rules or changes in existing rules were to be filed with the SEC and, with limited exception,²² no rule could take effect without SEC approval. All SRO disciplinary actions were also subject to SEC review. The amendments also subjected municipal securities dealers to SEC oversight for the first time. The other fundamental change during this period was the founding of the Depository Trust Company (DTC) and National Securities Clearing Corporation (NSCC) in the mid-1970s. Together, the DTC and NSCC ameliorated many back office and other administrative difficulties by, among other services, immobilizing security certificates at a central depository and simplifying trade settlement.²³ The two companies were also registered with the SEC under the Exchange Act as a new category of SRO, meaning that their rules and procedures became subject to SEC oversight.²⁴

Beginning in the early 1990s, many SROs began demutualizing into for-profit companies; by 2006, all but one of the national securities exchanges were demutualized.²⁵ The exchanges restructured their regulatory functions with a goal of ensuring that business operations did not unduly influence disciplinary

²² Under Section 19(b)(3)(A), some rules can take effect immediately upon filing. The SEC has 60 days to abrogate the rule, if it decides to do so.

²³ For a general description of the DTCC's history and functions, see *Responding to Wall Street's Paperwork Crisis*. The Depository Trust & Clearing Corporation. Web. 1 Feb. 2011.

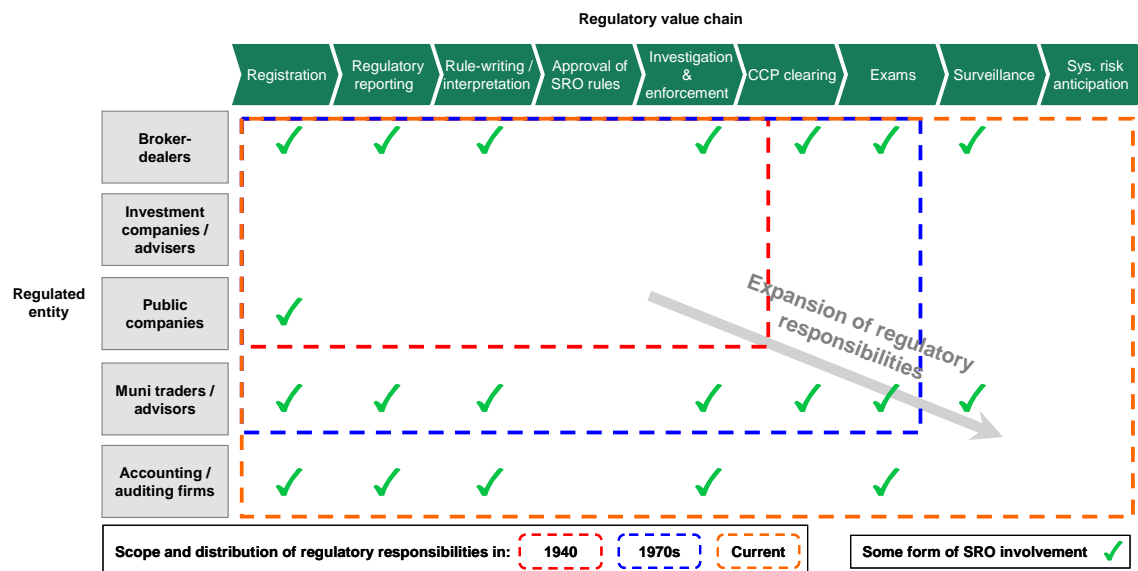
²⁴ The Fixed Income Clearing Corporation was added in 2003 to perform a similar function for debt instruments.

²⁵ CBOE was not demutualized until 2010.

responsibilities. Following a series of enforcement actions by the SEC, the exchanges began to segregate regulatory functions from business functions. In addition to these structural adjustments, to some extent there has also been consolidation of regulatory activities performed by SROs: FINRA was formed in 2007 as the successor to the NASD and in 2010, it completed a combination with parts of NYSE Regulation. Currently, FINRA provides regulatory services (including surveillance) for approximately 80 percent of the trading volume in US equity markets. Its other responsibilities include registering and examining all securities firms doing business with the public, writing and enforcing rules and the federal securities laws, and informing and educating the investing public.

The SEC currently leverages SROs for a broad range of activities. With respect to broker-dealers, SROs register members, review regulatory reports, write and interpret rules, conduct examinations, investigate and enforce rule violations, oversee all trade clearing and settling, and surveil all trading activity. SROs also play a significant role in overseeing public auditors: the PCAOB registers, conducts examinations, reviews regulatory reports, and writes rules for all accounting firms that conduct audits of public companies or broker-dealers. Finally, issuers who choose to list on an exchange are subject to SRO oversight in the form of the substantive listing requirements.

Exhibit 3.2-1: Evolution of SEC and SRO responsibilities over time



Source: BCG analysis

There is an active debate both in the US and abroad over the appropriate role for SROs in financial regulation. In addition to questions about what the SROs should do, there is no universally fixed definition of “self-regulation”:

governance models exist on a continuum, with purely voluntary industry regulation on one end and purely governmental regulation on the other.²⁶

The following discussion is intended primarily as an overview of the ongoing debate. The SEC recently released a study mandated under Dodd-Frank that analyzes, among other topics, whether self-regulation is appropriate with respect to investment advisers.²⁷ Another Dodd-Frank study to be performed by the Government Accountability Office will examine the governance of national securities associations such as FINRA.²⁸ These studies supplement the existing rich analyses of self-regulation in the securities markets.

There are a number of commonly-cited justifications for relying on SROs, the most prominent of which is that self-regulators have greater technical expertise because of their proximity to the industry.²⁹ According to this argument, complex industries such as the securities markets require regulators that are intimately familiar with day-to-day business issues and operations. That familiarity, the theory goes, grants certain informational advantages to self-regulators. First, industry participants may be better positioned to construct a regulatory structure that is appropriate to the industry. Second, self-regulators' proximity to the industry enables them to prescribe requirements—such as ethical and moral standards—that government authorities might not be able to impose effectively. Finally, once the regulatory framework is in place, self-regulators could monitor the industry more efficiently than government regulators. Self-regulation is also credited by some as being more cost-effective than direct government oversight. The more common variation on this claim is that self-regulation is usually funded by the industry being regulated, meaning that the cost of regulation is internalized.³⁰ While some of these costs might be passed through to a broader population, they are almost certainly more focused than the general taxation that would fund a government regulator.³¹ There has been, to date, no resolution on private versus public regulatory efficiency with respect to financial regulation, but the view that government regulators are overly bureaucratic (and therefore more expensive) nevertheless persists.³²

There are two incentives-based justifications for self-regulation. Under this line of thinking, self-regulation is appropriate where profitability is linked to the appearance of stability. Of course, this justification is strongest with respect to securities exchanges: exchanges require participation by a broad issuer/investor

²⁶ Ogus, Anthony. *Rethinking Self-Regulation*, 15 Oxford J. Legal Studies 97, 1995. Print.

²⁷ United States. U.S. Securities and Exchange Commission. *Study on Enhancing Investment Adviser Examinations*, Washington: GPO, 2011. Print.

²⁸ *Dodd-Frank Wall Street Reform and Consumer Protection Act*. S 964.

²⁹ See e.g., *Dodd-Frank Wall Street Reform and Consumer Protection Act*. S 964; Poser, Norman S. and James A. Fanto. *Broker-Dealer Law and Regulation*, 4th Ed. Print; Gunningham, Neil and Rees, Joseph. *Industry Self-Regulation: An Institutional Perspective*, 19 Law & Pol'y 363, 1997. Print.

³⁰ *Rethinking Self-Regulation*.

³¹ Note, of course, that this justification fades when the government regulator is funded by industry fees and not by tax revenues.

³² See e.g., Carson, John. The World Bank. *Self Regulation in Securities Markets*, Policy Research Working Paper 5542, 2011. Print.

base to be successful, and they will only do business with exchanges that are well regulated (or are at least seen as such, to the extent that there is a distinction). Government regulators, the theory goes, may therefore entrust exchanges with regulatory responsibilities since those exchanges are incentivized to enact appropriate regulation anyway. The second incentives-based justification is more broadly applicable and relates to industry cooperation: industry participants are seen as more likely to buy into regulation when it comes from within. In this view, voluntary self-regulation may be more amenable to market participants than government oversight, even when the level of “voluntariness” is only superficial. With respect to US securities regulation, this was at least partially the case: the Exchange Act provisions establishing the national securities associations were a means of garnering support from market participants.

There are, however, criticisms of self-regulation. The most fundamental critique is that self-regulation is not real regulation at all: at best, self-regulation is less effective than government regulation, and at worst, is merely “an illusion” meant to deflect calls for government oversight.³³ According to this view, industry participants have a conflict of interest (between commercial interests and those of the market) that might prevent them from imposing adequate regulatory strictures on themselves.³⁴ Critics of securities SROs, for example, claim that exchanges fail to discipline profitable or otherwise powerful members out of fear that excessive regulation will push business to more lightly regulated competitors.³⁵ By extension, there are concerns that powerful members may exert excessive influence to not only avoid regulation on themselves but also impose additional regulation on other, less powerful members.³⁶ Industry participants may also be unwilling—or even unable—to coordinate properly with government regulators, thus creating additional hurdles to market oversight. Some also criticize self-regulation as lacking sufficiently broad jurisdiction to regulate effectively. In the context of the securities markets, these critics claim that individual securities exchanges, for example, cannot effectively regulate across multiple venues. Finally, some observe that SROs govern with only limited democratic accountability: besides their respective boards of directors, SRO leadership answers only to the SEC, meaning that investors and other market participants have, at best, indirect democratic means for effecting regulatory change.

As discussed above, the SEC has been increasing its reliance on SROs, and recent discussions suggest the possibility that the SEC will rely on SROs in additional areas.³⁷ This is not a global trend, however; outside the US, the level of SRO reliance varies. The United Kingdom relied heavily on informal self-regulatory bodies to oversee its securities markets for hundreds of years. Following financial regulatory reform in 2000, however, the UK centralized

³³ Omarova. *Rethinking the Future of Self-Regulation in the Financial Industry*, 35 Brook. J. Int'l L. 665, 2010. Print.

³⁴ Ibid.

³⁵ Ibid.

³⁶ *Broker-Dealer Law and Regulation*.

³⁷ *Study on Enhancing Investment Adviser Examinations*.

nearly all regulatory responsibilities in a single body, the Financial Services Authority (FSA). This move largely dismantled the country's SROs, representing a shift away from the UK's relatively informal regulatory policies.³⁸ Similarly, the Hong Kong Exchange, Hong Kong's sole stock and futures exchange, ceded much of its regulatory responsibilities in 1989 to the then-nascent Securities and Futures Commission, which had been created in response to the 1987 market crash that shut down the country's exchange for several days.³⁹ In contrast, the Canadian financial regulatory framework, which is a hybrid of state- and federal-level agencies, relies on SROs for certain market oversight responsibilities in part to navigate the two levels of government oversight. The two most prominent Canadian SROs are the Investment Industry Regulatory Organization of Canada, which oversees all investment dealers and enforces stock exchange rules, and the Mutual Fund Dealers Association, which oversees all mutual fund dealers.⁴⁰

Ultimately, there is no universal "right" answer; each country determines the appropriate mix of governmental and non-governmental oversight of its securities markets based on relevant characteristics, including market size, investor base, and product types. Congress and the SEC must therefore determine the optimal level of reliance on SROs and, given that level of reliance, how the SEC should interact with SROs.

3.3 The SEC's external environment

The environment in which the SEC operates is changing rapidly, requiring the agency to adjust along several axes. Two prominent drivers of these developments are changes in the regulatory landscape and changes in the capital markets. In response, the SEC has had to take on new duties, develop new skills, and build new capabilities, all on an accelerated timeframe.

3.3.1 Regulatory landscape

Dodd-Frank calls for a significant restructuring of the US financial regulatory framework. The Act imposes new requirements on financial market participants and calls for enhanced coordination among regulators through vehicles like the Financial Stability Oversight Council and the Office of Financial Research. It also creates new regulators (e.g., the Consumer Financial Protection Bureau) and eliminates others (e.g., the Office of Thrift Supervision).

³⁸ Schooner, Heidi M. and Michael Taylor. *United Kingdom and United States Responses to the Regulatory Challenges of Modern Financial Markets*, 38 Tex. Int'l L.J. 317. 2003. Print; Alpert, Cory. *Financial Services in the United States and United Kingdom: Comparative Approaches to Securities Regulation and Dispute Resolution*, 5 B.Y.U. Int'l L. and Mgmt. Rev. 75. 2008. Print.

³⁹ Jordan, Cally and Pamela Hughes. *Which Way for Market Institutions: The Fundamental Question of Self-Regulation*, 4 Berkeley Bus. L. J. 205, 211, 2007. Print.

⁴⁰ Pan, Eric J. *Transnational Law and Contemporary Problems*, 19 Transnat'l L. & Contemp. Probs. 796, 2011. Print.

In addition, the Act imposes new requirements on the SEC, including mandatory **organizational changes** and **new responsibilities** in several key areas.

Organizational changes: The Act requires five new offices within the SEC, four of which must report directly to the Chairman:

- **Office of Municipal Securities:**⁴¹ Administers SEC rules for municipal securities broker-dealers, advisors, investors, and issuers and coordinates with the MSRB for rulemaking and enforcement actions
- **Office of Credit Rating Agencies:**⁴² Administers SEC rules for NRSROs and is required to conduct exams of each NRSRO at least annually and publish an annual report of exam results
- **Office of the Investor Advocate:**⁴³ Assists retail investors in their interactions with the SEC or SROs, identifying problems that investors have with financial service providers and investment products, and analyzing the impact of proposed SEC and SRO rules on retail investors
- **Office of Minority and Women Inclusion:**⁴⁴ Oversees all matters relating to diversity in management, employment, and business activities at the SEC, including contracting practices; assesses the diversity policies and practices of regulated entities
- **Whistleblower Office:**⁴⁵ Administers and enforces the Whistleblower incentives and protection included in Dodd-Frank; the head of this office will not report directly to the Chairman

New responsibilities: Under Dodd-Frank, the SEC has an expanded scope in a number of areas:

- **Private funds:** With certain exceptions, the Act requires managers of private funds to register with the SEC under the Investment Advisers Act, subjecting managers of those funds to enhanced SEC scrutiny and oversight for the first time⁴⁶
- **Derivatives:** The Act imposes new regulation on the swaps markets, dividing jurisdiction between the SEC and the CFTC. The Act calls for mandatory clearing through regulated central clearing organizations and mandatory trading through regulated exchanges or swap execution facilities. The Act also creates new categories of regulated market participants, including swap dealers and major swap participants⁴⁷

⁴¹ *Dodd-Frank Wall Street Reform and Consumer Protection Act*. S 979.

⁴² *Ibid* S 932(a)(8).

⁴³ *Ibid* S 915.

⁴⁴ *Ibid* S 342.

⁴⁵ *Ibid* S 924.

⁴⁶ *Dodd-Frank Wall Street Reform and Consumer Protection Act*. Title IV

⁴⁷ *Ibid*. Title VII, Subtitle A, Part II.

- **Credit rating agencies:** The Act subjects credit rating agencies to annual examinations, provides the SEC with additional enforcement tools, and requires additional rulemaking⁴⁸
- **Asset-backed securitization:** The Act requires heightened reporting and disclosure for asset-backed securities issuances. It also requires issuers to retain a portion of the credit risk associated with the instruments⁴⁹
- **Corporate governance reform:** The Act requires the SEC to draft rules governing executive compensation and other governance matters. These provisions include, among others, non-binding shareholder votes on executive compensation every three years, the independence of compensation committees, and certain prohibitions and reporting requirements for financial institutions regarding compensation structures⁵⁰

Given these mandates, the SEC must determine the extent to which trade-offs will be required to implement its new responsibilities and whether the agency has sufficient flexibility to deploy its resources efficiently.

3.3.2 Capital markets trends

In addition to the changes in the regulatory landscape, capital markets have also evolved. Over recent years, changes in the capital markets have been prompted by four key drivers: 1) new types of demand; 2) technology-led innovations; 3) changes in market structure; and 4) the response of market participants to regulatory change. In aggregate, these drivers have created a financial marketplace that is significantly larger, faster, and more complex than ever before.

New types of demand

Notwithstanding the credit crisis and its severe impact on capital markets, there has been a long-term structural expansion of the role of capital markets in the economy. This is exemplified by the growing breadth of participants who are accessing the capital markets for a variety of financial needs. These participants include public and private sector issuers seeking to raise financing in public markets, various types of investors (e.g., investment managers, mutual funds, hedge funds, sovereign funds, insurance companies, retail participants), market intermediaries (e.g., broker-dealers, investment advisers), markets (e.g., exchanges, ECNs, and dark pools), rating agencies, clearing houses, and depositories.

With a long history of innovation, capital markets have offered these participants an increasing number of asset classes/products (e.g., equities, fixed income, derivatives) and a means of accessing the markets (e.g., direct market access, high-frequency trading). These innovations have allowed participants to

⁴⁸ Ibid. Title IX, Subtitle C

⁴⁹ Ibid. Title IX, Subtitle D

⁵⁰ Ibid. Title IX, Subtitle E

better address a variety of financial needs, including capital raising, investing, risk management, speculation, and research. Consequently, while demand varies across different products and markets to reflect prevailing investment conditions, the aggregate size and complexity of capital markets has been growing consistently.

Rise in cross-jurisdictional market activity: Cross-jurisdictional market activity has increased, fueled by the growth of international markets and technological advances that have enabled easy access and faster communication. As a result, capital markets are becoming increasingly global. Issuers are accessing capital markets worldwide to get the best financing for their needs, investors are accessing global capital markets to find the best investment opportunities, and financial institutions have become global entities operating within and across a variety of regulatory jurisdictions.

The increase in cross-jurisdictional market activity has important implications for regulators, largely due to the complications it raises. In particular:

- Frictions caused by inconsistencies in the patchwork of regulation are more acutely felt by market participants
- Effective investigation and enforcement activity is more likely to require cross-border coordination among regulators
- The task of assessing and addressing systemic risk is made more complex

Technology-led innovations

Transition to electronic trading: As recently as a decade ago, the majority of equity share volume was executed manually on exchange floors or over the telephone. Today, as a result of advancements in technology and regulatory changes, almost all equity trades are executed electronically. This trend has spread to other asset classes as well, such as fixed income and foreign exchange.

Electronic trading is increasing the prevalence of Straight Through Processing (STP), whereby the entire transaction process for trades is conducted electronically, without manual intervention. When fully implemented, STP provides market participants with faster trade settlements, reduced settlement risk, and lower operating costs. STP is a critical enabler of high-frequency trading and other high-volume strategies: without it, back offices would struggle to support the volume of trades generated.

Emergence of high-frequency trading: High-frequency trading—a trading strategy that relies on the frequent turnover of many small positions based on the detection of minute inefficiencies or market patterns—has recently emerged as the largest driver of volume in the US equity markets. It is estimated that high-frequency trading currently accounts for approximately 56 percent of US equity

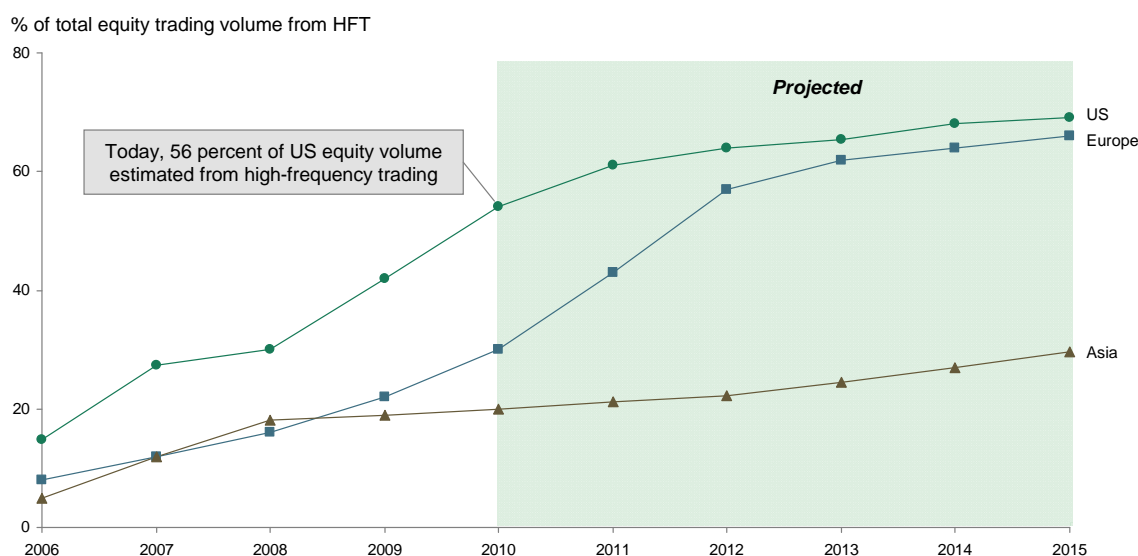
trade volume, up from 35 percent in 2005 (see Exhibit 3.3.2-1). High-frequency trading is a growing phenomenon in other markets as well.⁵¹

Factors behind the development of high-frequency trading include: 1) the modernization of the capital markets (e.g., decimalization, competition between trading venues, and direct market access); 2) increased computing power; 3) the broad availability of low latency bandwidth; and 4) advances in the field of complex event processing.

High-frequency trading is having a significant impact on capital markets. By driving the increase in volume over the last decade, it has helped deepen markets and tighten spreads. High-frequency trading is also seen as a potential source of market volatility and new risks of market manipulation. Additionally, by virtue of some common practices such as co-location, high-frequency trading arguably reduces market fairness.

For a further discussion of high-frequency trading, see Section 7.5.2.

Exhibit 3.3.2-1: Significant growth in high-frequency trading (HFT)



Source: TABB Group; BCG analysis

Increase in the effective use of information: Sophisticated market participants are employing new tools and methodologies for collecting, managing, and making use of all kinds of market data. Many automated high-frequency trading strategies employ real-time news feeds—including non-traditional information feeds—to better incorporate up-to-the-minute data into algorithms. The result is an increase in the speed and sophistication of market participants and trading strategies, which requires the SEC and other regulators to make corresponding increases in their own speed and sophistication.

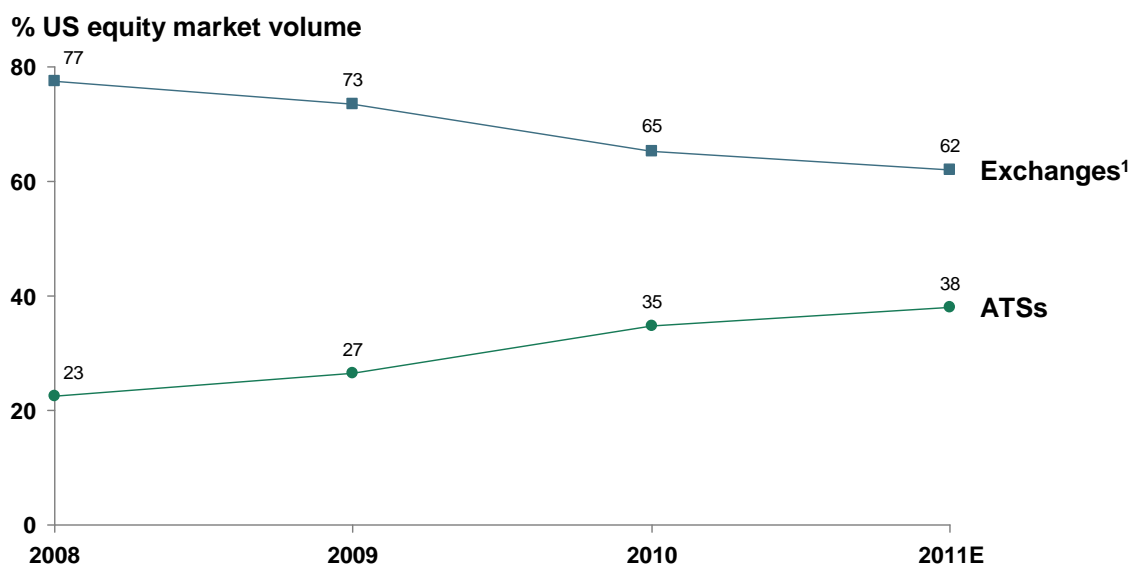
⁵¹ TABB Group.

Changes in market structure

Proliferation of new trading venues: Technological advancements, coupled with a series of regulations designed to foster competition and drive down trading commission costs (e.g., Regulation NMS), have given rise to new trading venues. These new venues—primarily alternative trading systems (ATs) such as electronic crossing networks (ECNs) and dark pools—have captured a significant share of the market from traditional exchanges (see Exhibit 3.3.2-2). Five years ago, 70 percent of volume in NYSE-listed stocks was traded on the NYSE; today, NYSE Euronext handles only 36 percent⁵² of those trades.⁵³ Meanwhile, the over 80 ATs that have emerged in recent years are expected to capture an estimated 38 percent of US equity volume in 2011.⁵⁴

The proliferation of venues has a number of implications for the capital markets. As volume shifts away from traditional exchanges, the capital markets become more fragmented. The result is increased complexity which leads to, among other consequences, opacity in price discovery, difficulties in tracking market manipulation, and challenges in collecting market data.

Exhibit 3.3.2-2: New trading venues carry larger share of US equities volume



1. Exchanges include BATS, NASDAQ, NYSE, NYSE Arca, and regional exchanges
Source: Tabb Group, BCG analysis

Emergence of new market access solutions: Sophisticated market participants are employing new means of accessing markets, with the intent of gaining flexibility and speed, and reducing transaction costs. These new market

⁵² This 36 percent includes Arca and Amex; NYSE alone is approximately 22%.

⁵³ "The New Speed of Money, Reshaping Markets." *New York Times* 1 Jan. 2011. Print.

⁵⁴ *Alternative Trading Systems Active Filers as of October 15, 2010*. U.S. Securities and Exchange Commission. Web. 1 Feb. 2011; Tabb Group Equities Liquidity Matrix; BCG analysis.

access solutions—in particular, co-location, direct market access (DMA), and sponsored access—help to enable or enhance new trading strategies such as high-frequency trading.

To develop a speed advantage, high-frequency traders are physically locating their servers as close as possible to exchange and ATS matching engines—in many cases, in the same data center. This practice, called co-location, can confer an advantage of a few milliseconds, which is potentially enough time to view and react to price quotes before the rest of the market.

Market participants employing sophisticated trading strategies are increasingly bypassing sell-side trading operations through DMA and sponsored access. With DMA, a broker-dealer provides market participants with direct access to its order routing infrastructure, giving the participant the same level of market access as the broker-dealer’s own traders. With sponsored access, this concept is taken further: market participants are allowed to interact directly with the exchange or ATS, just as the broker-dealer does. By cutting out the broker-dealer entirely, the market participant gains additional speed over both traditional market access and DMA.

These new market access solutions enable faster, more complex capital markets. They also have the potential to increase market risk and raise questions regarding fairness. The SEC’s recent ban on “naked” sponsored access, which allowed market participants to place trades that had not undergone a broker-dealer pre-trade risk assessment,⁵⁵ as well as the SEC’s concept release questioning the practice of co-location,⁵⁶ demonstrates regulators’ awareness of these concerns.

Market participant response to regulatory change

In the wake of the financial crisis, there has been a concerted effort among US and international regulators to strengthen the regulatory oversight of capital markets, harmonize the regulatory treatment of various risks across jurisdictions, and create institutions and capabilities to anticipate, mitigate, and manage future financial crises. This effort has already had significant implications for financial institutions. These institutions have placed greater emphasis on improving risk transparency and management, rationalized their business portfolios (e.g., exited proprietary trading pursuant to the Volcker Rule in Dodd-Frank), and are optimizing the deployment of capital (e.g., by following Basel III guidelines). In addition, some complex financial institutions are working with regulators to develop “living wills” as a potential approach to resolution in the event this were to become necessary.

⁵⁵ United States. U.S. Securities and Exchange Commission. *Risk Management Controls for Brokers and Dealers with Market Access*, Exchange Act Release No. 63241. 75 Fed. Reg. 69792. 2010. Print.

⁵⁶ United States. U.S. Securities and Exchange Commission. *Concept Release on Equity Market Structure*, Exchange Act Release No. 61358. 17 CFR 242. 2010. Print.

In summary, the advent of new types of demand, technology-led innovations, changes in market structure, and updates to the regulatory framework all have material implications for the SEC. It is paramount that the agency determine how these trends will—and should—affect its organizational structure, people, technology, and interactions with SROs.

3.4 Constraints impacting the SEC

In addition to the changing external environment, the SEC is impacted by a number of real and substantial constraints. Some are unique to the SEC while others are shared across government agencies. These constraints fall into two categories: non-funding and funding. The primary non-funding constraints are Congressional requirements, governance requirements, and civil service laws, and other related factors. The funding constraints include not only the funding level but also funding cycle predictability.

3.4.1 Congressional requirements

Legal jurisdictions allowing only for partial regulation or enforcement action

The legal jurisdiction of the SEC is still defined primarily by the Securities Act, the Exchange Act, the Investment Company Act, and the Investment Advisers Act. These acts gave the SEC jurisdiction over most aspects of the market—as it existed almost 80 years ago. Since then, much has changed and the recent financial crisis highlighted gaps in regulatory oversight. Efforts have been made to close some of these gaps (e.g., derivatives on securities), but from the agency’s perspective, coverage remains incomplete. For example, the SEC may regulate broker-dealers, but not their holding companies. In addition, it shares legal jurisdiction with the CFTC in that the SEC may regulate securities, but not all futures products derived from those securities. As a result, overlapping regulatory authority may lead to inconsistent rulemaking. Finally, the SEC has the authority to bring civil, but not criminal charges. In these ways, the SEC’s regulatory purview is constrained.

Organizational structure partly mandated by Congress

Dodd-Frank mandates four new offices that must report directly to the Chairman; however, the Chairman already has 20 direct reports. Moreover, many of the functions performed by these new offices already exist at the SEC. To comply with Dodd-Frank, the agency is required to reorganize its organizational structure, reallocate support resources to these small new offices, and reprioritize its focus on this work. As a result, these new offices create management complexity, duplication, and a need for new support capacity.

Exhibit 3.4-1: Constraints

Congressional requirements	<p>Legal jurisdictions allowing only for partial regulation or enforcement action</p> <ul style="list-style-type: none"> • E.g., SEC authority to regulate broker-dealers but not holding companies, securities but not futures • E.g., Enforcement authority to bring civil but not criminal charges <p>Organizational structure partly mandated by Congress</p> <ul style="list-style-type: none"> • E.g., four new offices mandated by Congress that report directly to the Chairman <p>Rulemaking agenda and priorities influenced by Congress</p> <ul style="list-style-type: none"> • E.g., conduct annual exams of all NRSROs as mandated by Dodd-Frank irrespective of risk profile • E.g., review annual reports of all public companies, including investment companies, at least every three years irrespective of risk profile <p>Administrative processes dictated by guidelines</p> <ul style="list-style-type: none"> • E.g., Paperwork Reduction Act, Administrative Procedure Act, Privacy Act, FOIA
Governance requirements	<p>Commission Structure and Government in Sunshine Act</p>
Civil service laws and related factors	<p>Complex hiring authorities</p> <ul style="list-style-type: none"> • E.g., Competitive Service hiring process <p>Limited compensation authority for specialized hiring</p>
Funding	<p>Unpredictability of appropriations process</p> <p>Funding level</p>

Source: BCG analysis

Rulemaking agenda and priorities influenced by Congress

Congressional mandates also influence the daily operations of the SEC. Dodd-Frank requires the agency to write over 100 new rules. In 2010, the SEC proposed 34 rule packages—two-thirds of which were Dodd-Frank related. In contrast, the SEC has historically proposed an average of 20 rule packages per year. The Act also requires that the SEC conduct annual exams of all NRSROs rather than permitting the agency to define a risk-based approach or the appropriate cadence. To fulfill the requirements of Dodd-Frank, the agency will need to significantly reallocate resources.

In addition to these new requirements, the SEC still has significant duties stemming from other regulations. For example, the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley) requires the agency to review the financial statements of all publicly-held companies, including investment companies, at least once every three years. Given its resource constraints, the SEC has only a limited ability to spend more time on companies that pose the largest risk for the securities

markets. In some instances, these requirements force prioritization of the agenda according to mechanical prescriptions.

Administrative processes dictated by guidelines

The SEC's daily administrative processes are also dictated, to a great extent, by requirements that are not specific to the agency.

The Paperwork Reduction Act of 1980 (PRA) mandates that the Office of Management and Budget (OMB) review and approve all information collection vehicles distributed by the federal government. The PRA has multiple objectives, which include reducing the paperwork burden for both the federal government and the general public, and maximizing the public benefit from collected information.⁵⁷ The information collection vehicles require submission to and approval from OMB. This submission must include the anticipated burden that the proposed rule would impose on a member of the public, as well as an estimate of the total burden the proposed rule would impose on a national basis.⁵⁸ The procedure that accompanies the rule proposal could be a driver of additional workload. In general, any proposed rule must solicit public comment on the paperwork collection; be revised to respond to public comments received; and then after adoption, OMB generally has another 60 days to approve the collection. As the PRA applies to many of the rules created, the cost to the SEC is twofold: the delay in the effective date of a new rule, as well as the added workload of the burden analysis and response to public comments. Additionally, the PRA restricts the number of respondents from whom the SEC can perform certain standardized data collections to nine, without receiving prior approval from OMB.

The Administrative Procedure Act of 1946 (APA) is another piece of legislation governing how the agency may propose and establish new regulations. The APA requires the agency to provide public notice and seek comments prior to the enactment of new rules. Additionally, it defines the process for judicial review of most rules in federal court. As a result, the SEC must make most rule filings available to the public prior to implementation—to ensure that the general public has an opportunity to voice complaints and objections—and it must respond to comments when adopting the final rule.⁵⁹ Finally, when involved in formal adjudications, the SEC must conduct public, formal hearings subject to judicial review. Should any party feel aggrieved by the ruling, they can request judicial oversight.⁶⁰ These review requirements add to the response time and workload of the agency and reduce its ability to adapt quickly in a changing environment. However, benefits of the APA include increased transparency of government agencies, the promotion of public participation in the rulemaking

⁵⁷ 44 USC. Sec. 3501. 1980. Print.

⁵⁸ Ibid.

⁵⁹ 5 USC. Sec. 500. 1946. Print.

⁶⁰ Ibid.

process, and the establishment of uniform standards for the conduct of formal rulemaking.⁶¹

The 1975 and 1996 amendments to the securities laws require an analysis of impact on efficiency, competition, and capital formation when adopting new rules. These responsibilities have been interpreted such that the agency produces cost-benefit and burden analyses to accompany most of its rules. As such, rulemaking teams must include not only policy experts but also data analysts and economists able to estimate the impact of any regulation, and produce a report suitable for public consumption justifying the consequences of new regulation. This activity engages nearly 50 percent of the analytic capacity within RSFI, thus reducing its ability to focus on other risk management activities.

The Privacy Act of 1974 governs the collection and use of personally identifiable information by federal agencies. Under the Privacy Act, individuals are protected from the disclosure of information without written consent, and are able to seek access to and request amendment of their records.⁶² For the SEC, employees are required to 1) preface any testimony taken or information requested with a standard disclosure identifying themselves as an agent of the SEC; and 2) reveal the purpose for which they are conducting an investigation. These disclosure requirements limit the agency's ability to conduct discreet investigations and, thus, pursue potentially fraudulent practices.

The Freedom of Information Act (FOIA) requires the SEC to respond to information requests regarding its regulated entities. While there is great value in transparency, over 70 percent of FOIA requests to the SEC are made by commercial organizations that use the data as part of their business operations. Another 20 percent of the requests are made by media organizations. Less than 1 percent of requests are from other government agencies or for educational purposes. In 2010, the SEC spent almost \$6.5 million responding to FOIA requests.⁶³ These funds are diverted from other critical activities and cannot always be recovered by the agency.

In summary, acts of Congress affect the structure, priorities, and processes at the SEC. These acts bring significant benefits to the general public, including an increased regulatory focus on key topics, enhanced agency transparency, and strengthened protection of individuals' privacy. However, these acts also impact the SEC's discretion to prioritize those activities that management believes are most critical.

⁶¹ United States. Department of Justice. *Attorney General's Manual on the Administrative Procedure Act*. Tom C. Clark. Attorney General, Washington: GPO, 1947. Print.

⁶² 5 USC Sec. 552. 1974. Print.

⁶³ United States. U.S. Securities and Exchange Commission. *Freedom of Information Act (FOIA) Annual Report for Fiscal Year 2010*. Washington: GPO, 2010. Print.

3.4.2 Governance requirements

In addition to providing the SEC with its mandate and overseeing its execution of that mandate, Congress has input into and oversight of the internal governance of the agency. This oversight comes in different forms, such as the Commission structure, the Government in the Sunshine Act of 1975 (the Sunshine Act), and the Government Accountability Office (GAO) and Inspector General (IG).

Commission structure and Government in Sunshine Act

The Commission structure—not unusual for regulatory agencies⁶⁴—is composed of five Presidentially-appointed Commissioners with staggered five-year terms. Of these appointees, one is designated by the President as Chairman of the Commission and serves as the agency’s chief executive. By law, no more than three of the Commissioners may belong to the same political party, ensuring the agency’s non-partisanship as well as a rich dialogue of key issues.⁶⁵

When interacting with the Commission, the SEC is subject to the Government in Sunshine Act of 1975. This act was created to provide greater transparency into governmental decisions. Affected agencies are required by law to conduct certain deliberations involving a quorum of members and regarding official agency business in an audience open to the public.⁶⁶ Although this requirement may seem somewhat trivial at first glance, it imposes a substantial burden on the agency. It prohibits, absent exceptions, more than two Commissioners from meeting at the same time with the staff to discuss official agency business. Other than a limited set of enforcement and confidential matters, any dialogue between multiple Commissioners and a staff member must occur in a public setting, limiting information exchange to formally scheduled sessions. As such, this is one driver contributing to a slower decision-making process.

Additionally, these restrictions imposed on sharing working results with the Commissioners could result in significant rework for SEC staff or an inefficient prioritization of rulemaking projects. Although the agency has developed several methods of communicating with the Commissioners less formally—staff members can meet with each Commissioner separately to get their input on rulemaking projects and can hold non-public briefings with the Commissioners, as long as the Commissioners refrain from engaging in substantive discussion on the presentation—these workarounds are insufficient, place a meaningful burden on the SEC’s resources, and further inhibit the agency’s speed of decision-making.

⁶⁴ The CFTC, for example, uses the commission structure, as do various other agencies, including the Equal Employment Opportunity Commission and the Federal Trade Commission, among others.

⁶⁵ *The Investor’s Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation*. U.S. Securities and Exchange Commission. Web. 1 Feb. 2011.

⁶⁶ Members defined as members of the collegial body governing the agency.

Potential risk aversion

In recent years, there has been an increase in audit activity by the GAO and IG. These audits and investigations are unequivocally important in ensuring the proper and efficient functioning of the agency. At the same time, these place demands on the SEC staff's time and attention, and can cause potential risk aversion.

3.4.3 Civil service laws and related factors

Certain aspects of civil service laws act as a material constraint on the SEC's degrees of freedom with regard to personnel management. These, together with related factors such as consultation and negotiation with the union, will need to be taken into consideration when implementing certain recommended initiatives.

Complex hiring authorities

As a federal agency, the SEC's hiring processes are governed by the civil service laws. The hiring authorities provided to the SEC vary depending on the position. The Competitive Service hiring process is the most constraining. This process applies to administrative and support positions such as human resources, business operations, financial management, acquisitions and administrative support. In this process the SEC is required to provide public notice and post the job on a national website for those searching for government employment. In addition, the agency applies the OPM minimum qualifications to each job posting; minimum qualifications are used to filter applications for qualified applicants. An assessment tool is created to score the qualified applications. OHR and the hiring manager define "categories", or ranges of scores, to group applications. Under the Competitive Service process, veterans' preference applies and veteran applications rise to the top category. For postings that attract significant interest, the Competitive Service process can become quite lengthy and cumbersome, sometimes making it difficult to find the right talent.

Recognizing these constraints, Congress provided additional authorities (e.g., Excepted Service Hiring Authority) that impose fewer requirements. However, in practice, these are strictly interpreted and not fully utilized for reasons further discussed in Section 7.2.4.2. Consequently, hiring authorities remain a material constraint.

Limited compensation authority for specialized hiring

The compensation system at the SEC is also governed by civil service laws. While the Pay Parity Act (see Section 7.2.4.2) gave the SEC more authority to differentiate its pay scale, the agency may need to revisit pay authorities to ensure its ability to attract and retain industry expertise.

As a related factor, similar to other federal agencies, the SEC operates in cooperation with a union,⁶⁷ whose collective bargaining agreement governs in part how the agency uses its resources and implements decisions. The union has the right to negotiate on the impact and implementation of management decisions as they relate to personnel. Timely and effective consultation and negotiation will be a prerequisite of successful implementation of personnel-related initiatives.

3.4.4 Funding predictability and funding levels

The SEC oversees a large, complex, and rapidly changing securities market. With its workforce of 3,900 employees, the agency regulates over 37,000 registered entities,⁶⁸ and the complexity of its role has increased as a result of both expanded legislated responsibilities under Dodd-Frank and the evolution of securities markets. The SEC has assumed these new responsibilities with its available resources: writing new rules, overseeing new financial products, and developing new offices, all while managing its previous workload and responsibilities.

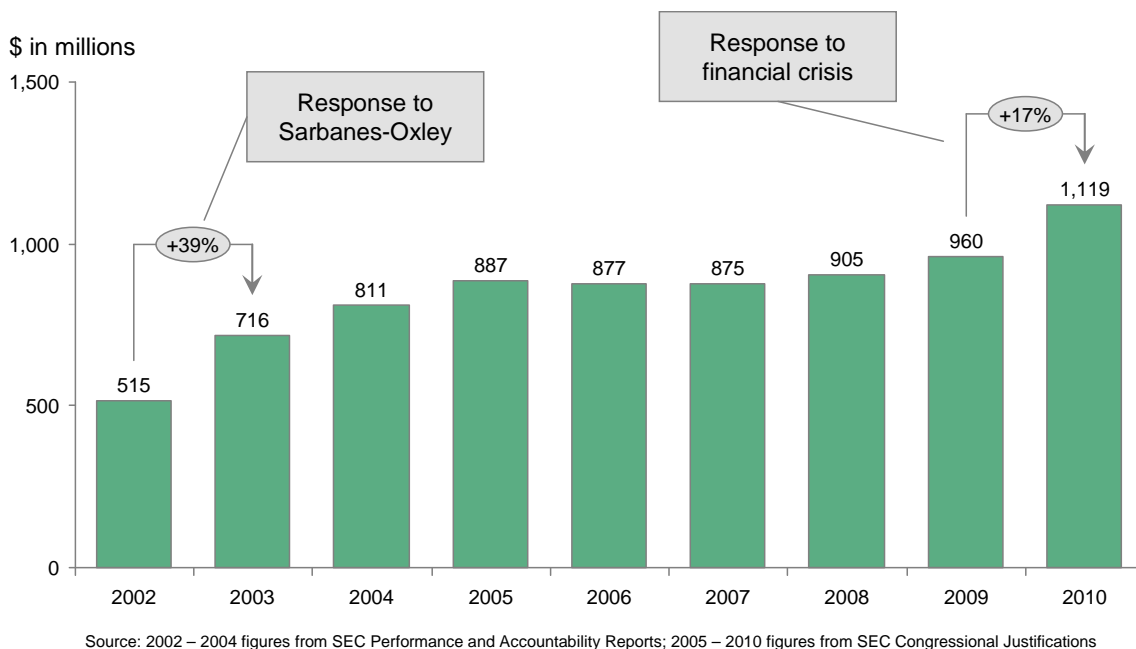
Historically, given regulation of this significance, the SEC's funding has grown to meet the new demands. For example, from 2002 to 2003 the SEC's budget climbed 39 percent, from \$515 million to \$716 million to meet the demands of Sarbanes-Oxley. The budget continued to grow as the agency managed the aftermath of the new regulation, increasing another 25 percent from 2003 to 2005. In 2006 and 2007, the funding allocated to the SEC shrunk slightly and despite gains in 2008 and 2009, has not kept up with inflation since 2005.⁶⁹ Despite the material increases in responsibility driven by Dodd-Frank and the concomitant increase in workload, the SEC's resources have not grown in proportion.

⁶⁷ National Treasury Employee's Union, Chapter 293.

⁶⁸ *In Brief FY 2010 Congressional Justification*.

⁶⁹ *About the SEC*. U.S. Securities and Exchange Commission. Web. 1 Feb. 2011.

Exhibit 3.4-2: SEC funding



In contrast, other regulators have increased resourcing to respond to the crisis or to changing regulatory environments. For example, the MSRB raised its annual fee for municipal securities dealers in October 2009 due to rising costs of regulation primarily associated with the implementation of its new Electronic Municipal Market Access system.⁷⁰ To effectively respond to the crisis and regulatory reform, the FDIC doubled its funding to \$2.3 billion in 2009. Finally, in addition to the FDIC, other federal regulators are self-funded and have more funding flexibility. For example, the OCC does not receive appropriations from Congress. Its funding level of \$791 million is derived primarily from assessments collected from the roughly 1,500 national banks that it regulates.⁷¹ The Federal Reserve funds its operations through fees levied on the banks it oversees.

In addition to the challenges associated with its level of funding, the SEC—like other government agencies—operates under an unpredictable budget cycle. The fiscal year begins in October but as of this report, the budget for 2011 has yet to be approved. Instead, the SEC is operating under last year’s budget, via a continuing resolution, until Congress completes the appropriations process. This circumstance is not unique to 2011. Over the last 11 years, the SEC has waited an average of three months beyond the start of its fiscal year to receive its budget allocation. In 2009, the continuing resolution extended 157 days into March.⁷²

⁷⁰ United States. Municipal Securities Rulemaking Board. “MSRB Increases Annual Fee for Dealers.” 13 Aug. 2009. Web. 1 Feb. 2011.

⁷¹ United States. U.S. Department of the Treasury. Office of the Comptroller of the Currency. *Annual Report Fiscal Year 2010*. Washington: GPO, 2010. Print.

⁷² United States. U.S. Government and Accountability Office. *Continuing Resolutions: Uncertainty Limited Management Options and Increased Workload in Selected Agencies*. Washington: GPO, 2009. Print.

While under continuing resolution, the SEC is constrained from making key long-term investments (e.g., recruiting, technology). In addition, the SEC—like other government agencies—must seek permission from Congress to shift funding within its budget through a reprogramming request.

4 Assessment

BCG conducted a broad assessment of the SEC across the four matters for study—organizational structure, personnel and resources, technology and resources, and relationships with SROs. While we note that the SEC has strengths and has successfully implemented key initiatives in each of these areas, there are also areas for development where further improvement is required. The following section includes an assessment along each of the four matters for study outlined in the Statement of Work.

4.1 Organization design

When creating the SEC in 1934, Congress vested it with the authority to regulate the securities markets under the Securities Act of 1933, the Securities and Exchange Act of 1934, and later the Investment Adviser and Investment Company Acts of 1940. The SEC has traditionally organized its divisional structure to align with this regulatory framework. This structure enabled the agency to develop proficiency in the applicable bodies of law, in turn creating industry expertise in several areas (e.g., broker-dealers and investment advisers). In 1971 and 1995, respectively, the SEC enhanced its functional capabilities by creating the Division of Enforcement (Enforcement) and the Office of Compliance Inspections and Examinations (OCIE). These changes to the organizational structure added substantial functional capabilities by building enforcement and exam programs that ranged across the whole spectrum of applicable laws and registrants. These units were intended to streamline and strengthen the agency's programs, improve resource allocation, and reduce duplication. Today, the majority of the SEC's enforcement and exam staff are located in the eleven regional offices. The SEC's regional model has historically sought closeness to the markets and entities regulated, and facilitated alignment with local co-regulators.

Over the past two years, the SEC has initiated a series of changes to its organization, including, but not limited to:

Restructuring the Division of Enforcement: In 2009-2010, Enforcement implemented a broad restructuring of its operations. The overarching goal of the effort was to increase the efficiency and expertise with which the Division investigates and brings its cases, so that time and resources can be devoted to matters with high urgency and impact. As part of the restructuring, Enforcement created a Managing Executive position for the Division (similar to a Chief Operating Officer) charged with responsibility for project management and workflow for various infrastructure and operational aspects of the Division.⁷³ Key initiatives of the restructuring included the creation of five national units

⁷³ United States. U.S. Securities and Exchange Commission. "Adam Storch Named Managing Executive of SEC's Enforcement Division." 16 Oct. 2009. Web. 1 Feb 2011.

dedicated to highly-specialized and complex areas of the securities industry, the streamlining of management and internal processes, the establishment of an Office of Market Intelligence responsible for collecting, risk-weighting, triaging, and referring TCRs, improvements to the Division's metrics, the devolvement of certain decision-making from Division senior leadership to senior officers, and the delegation of authority of certain matters from the Commission to the Division Director.⁷⁴ One result of these efforts was the establishment of a nationwide network of experts that connects regions and allows for a more flexible staffing model.

Reorganizing OCIE and establishing a National Exam Program: Over the past year, OCIE's new leadership team has undertaken a comprehensive self-assessment of its strategy, structure, people, processes, and technology to strengthen the exam program.⁷⁵ As part of its strategy going forward, OCIE is establishing an integrated National Exam Program to increase consistency, effectiveness, and efficiency across the regions. In addition, OCIE is working to implement an enhanced risk-focused exam strategy to better allocate available resources. Finally, OCIE is strengthening expertise through focused recruiting, specialty units, and enhanced training. Key initiatives to support these strategies include the creation of a national governance model to enhance oversight and communication between the regional and home offices, the implementation of a new Risk Analysis and Surveillance Unit to inform risk-based decision-making, the introduction of a Managing Executive position to improve the effectiveness and efficiency of operations, the recruitment of senior specialized examiners, and the development of standardized policies, procedures, and tools. In addition, the program increases flexibility by introducing a common staffing pool of examiners with different backgrounds and areas of expertise, and by breaking down the silos between investment adviser and broker-dealer exams. Based on a comparison of exam programs across peer regulators, we note several potential opportunities for improvement of the SEC's exam program in Section 7.5.1.

Creating the Division of Risk, Strategy and Financial Innovation (RSFI): RSFI, which was created in 2009 and is still in the process of being fully established, is charged with sophisticated analysis that integrates economic, financial, and legal disciplines—such as identifying new developments and trends in financial markets and systemic risks, making recommendations as to how these new developments and trends affect the agency's regulatory activities, and conducting research and analysis in furtherance and support of the functions of the agency.⁷⁶ The objective is for RSFI to look across all programs of the SEC to better understand systemic risks and to “connect the dots” across divisional silos.

⁷⁴ Khuzami, Robert. “My First 100 Days as Director of Enforcement.” *New York City Bar*. New York, NY. 5 Aug. 2009. Speech.

⁷⁵ di Florio, Carlo. “Remarks at the CCO Outreach National Seminar.” *SEC Headquarters*. Washington, DC. 8 Feb. 2011. Speech.

⁷⁶ United States. U.S. Securities and Exchange Commission. “SEC Announces New Division of Risk, Strategy, and Financial Innovation.” 16 Sept. 2009. Web. 1 Feb 2011.

Promoting a culture of collaboration: The agency has recognized the need for heightened collaboration, and senior management has stressed the importance of sharing information and ideas. One notable success of this approach is the cross-divisional tips, complaints, and referral (TCR) project. The objective of the project was to revamp the SEC’s technology and cross-divisional processes for handling the approximately 300,000 tips and complaints it receives each year. As with TCR, the agency has also established cross-divisional task forces in other key areas of focus, such as the Consolidated Audit Trail and Life Settlements. In addition, a series of newly established meetings should help facilitate collaboration. Examples include: 1) the monthly “Trends Meeting”, which is tasked with promoting open dialogue about market trends, systemic issues, and key emerging/potential risks affecting the markets that the agency regulates; 2) the regular meetings of all rulemaking functions instituted by the General Counsel to align and ensure consistency of the rulemaking efforts resulting from Dodd-Frank provisions; 3) the regular meetings of the agency-wide “Task Force on International Implementation” established by the Office of International Affairs to discuss international issues arising from Dodd-Frank rulemaking and facilitate awareness and consistency, where appropriate, across the rulemaking process; 4) regular coordination meetings between OCIE and Enforcement to discuss the status of examinations and enforcement referrals; and 5) OCIE and policy divisions have implemented several new coordination mechanisms (e.g., “One SEC” supervision strategies for large firms).

While these and other recent changes are steps in the right direction, there are further opportunities to shape a more efficient and flexible organization. Specifically, we examined the following seven organizational aspects and discuss each in detail below:

- *Operating division structure*
- *Operations management and support office structure*
- *Dodd-Frank mandated offices*
- *Regional model*
- *Organizational pyramid (in terms of layers and spans of control)*
- *Collaboration mechanisms*
- *Commission/staff interaction processes and delegation of authority*

Operating division structure

As it relates to the SEC’s operating divisions (including OCIE), we identified the following key challenges:

- ***Structural separation of broker-dealer and investment adviser regulation:*** The structural separation of regulatory responsibilities for investment advisers and broker-dealers into the Division of Investment Management (IM) and the Division of Trading and Markets (TM) aligns with statutory legislation even though, from a business standpoint, distinctions between

the two have become blurred.⁷⁷ As it stands, the agency’s structure is not fully aligned with the business realities of the industry it regulates. Absent structural changes, were the SEC to harmonize broker-dealer and investment adviser regulation as its staff report recently suggested,⁷⁸ it would have to bridge across the existing divisional boundaries—through enhanced collaboration mechanisms—between IM and TM. While the rulemaking functions for broker-dealers and investment advisers are clearly separated as discussed above, OCIE has taken steps to enhance the coordination between the exam functions across broker-dealer and investment adviser exams

- ***Structural distance between exam and rulemaking functions:*** The rationale for centralizing examiners in OCIE in 1995 included the need to streamline the exam process, reduce duplication of work, increase the quality of training, improve resource allocation, increase objectivity, and enhance coordination with regional exam staff, Enforcement, and other regulatory agencies.⁷⁹ Today, OCIE is also the key driver in implementing the National Exam Program, as discussed above. By centralizing exam functions in OCIE, however, the SEC makes an implicit trade-off. It gains some consistency and coordination as well as enhanced independence of the exam function but—by segregating the exam function from the policymaking functions of TM and IM—it distances rulemaking from exams, which can weaken the critically important information and knowledge flow between the two. In addition, it weakens a historical career path for examiners who could over time advance into rulemaking roles within the same division.
- ***Impact of Dodd-Frank mandates on the exam program:*** Section 965 of Dodd-Frank requires IM and TM to each establish a staff of examiners.⁸⁰ The distribution of exam resources between OCIE and the two divisions is not yet fully specified.⁸¹ However, as a result, exam staff at the agency could end up spread across the OCIE home office, regional offices, and operating divisions and would reside in all of the following units:
 - Division of Investment Management (as per Dodd-Frank Section 965)

⁷⁷ *Investor and Industry Perspectives on Investment Advisers and Broker-Dealers*. RAND Corporation, 2008. Print.

⁷⁸ United States. U.S. Securities and Exchange Commission Staff. *Study on Investment Advisers and Broker-Dealers*. Washington: GPO, 2011. Print.

⁷⁹ United States. U.S. Securities and Exchange Commission. *1995 Annual Report*. Washington: GPO, 1995. Print.

⁸⁰ Dodd-Frank Section 965 states that IM and TM must have a staff of examiners that “perform compliance inspections and examinations of entities under the jurisdiction of that Division and report to the Director of that Division.”

⁸¹ SEC management believes that the most effective and efficient means of implementing Section 965 would be to have a coordinating committee between OCIE, TM, and IM and have a limited number of examiners in TM and IM whose function would include liaising with OCIE and supporting the coordinating mechanisms noted above.

- Division of Trading and Markets (as per Dodd-Frank Section 965)
- Office of Credit Rating Agencies (as per Dodd-Frank Section 932)
- Office of Compliance Inspections and Examinations
- Eleven regional offices

Coordination between the exam staff in the home office and regional offices currently occurs through OCIE’s newly implemented committee structure, which connects regional and home office staff. As examiners spread across the agency, however, OCIE and the divisions will need to continue working together to jointly identify the roles, responsibilities, coordination requirements, and collaboration mechanisms needed for the various exam teams

Operations management and support office structure

Historically, the agency’s operational responsibilities were split between the Office of the Executive Director (ED) and the division directors. In fact, the Code of Federal Regulations gives significant operational responsibility to the ED.⁸² Given the necessary focus on the annual congressional appropriation cycle, internal budgeting process, and administrative duties, however, the ED has traditionally been left with limited time for the operational management of support offices. As a consequence, the support capabilities and offices (e.g., HR and IT) did not receive requisite attention and investment. In addition, the typical division director’s focus on policy and rulemaking tended to result in day-to-day operations within divisions moving further down the agenda.

The SEC’s senior management has recognized the importance of making the agency more efficient and effective. One critical step towards achieving this goal was the recent creation of a Chief Operating Officer (COO) position for the agency, with the explicit objective of enhancing the agency’s effort to refocus its resources and make the agency more efficient and effective.⁸³ Operational efficiency has also moved to the top of the agenda for most of the division directors, who created (or are in the process of creating) COO-like positions called “managing executives” within the major operating units (e.g., Enforcement and OCIE).

However, with the creation of a COO, responsibility for “maximizing the use of SEC resources by overseeing the strategic planning, information technology program, financial management, records management, human resources and administrative functions of the agency”⁸⁴ is currently split between the Office of the Executive Director (ED) and the Office of the COO. The ED manages the Offices of Human Resources and Administrative Services while the

⁸² United States. U.S. Securities and Exchange Commission. *Organization; Conduct and Ethics; and Information and Requests*. 17 CFR 200.13. 1995. Print.

⁸³ United States. U.S. Securities and Exchange Commission. “Jeff Heslop named SEC Chief Operating Officer.” 27 May 2010. Web. 1 Feb 2011.

⁸⁴ 2010 *Performance and Accountability Report*.

COO oversees the Offices of Information Technology and FOIA & Records Management Services. Together, the COO and ED oversee the Office of Financial Management (OFM). The current separation of responsibilities between the two has, at times, led to a lack of clarity in roles for the COO and ED. This situation weakens the authority of both roles and limits them from adopting a broader approach to improving efficiency across the agency's support functions and providing relevant guidance to the operating divisions. In addition, there is no explicit link between the COO organization and the managing executives in operating divisions.

In addition to the administrative offices mentioned above, the SEC has three offices that, in one form or another, perform external relations functions: the Office of Investor Education and Advocacy (OIEA), Office of Public Affairs (OPA), and Office of Legislative and Intergovernmental Affairs (OLIA). OIEA interacts with the public through its role as an investor advocate and educator. Meanwhile, OPA coordinates the agency's relations with the media and the general public, in the United States and around the world. Finally, OLIA acts as a liaison with House and Senate members and staff. In addition, the Office of the Secretary (OS) is responsible for the SEC's official website beyond its main responsibility for the procedural administration of Commission meetings, rulemaking, practice, and procedure. Elsewhere, various divisions and offices formally and informally communicate externally with different stakeholders as needed. Given the fragmentation of communication responsibilities across a number of offices, ensuring the consistency of messages and communication priorities can be difficult.

Dodd-Frank mandated offices

Under Dodd-Frank, the SEC is required to create five new offices, four of which report directly to the Chairman: 1) Office of Municipal Securities; 2) Office of Credit Rating Agencies; 3) Office of the Investor Advocate; and 4) Office of Minority and Women Inclusion. Creating these offices would increase visibility and focus on the activities and responsibilities of each respective office. However, many of the functions to be performed by these new offices are already performed within the SEC today. The congressionally mandated reporting of these offices to the Chairman would further drive organizational complexity by increasing the Chairman's number of direct reports from the current 20 to 24. In addition, separating the new offices from the existing support infrastructure would lead to increased resource duplication and fragmentation.

Regional model

The majority of the SEC's exam and enforcement staff is located in one of its eleven regional offices. The agency has recently taken steps to streamline and strengthen both programs by establishing consistent and interconnected nationwide programs, increasing specialized expertise, and enhancing staffing flexibility. We considered three components of the regional model: 1) the

location strategy; 2) the roles of regional versus home office staff; and 3) the regional structure and reporting relationships.

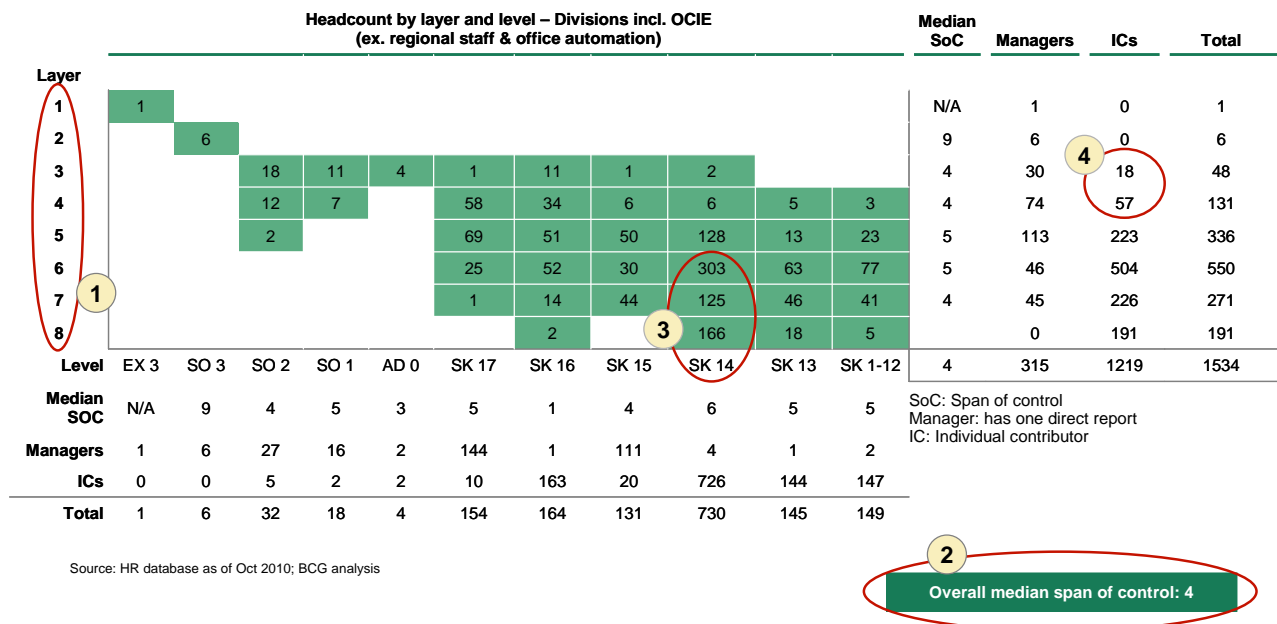
- **Location strategy:** The SEC does not currently have a clearly articulated agency-wide strategy for its regional office presence. This is partly driven by the fact that the regional offices are historically grown, with the majority dating back to the inception of the agency in 1934. However, changes in the SEC's external environment, the likely continued funding constraints, as well as the agency's focus on national programs, specialization, and flexibility require the SEC to assess whether the current approach best supports its national programs and the efficiency of the current regional model given the offices' different sizes and territories assigned. On a more practical level, the lack of a long-term plan makes it difficult for regional directors and offices to plan and adequately support regional staff
- **Role clarity:** While both OCIE and Enforcement have taken steps to clarify the specific roles assigned to their respective regional and home office staff, specific areas of tension remain. In Enforcement, for example, the assignment of cases between regional and home office staff has historically been a topic of ambiguity and contention. This is largely driven by two factors: 1) the agency's Washington, DC home office is the largest office, but it has no predetermined geographic jurisdiction; and 2) the home office is geographically close to several other offices. Since cases are usually assigned based on the geographic nexus of the activity underlying the case, home office staff—by default—work on cases that are technically in the jurisdiction of regional offices. In the past, this has led to concerns by regional staff that the home office acts as a separate, “duplicative” enforcement program that is able to target cases selectively, although whether this is more perception than reality is an open question. As a result of these and other considerations, Enforcement has undertaken an initiative to revise and make transparent the criteria by which cases based on tips, complaints, and referrals are assigned throughout the division. This and other initiatives reflect that both Enforcement and OCIE have started to clarify the respective roles of regional and home office staff, although more needs to be done. This includes areas where regional responsibilities overlap between Enforcement and OCIE, such as support needs that serve both programs or discretionary budget allocated to the region for both programs
- **Regional structure and reporting lines:** Currently, each regional office is headed by a regional director, who reports both to the Director of the Division of Enforcement and to the Director of OCIE. The regional director is responsible for regional operations and support functions. Associate directors in the regions oversee the local enforcement and exam programs in their respective regions and report directly to the regional director. Until recently, the link between OCIE and the regional exam program has been

weaker compared to that of Enforcement. This is due to the historic context under which the regional offices and Enforcement evolved and to the fact that regional directors traditionally have more of an enforcement background. This makes it more difficult for OCIE to ensure sufficient knowledge and expertise flow between the home and regional offices⁸⁵

Organizational pyramid

Looking at the SEC's organizational structure in aggregate across operating divisions and OCIE, the shape of its pyramid in terms of spans of control (SoC) and reporting layers,⁸⁶ we make four observations that are labeled below on Exhibit 4.1-1 and described in the following text:

Exhibit 4.1-1: Layer-level analysis for divisions and OCIE



- 1) The agency has eight layers, which creates significant separation between senior leadership and relatively senior staff operating deep down in the structure. An overly deep organization typically faces challenges in communication and engagement, as it is more difficult for information to travel up and down the organization
- 2) While they vary by division and office, spans of control (SoC) are relatively low within the agency, which contributes to the high number of layers described above. Many organizations face this issue as structures change over time, new responsibilities are absorbed, and

⁸⁵ The new national governance model that OCIE implemented this past year has begun to improve oversight, coordination, and accountability (including the participation of regional exam staff on national governance committees). These efforts should be continued and monitored.

⁸⁶ Layer/level analysis was completed for headquarters staff only given data availability.

high performers are promoted. The agency's median SoC is four across most layers. Although a narrow SoC may appear to lessen the burden on supervisors, it also introduces the potential for unnecessarily high levels of oversight. Especially with relatively small team sizes, managers continue to maintain a high degree of involvement with the content, potentially at the expense of developing people management, leadership, and operations skills

- 3) More than 80 percent of often long-tenured SK-14 lawyers, accountants, and economists sit in the lower layers (layers six through eight) of the organization. With significant portions of senior staff quite deep in the organization, the agency could potentially be under-leveraging this experienced talent, which is compensated at a relatively high pay-grade
- 4) Over 40 percent of employees in layers three and four are non-managerial staff (i.e. individual contributors (ICs)). Having these ICs high in the organization contributes to lower SoC throughout the top and middle of the organization. Low spans of control perpetuate gaps in management capabilities and empowerment, incenting managers to engage in detailed content instead of providing direction and developing employees

Collaboration mechanisms

Collaboration is critical at the SEC and enables the agency to connect the dots across its divisions and offices. Collaboration is also needed to ensure consistency in the regulation of similar entities, enable communication between home and regional offices, increase the effectiveness of special projects, and enhance alignment between the business divisions and support offices. The SEC's senior management has recognized the need for heightened collaboration, as evidenced by the new TCR system, the monthly "Trends Meeting", rulemaking function meetings, and agency-wide task forces. However, despite these advances, structural, cultural, technological, and process driven aspects continue to impact communication and collaboration.

The SEC's segmentation into units is partially aligned with the relevant legislation, and each division's internal structure is tailored to division-specific needs with historically limited emphasis on formalized cross-divisional collaboration mechanisms. As a result, communication tends to be ad hoc and based on personal relationships. In conjunction, the SEC's traditionally siloed nature is driven by several cultural factors, including the agency's informal incentive structure and its hierarchical culture. Enforcement success, for example, was informally measured by statistics (i.e. number of cases) and the relative profile of cases, resulting in internal competition for "hot" cases, an aversion to take on resource and time intensive cases, and limited information sharing across teams. Enforcement has since taken steps to address this issue by including collaboration across regions and units in its processes and measuring

qualitative factors. Meanwhile, the agency has a hierarchical culture—more prevalent in some divisions than others—which too impairs collaboration. While good communication and collaboration exists at the most senior level, information does not always cascade through the chain-of-command as efficiently as it should.

Effective communication and cross-divisional collaboration is further affected by the SEC's lack of supporting technological infrastructure, which does not readily enable information sharing across the agency. In many cases, each division maintains its own independent database, and the agency still depends largely on written memos to track and communicate staff actions or key decisions. Some unpredictability in its workload and resourcing has also prevented the agency from fully utilizing mechanisms that usually foster collaboration across divisions, such as the strategic planning process. The SEC's latest strategic plan was developed collaboratively with an Executive Steering Committee and cross-divisional working groups; however, due to uncertainty around Dodd-Frank and funding, it was not fully communicated to staff and as a result, is not used to guide divisional strategies, goals, or metrics.

Commission/staff interaction processes and delegation of authority

The role of the Commission has changed over time. Historically, Commissioners were closely involved in day-to-day decision-making. However, as part of the Reorganization Plan 10 of 1950, all executive functions were consolidated under the Chairman. In addition, a 1962 amendment to the Exchange Act allowed the Commission to delegate responsibilities other than rulemaking to SEC staff. The Commission has since delegated many decisions to the staff, such as the authority to approve certain types of exemptive orders, issue no-action letters, and approve SRO rule filings. In addition to rulemaking and novel exemptive relief, the Commission retains authority over decisions on enforcement actions. While the Commission has delegated to Enforcement the authority to 1) submit witness immunity orders to the Department of Justice, and 2) issue formal order of investigation, including the accompanying subpoena power, it approves every enforcement action, from settlement to litigation. This may be one area for potential further selective delegation.

As in every situation with delegated authority, the SEC faces two sets of challenges. Delegated authority helps increase the agency's efficiency of operations and speed of decision-making by empowering staff. However, where authority is delegated to staff, Commissioners may have limited visibility into decision-making without formal mechanisms to inform the Commission of ongoing issues. Conversely, where authority is retained by the Commission, it has substantial control over decision-making. However, the process of gaining input and approval can be cumbersome and time-consuming. This is largely driven by the constraints of the Sunshine Act, but it requires additional staff resources and could require additional time, reflecting the Commission's own capacity.

Summary

While the SEC has done much to improve organizational efficiencies and communication, going forward it will have to make fundamental decisions regarding the agency's operating model. Key areas of focus will include redesigning the structure of the operating divisions, increasing the focus on operational management and efficiency, formulating a clear strategy and design for the regional model, and reviewing the interaction between the Commission and SEC staff. These topics will be described in greater detail in Chapter 6 of this document.

4.2 Personnel and resources

Having the right people with appropriate skill sets and experience levels is crucial for the SEC. Nearly 70 percent of its \$1.1 billion budget is allocated to personnel, demonstrating the importance of talent to the agency.

Currently, the agency has a highly skilled workforce. For example, fully 84 percent of employees hold a bachelors degree or higher. Over 1,600 employees, or 41 percent of the agency workforce, have a professional degree; another 500 have Masters Degrees and over 50 hold PhDs.⁸⁷ In addition, the agency has a very experienced workforce. Over half of employees had experience in securities markets before joining the SEC.⁸⁸ Employees, on average, have 10 years of SEC experience, and 40 percent of the workforce has been with the SEC for greater than 10 years.⁸⁹ The tendency to remain at the SEC is also evident in its attrition levels—voluntary attrition at the SEC averaged 3.6 percent from 2005 to 2009,⁹⁰ relative to 7.1 percent for the federal government over the same timeframe.⁹¹ This relatively low attrition enables the agency to build a significant experience base with institutional memory. Furthermore, the SEC is an attractive place to work. Compensation levels for most current roles are in parity with or above other FIRREA agencies. The flexible work arrangements (e.g., alternative work schedules, telework) attract a variety of diverse talent; currently, over 40 percent take advantage of the telework options.⁹²

The agency has built upon these strengths, undertaking several initiatives to further improve its personnel and resources. While this progress is significant, more can be done to improve resourcing, particularly with respect to:

- *Organizational capabilities*
- *Job-specific competencies*

⁸⁷ SEC HR database 27 Oct. 2010.

⁸⁸ BCG Capability and Competency Survey 2011.

⁸⁹ SEC HR database.

⁹⁰ SEC vacancy database 2010; SEC FY2009 Turnover; SEC Official Turnover 2005-2008.

⁹¹ BLS JOLTS Quits data 2000-2010.

⁹² United States. U.S. Office of Personnel Management. *Status of Telework in the Federal Government*. Washington: GPO, 2009. Print.

- *Workload capacity*
- *People pipeline and supporting HR processes*
- *Workforce engagement*

Organizational capabilities

As described more fully in Section 7.2.2, BCG conducted an assessment of the agency's organizational capabilities and individual competencies, drawing on perspectives from the SEC's senior management. There are several areas where more expertise is desired: risk management, technology sophistication, data analytics, and industry expertise. For example, over half of existing risk management capabilities across the agency were rated as average or below by senior management. In RSFI, just four employees out of 59 have prior experience in risk management. Effective risk management capabilities across multiple divisions could enable the agency to better manage several types of risk, including systemic, mission-related, and operational risk.

In addition, the agency's understanding of new technologies has not kept pace with the expertise of market participants. For example, high-frequency traders employ sophisticated and highly-technical trading algorithms; today, the agency does not have sufficient in-house expertise to thoroughly investigate the inner-workings of such algorithms, should the need arise. While this example highlights a specific skill gap, it is indicative of a broader area for development. According to senior management, the agency's employees have only a "basic" skill level with regard to technology. As a result, the SEC is not fully equipped to regulate and proactively act on technology-driven market activity.

SEC senior management also believed that staff supports decisions with analytics where possible, but that staff is short specific expertise, training, resources, and tools to provide top-quality analytics. In addition, managers viewed existing analytic capabilities as average or below. This together suggests that existing employees have tried to bridge the gap on their own, but are likely responding to a need outside their existing skill sets. Further development of analytic capabilities is necessary to perform simulations and analytics that help the agency spot market manipulation, fraud, and other trends.

Specialized industry expertise is also required to deliver upon the expanded scope mandated under Dodd-Frank. In particular, OTC derivatives, asset-backed securities and corporate governance were all identified by SEC leadership as high-priority areas of expertise with the largest need.

Although capability needs still persist, the SEC has taken proactive steps to address them. For example, the creation of RSFI is a first step towards building analytic and risk management capabilities at the agency. In addition, Enforcement has developed specialized units with industry expertise to focus on structured products and municipal securities. Similarly, OCIE has created specialized working groups and recruited senior specialized examiners to cover

specific topic areas (e.g., structured products, trading practices, valuation). The agency has also begun hiring additional expertise in hedge funds and Value at Risk modeling. However, making further progress remains difficult. As described above, the agency has relatively low attrition levels and a relatively flat budget in recent years. This allowed limited opportunities to hire new talent and build new capabilities.

Job-specific competencies

As noted above and described in detail in Section 7.2.2, BCG also assessed job-specific competencies aligned with various roles at the SEC. The agency's senior managers clearly identified a need to build the functional skill sets of managers and administrative support staff in particular. Managers, for example, have a very challenging role. As an agency of professionals, employees are naturally experts in their content areas. However, people management is often a new skill set for those promoted into management roles. Especially with relatively small team sizes, managers continue to maintain a high degree of involvement with content, at the expense of people management, leadership, and operations skills. The SEC's senior management noted a significant need for improvement in people development, situation management, strategic planning and technology management skill sets. Improvements in people management skills could also contribute to streamlined people pipeline processes as managers play stronger roles in recruiting, developing, and actively managing their talent.

In addition, there is little monetary or other incentive to become a manager. The difference in pay for managers, despite the role's new and challenging responsibilities, is minimal. There are cases where an SK-14 non-management professional earns more than an SK-15 manager, and of the nearly 300 SK-15s at the agency, 18 percent earn below the SK-14 *average* salary.⁹³ By maintaining a clear compensation differential between managers and senior line staff, the SEC can motivate high performers to take on managerial duties, create more desirable career paths within the agency, and develop a pipeline of top talent prepared to succeed in leadership roles.

BCG's assessment also revealed a need for improved administrative support skill sets (e.g., document management and control). Filling this gap is often challenging because managers are less willing to use their allocated human resource slots for administrative staff, especially given concerns about whether new staff will have sufficient skill sets. This behavior is reinforced by the Competitive Service hiring process (described further in Section 3.4.3), which increases the complexity associated with locating and hiring talented administrative staff. Where skill gaps exist that have not been addressed, professional staff has often taken on these duties, reducing their capacity and efficiency.

⁹³ SEC HR database.

Workload capacity

The question of adequate capacity is increasingly relevant given the expanded mandate conferred on the SEC by Dodd-Frank. It is not surprising, then, that the need for additional human resources was a consistent theme throughout BCG's interviews at the SEC. To test this, BCG used a workload modeling approach to estimate capacity needs by organizational unit. To construct its capacity model, BCG examined workload drivers by organizational unit, focusing on the SEC's largest programmatic areas: Enforcement, OCIE, CF, IM, TM, and RSFI. These six areas comprise approximately 75 percent of the SEC's personnel and the bulk of its mission-related operations. BCG conducted over 60 interviews with SEC managers to understand current activities in these units, key workload drivers, and the impact of Dodd-Frank. In addition, BCG built a separate capacity model for OIT, which is discussed further in Section 4.3.

The workload modeling results indicate that workload in the SEC's operating divisions and OCIE has increased such that they currently face a net capacity gap of 375 to 425 FTEs for the five divisions and OCIE. In addition, BCG's capacity model for OIT indicates a further gap of approximately 60 FTEs. This is a net capacity gap, reflecting the balance of surplus in management and gaps in professional and support staff. This estimate (see Section 7.2.3 for further detail) assumes that the SEC performs its current activities and those mandated by Dodd-Frank without making meaningful business process enhancements. With the optimization recommendations outlined in Chapter 6, there is an opportunity to address part of this resource need through efficiencies.

There are several drivers of this capacity gap. Initially, the gap can be traced primarily to an increase in rulemaking requirements resulting from Dodd-Frank. TM faces an extra burden as it becomes responsible for processing additional SRO rule filings and monitoring new clearing and execution facilities related to security-based swaps. These new entities, along with NRSROs, private fund advisers and municipal securities advisers, also become candidates for examination and enforcement. The addition of new registrants is not a temporary issue. Once registered, the firms become subject to SEC oversight, including examinations, going forward. Though part of this capacity gap is temporary due to the new rule-writing, based on the ongoing need to administer new regulations and examine new registered entities, the agency's capacity shortage will continue to grow through 2013.

The significance of Dodd-Frank, combined with its immediacy, required the agency to ramp up new activities very quickly (e.g., writing new rules, registering new entities, supporting FSOC projects). The SEC's management had to make difficult decisions about its priorities without the benefit of a plan or resources in place to quickly increase capacity to correspond with workload. The lack of surge capacity to manage this spike in workload has forced the agency to stretch and reallocate its resources to respond to the new legislation.

People pipeline and supporting HR processes

As described more fully in Section 7.2.4, a robust end-to-end people management process supports effective compensation and recruiting strategies, training, performance management and talent management in order to better manage existing and new talent. To be as successful as possible, these processes must be supported by a well-functioning HR team. The SEC has taken a number of important steps to improve OHR and its recruiting, training, and performance management functions. While these steps lay the foundation for a robust people pipeline, there are areas where the agency could improve implementation. Each step of the people pipeline and the supporting HR organization are examined further below.

Compensation: As noted above, managerial compensation is not significantly differentiated from many non-managerial positions. In addition, because the percentage of compensation allocated to the merit pay pool is just 1.5 percent and is not yet linked to the performance management system, the SEC struggles to differentiate high performers through merit compensation. The SEC can also reward performance through one-time monetary awards, but this award budget is minimal, at ~0.5 percent of the overall compensation budget for the agency. The median government award budget is just over six percent and goes as high as 12 percent.

Recruiting: Recruiting strategies and processes provide the inputs to the people pipeline by sourcing diverse, high-quality talent aligned with an organization's long-term capability needs. It has been difficult to fill the SEC's capability gaps using current recruiting processes given the constraints described in Section 3.4.3. For example, the recruiting process at the SEC is largely driven by the hiring authorities provided by Congress (see Section 7.2.4 for further detail). While Congress afforded the SEC significant flexibility in the Excepted Service (ES) and Excepted Service Hiring Authority (ESHA), strict interpretations inhibit the SEC from taking full advantage of the flexibilities allowed and recruiting talent in a more targeted way. Instead, much of the recruiting processes default to the legacy government posting process. It is also difficult, given the variable budget cycle year-to-year, for the agency to develop and implement recruitment and diversity strategies and maintain dialogue with top talent. This has been particularly difficult when the agency must respond quickly to increases in workload that require significant recruiting efforts.

Training: The HR function has made considerable progress in improving its training function. For example, it recently hired a new Chief Learning Officer as well as a new Dean for the College of Leadership Development, both with deep FIRREA agency training experience. The training team has begun the process of centralizing training programs across the agency into curricula (e.g., centralizing the Certified Examiner Training program for OCIE). In addition, it created a new leadership training program that helps develop a stronger, more active cadre of leaders at the agency by developing personal strengths and leadership styles, effective human capital management, coaching tools, and

strategic leadership. However, the training team is operating at about half its optimal size. To support SEC staff at a benchmark ratio of 180 to 240 learning staff members per FTE, the SEC would require an additional 6 to 12 training staff.⁹⁴ Based on BCG experience, support levels provided by training at other regulators can be even higher. Section 7.2.4 discusses these benchmarks further.

Another critical training capability is a knowledge management system that enables employees to codify and share learning. Currently, knowledge sharing systems and processes are limited, and the agency lacks an overarching framework for capturing and building agency knowledge. Though the steps already taken improve the SEC's training organization, more remains to be done to fully support the agency's training needs.

Performance management: Significant progress has also been made with the launch of the new Evidence-Based Performance Management (EBPM) system in 2008; it addresses both work outcomes as well as behaviors, aligns individual objectives with strategic goals, implements a consistent set of objectives by metric and grade, and deploys actionable metrics with a thorough Key Performance Indicators vetting process. However, successful implementation of EBPM is critical to realizing the system's full potential, as is a strong link between performance and compensation. Managers and employees are still hesitant to use EBPM and will require further training to illustrate the system's benefits and to convey how it can be used as a management and staff development tool. In addition, a robust change management strategy and visible leadership support for the new system will be essential, particularly as the SEC moves back toward performance-based compensation. These implementation efforts will be critical to talent management and employee engagement efforts going forward.

Talent management: Another new HR initiative is the creation of an HR Manager role to liaise with various divisions and offices. This role is intended to provide strategic thought partnership to divisions and offices, and to help develop talent management plans, including recruiting, career pathing, and high-potential and succession planning. Further development or staffing of these roles is on hold pending the 2011 budget release. However, these roles on their own are not sufficient; they require alignment with other front, middle and back office functions, clear delineation of responsibilities, and service standards with "customers."

Engagement

By continuing to improve the people management capabilities and people pipeline processes, the agency will also improve overall employee engagement levels. Engagement describes the degree to which employees feel a strong bond

⁹⁴ United States. American Society for Training & Development. *2010 State of the Industry Report: Definitive Review of Workplace Learning and Development Trends*. Alexandria: ASTD Press, 2010. Print.

with their organization and are motivated to give their best.⁹⁵ According to BCG analysis of prior Federal Employee Viewpoint Surveys using our proprietary *Engaging for Results* methodology, engagement levels at the SEC have been declining since 2004 and are largely in the fourth quartile when compared to public sector benchmarks.⁹⁶ While the senior management at the SEC is highly engaged (better than public sector peers), engagement levels are low in the middle levels of the organization. The SEC has a clear opportunity to improve staff morale and engagement, which can have exponential benefits for the agency's overall performance. Engaged employees are typically more productive and willing to apply discretionary effort for the benefit of their overall organization. This kind of commitment will significantly bolster the agency's ability to succeed in a rapidly changing and resource-constrained environment. In addition, engagement can improve retention of high-performing employees, which will be paramount both as the economy begins to recover and as the SEC tries to attract talent with specialized expertise.

Summary

In summary, while significant progress has been made to improve personnel and resourcing at the SEC, there is recognition that more can be done to improve its people processes and capabilities. For example, the agency requires a targeted recruiting process, enhanced training capabilities, a knowledge management system, and a fully implemented and embraced performance management system. These must be supported by a well-functioning, service-oriented, and appropriately staffed HR team. Continuing to build the necessary processes and a robust HR function that support the SEC's capacity and capability needs will be essential to ensuring that the agency has the talent it needs to continue executing on its complex and growing mission.

4.3 Technology and resources

Technology is a critical enabler for the SEC. As a result of the expansion in the agency's mandate and the growing complexity in the securities markets, the role of technology in supporting the agency's mission has been significantly enhanced. Today, the agency's technology needs are greater and more urgent than ever before.

The SEC's recent momentum with regard to technology is promising. The SEC's senior management recognizes the critical role of technology at the agency and has spoken at length in public and private forums about the need for technology sophistication to be a key organizational strength. With this objective in mind, the agency recently made two key leadership hires, a COO and a new Chief Information Officer (CIO), both with professional experience in managing

⁹⁵ Konrad, Alison M. "Engaging Employees through High-Involvement Work Practices." *Ivey Business Journal*. 2006. Print.

⁹⁶ 2010 Human Capital survey response rate of 54 percent suggests results might be lower than actual for the entire agency, as respondents often tend to be most unengaged.

sophisticated IT organizations in the private sector. The agency also prioritized the development and implementation of key systems, in particular a solution for managing tips, complaints, and referrals (TCR) and an improved case management system (Hub). These systems support critical elements of the SEC's workflow and begin to lay a foundation for fostering the sharing of information across systems, divisions, and offices.

The new IT leadership team is working to improve the effectiveness of the Office of Information Technology (OIT) in delivering the IT services the SEC requires. For example, the leadership is exploring new models for engaging with the SEC's divisions and offices, with the intent of improving coordination and OIT's understanding of their needs. It is also conducting a thorough review of its capital investment process aimed at improving initiative prioritization and management, and is putting in place the mechanisms necessary to better leverage metrics and key project management tools to drive accountability.

While these successes are notable and highly visible, technology at the SEC has been hindered by a history of neglect and constrained funding, and much remains to be done for the SEC to fully realize the benefits that technology can provide. Specifically, the SEC needs:

- *An institutionalized technology awareness and expertise*
- *The technology systems capable of delivering necessary capabilities*
- *A technology delivery capability for implementing and supporting the necessary applications and systems*

Technology awareness and expertise

The SEC's mission requires a deep expertise in technology. This need extends well beyond the scope of the traditional IT function; it must be an institutionalized understanding and awareness of technology that is pervasive in the day-to-day functioning of the organization.

In our assessment, we found that the agency needs to take further steps to develop its technology awareness and expertise, specifically in the following areas:

- ***Understanding of current and emerging market technologies:*** Given the increasing role of technology in shaping market behaviors and structures, there is a strong need for the SEC's staff to have a solid understanding of the technologies currently utilized by market participants and trading venues. Such an understanding—when coupled with insight into the impact of these technologies on the securities markets—can enable investigation and enforcement activities, proactive risk management, and more informed policy-making. This is an area where the SEC needs significantly enhanced capabilities. As noted in the assessment outlined in Section 4.2, senior SEC managers described the staff's understanding of

market technologies as “basic” and expressed a clear interest to invest in additional resources that possess a high level of technology awareness

- ***Expertise to develop and manage complex IT systems:*** The SEC requires the internal IT expertise necessary to develop complex applications and systems. In particular, significant skill is required in business systems analysis, technical architecture, project management, and software development/integration. To meet its current level of demand, OIT faces a shortfall of approximately 125 FTEs in these roles. This gap is both the result of sub-optimal resource deployment (e.g., an over-commitment of resources to infrastructure support) and the resource constraints faced by OIT.

OIT has historically relied on outsourcing to fill a significant portion of its resourcing needs. Currently, 80 percent of its FTE resources are from external contractors. This excessive reliance on external staffing has the effect of reducing OIT’s understanding of division and office needs and its institutional knowledge. Additionally, some contracts for the outsourcing of complete functions could have been better managed, which has impacted OIT’s performance.

OIT is aware of its resource challenges and has recently taken initial steps to address them. For example, stronger performance-based metrics are being put in place for new contracts such as the new infrastructure support services (ISS) arrangement

Technology systems

The effective leveraging of technology requires that the agency have in place a robust set of systems that are capable of supporting the organization’s key functions—today and in the future.

The SEC currently has 196 technology solutions in place. Of these, three business applications—EDGAR (public filing store), Hub (case management), and TCR (tips, complaints, and referrals)—are of particular note given their broad scope, wide deployment, and relative import to the core activities of the SEC.

The SEC’s existing suite of business applications meets a significant portion of the agency’s current needs in terms of functionality. However, as a result of their historical architecture, many of these systems drive operational inefficiencies, limit end-user productivity, and hamper the sharing of information across systems, divisions, and offices. For example, EDGAR—a flagship application for storing and disseminating filings—is overly complex. It is in need of modernization, particularly given that its previously scheduled upgrade was delayed indefinitely due to a lack of resource availability. EDGAR currently has duplicative components, lacks standardization in data formats and business logic, and provides a sub-optimal end-user experience due to a proliferation of filing forms and inconsistent processes. As another example, many of the SEC’s 196

systems are single-purpose: they typically address a single need from a single division or office. Due to dissimilarities in the architecture of these systems, data cannot be easily shared between systems, and maintenance and development is made less efficient.

While much remains to be done to address this shortcoming, the SEC has recently made strides towards standardizing its systems on a common architecture. For example, two of the SEC's newest core systems—TCR and Hub—share a common architecture and platform and are able to efficiently share information between systems.

In addition to the challenges with core business applications, the SEC's underlying off-the-shelf system software is not current, creating operational risk. For example, critical SEC system components including middleware programs, application servers, and web servers are considerably dated, to the point that some are no longer supported by their vendors.

Looking forward, the SEC's existing systems do not meet the full range of data management, analytics, knowledge management, and workflow capabilities that the agency requires—particularly given the increasing scale and complexity of the securities markets and trends such as high-frequency trading. For example, the SEC's analytics toolset was ill-equipped to handle the large volume of data necessary for the agency's assessment of the market events of May 6, 2010. Similarly, the SEC lacks the technical capacity to handle more than minimal amounts of trading data. To conduct its assessment of the market events of May 6, 2010, the SEC had to acquire and consolidate trading data from a large number of trading venues in an ad hoc, time-consuming process that delayed its effort. Of note, there is awareness of the insufficiency of its current access to trading data. To address this, the agency has proposed the creation of a Consolidated Audit Trail (CAT), which would serve as a comprehensive repository of trading data from all trading venues.⁹⁷

Technology delivery capability

The implementation and management of the SEC's applications and systems requires a strong IT delivery capability. At the SEC, this function is primarily carried out by OIT. As previously noted, the SEC has taken some initial steps toward improving OIT's ability to deliver IT services. However, significant capability gaps remain along the following six dimensions:

- ***Lack of a well-defined technology vision and strategy:*** Today, OIT does not have the well-articulated and clearly communicated vision and strategy that it requires. Rather, OIT operates in a reactive posture, responding ad hoc to the SEC's technology needs as they arise and are deemed critical.

⁹⁷ United States. U.S. Securities and Exchange Commission. *Consolidated Audit Trail, Exchange Act Release No. 62174*. 75 Fed. Reg. 3255. 2010. Print.

Planning is typically short-term and lacks the broad organizational support necessary to be made effective.

Under new leadership, OIT has begun to take steps towards correcting this deficiency, in part through the creation of strategy workshops and implementation of industry-standard performance metrics

- ***Insufficient understanding of business needs:*** Currently, OIT and its internal clients are not tightly aligned. Communication between these groups is typically informal and ad hoc. For example, there is no formal process or checkpoint for divisions and offices to determine and prioritize their IT needs and formally communicate them to OIT. During project execution, divisions and offices typically do not engage in formal sign-offs with OIT at project development milestones, limiting visibility into their investments.

OIT's leadership has recently begun efforts to improve its alignment with internal clients, such as designating formal liaisons for each division and office and instituting project status dashboards to improve communication and transparency

- ***Limited investment governance:*** The SEC has a governance structure for planning, funding, and monitoring the delivery of IT investments. However, this structure suffers from significant gaps in process and execution. For example, there is little up-front planning before project proposals are submitted. As a result, governance bodies often must evaluate a proposed project without a well-developed business case or clear business requirements. Further, projects are typically evaluated individually, without considering the full breadth of IT demand and the necessary resourcing trade-offs. These gaps limit the SEC's ability to ensure that it is investing in the most critical IT initiatives.

Of note, OIT has recently launched a thorough review of its capital investment process with the aim of improving the prioritization and management of its IT investments

- ***Limited and inconsistent use of tools and methodologies:*** The tools and methodologies that OIT employs to develop applications and define development practices are inconsistently adhered to and limited in scope. For example, OIT lacks a comprehensive tool to manage project requirements. Similarly, although OIT uses an industry-leading project management system, it only utilizes a handful of its capabilities. Adherence to development methodologies is also sub-optimal—less than 50 percent of projects follow the software development lifecycle (SDLC) as prescribed. This lack of adherence is driven both by a lack of communication and insufficient historical management vigilance

- ***Sub-optimal organization design:*** OIT’s current organizational structure does not align OIT with the divisions and offices that it supports. In addition, the current structure lacks key roles such as strategy development. It also separates the development efforts for EDGAR from other projects, reducing the opportunity to benefit from synergies within functions. Lastly, OIT’s structure provides only limited alignment with “shadow” IT staff deployed in offices and divisions, leading to a duplication of activities and poor standardization of support and development efforts.

OIT’s leadership is aware of these alignment challenges and is currently exploring alternative organizational structures aimed at addressing them

Summary

There is recognition of the increasingly critical role of technology in the pursuit of the agency’s mission. Indeed, the agency has undertaken efforts in recent years aimed at enhancing its technology-enabled capabilities: valuable new systems with common, adaptable architectures have been built; plans for deploying resources more efficiently have been developed; and new roles aimed at improving engagement with internal clients are being formalized. However, despite these efforts, significant areas for development remain. As a result, the SEC today under-leverages technology in the conduct of its business. Given the SEC’s expanding mandate and the increasing complexity of the securities markets that it oversees, it is imperative that the agency address these gaps and make technology a strategic enabler.

4.4 Relationships with SROs

The SEC functions as both an overseer and a co-regulator in its relationship with SROs. It has a long history of overseeing and interacting with SROs to regulate the markets and market participants. Today, that relationship extends across multiple divisions, offices, and regions within the agency:

- TM works with SROs to write and interpret SEC and SRO rules, as well as to review SRO rule proposals governing markets and market participants
- Enforcement sends and receives referrals to/from the SROs, and leverages SRO capabilities, data, and resources to support investigations
- OCIE regularly inspects the regulatory operations at SROs and provides recommendations for improvement. OCIE also leverages data provided by FINRA to administer some broker-dealer examinations
- The Office of Chief Accountant (OCA) oversees and partners with the PCAOB to write rules governing audit/accounting firms and evaluate trends and risks in the audit space, both in general and for specific firms

Several strengths underpin the SEC’s ability to carry out these interactions. By regularly inspecting the SROs’ operations and reviewing their rules, the SEC

has developed an understanding of the culture and capabilities at each SRO. For example, the Office of SRO Inspections in OCIE has close to 50 FTEs dedicated to inspecting twelve SROs.⁹⁸ TM has over 100 staff attorneys reviewing SRO rule filings covering a wide range of topics, such as market structure and broker-dealer operations. The agency also has staff members who regularly team with SROs to achieve specific objectives. For example, enforcement professionals throughout all the regions regularly receive tips and referrals from the SROs regarding potential cases of insider trading and market manipulation. Subsequent investigations often leverage data and information provided by FINRA and the exchanges. Additionally, OCA regularly partners with the PCAOB to review audit firm practices, and, if they find unusual audit results, passes along the information to CF and Enforcement for further review or investigation, as appropriate. Furthermore, many staff members at the agency have worked with the same regulatory personnel at the SROs for years, and over time these professional relationships have led to better communication. Such relationships have formed at senior levels throughout the agency, both at headquarters and in the regions. Collectively, these strengths have enabled the SEC to function in its dual role as an oversight body and a co-regulator with SROs.

Nonetheless, we believe there are features of the SEC's relationship with SROs which can be improved. In particular, there are opportunities for improvement in three areas of the agency's SRO-related operations, which are discussed in detail below:

- *Structure*
- *Competencies*
- *Processes*

Structure

The SEC interacts with SROs across multiple divisions/offices and activities. As more divisions and offices have cultivated relationships with SROs, a structure has been created where SROs face multiple points of contact within the agency. Moreover, as most divisions and offices function independently, it can be difficult to coordinate their interactions with SROs. For example, if an SRO provides data to OCIE during an inspection that would be valuable for staff in TM and RSFI, there is no consistent, structured way to share that data. Today, that opportunity would be lost unless someone in OCIE or at the SRO took the initiative to contact the right people in the other divisions. While cross-functional collaboration is growing, there can also be more structural mechanisms to facilitate formal coordination between divisions/offices and centralize how SROs communicate and share information with the agency. Some progress has been made; leaders in some divisions and offices have sought to clarify, through informal mechanisms, the roles and responsibilities of staff members who interact with SROs.

⁹⁸ OCIE is currently responsible for inspecting all the national security exchanges, FINRA, the MSRB, and the PCAOB in conjunction with OCA.

Although the level of interaction with SROs has been fairly steady over time, the interactions themselves have become increasingly focused on specific issues at hand. For example, OCIE may inspect a specific aspect of an SRO's operations, or TM may review a specific rule filing submitted by an SRO. While engaging SROs to resolve near-term issues is important, there is also the need to have a more structured engagement with SROs, leveraging their regulatory expertise and perspective to understand and respond to broader trends and risks in the market. For example, the agency does not have a structure like an internal "College of Regulators" to engage and manage SROs in a consistent and coordinated manner.

There are also legal and legislative barriers that prevent the SEC from fully leveraging and overseeing the SROs. For instance, the state actor doctrine has become a somewhat controversial issue with respect to SRO information-sharing with the SEC. Additionally, under the current securities laws, the agency's review of SRO rules is limited to assessing the proposed rule's consistency with the Exchange Act. As such, two SRO rules may conflict, but can still be consistent with the Exchange Act.

Competencies

One of the agency's principal responsibilities with regard to SROs is its duty to review all SRO rule filings. Currently, this responsibility is predominantly handled by TM, where 50 percent of staff members are lawyers. While some of these staff attorneys have industry experience and expertise, others could benefit from a deeper understanding of how the markets and market participants operate. As the volume and complexity of SRO rule filings have increased, a shortage of staff and lack of skill diversity in TM has resulted in longer lead times for reviews to be completed and more reviews needing to be escalated to senior managers. While TM has begun hiring professionals with a background in securities markets to expand the division's competencies, the skill level of existing staff needs to be improved. In the near term, such capability upgrades become even more critical in light of the agency's expanded rulemaking responsibilities required by Dodd-Frank.

In recent years, the number of SROs has increased and the national securities exchanges have demutualized, creating potential conflicts of interest between each exchange's regulatory operations and its business operations. Many exchanges have also begun outsourcing their regulatory responsibilities to FINRA. Given these developments, it has become increasingly important that the SEC be able to measure the effectiveness of SRO regulatory operations, over time and relative to each other. The SEC currently does not employ a consistent set of metrics or standards by which to assess the regulatory efficacy of each SRO, however, OCIE is in the process of establishing a baseline assessment for each SRO with a goal moving forward to conduct strategic evaluations of SROs relative to that baseline. To that end, OCIE has begun requesting information from the SROs regarding their regulatory operations, but more can be done to make such

SRO disclosures more frequent and standardized. Given that OCIE's use of a risk-based inspection approach is a relatively recent development, it will be important for OCIE to periodically review its methodologies to ensure they are identifying the right risks in a timely manner.

While the SEC's oversight of all SROs needs strengthening, FINRA merits particular attention given its size and scope of regulatory authority. In particular, FINRA provides market surveillance of approximately 80 percent of all US equity trading. Currently, the SEC does not have any automated market surveillance systems in-house and only selectively audits the surveillance systems and outputs at FINRA and the exchange SROs. As market trends such as high-frequency trading become more prevalent, it is increasingly important for the SEC to maintain robust oversight of the surveillance capabilities deployed in the market.

Processes

The SEC and SROs are responsible for writing rules to govern market structure and market participants. SRO rules are often developed in partnership with TM and always require a review by TM staff. Historically, this rule review process has functioned relatively well to handle a steady flow of filings submitted by SROs. However, due to limited staff bandwidth, higher volumes of rule filings, and statutory requirements, this process has become strained. Indeed, the number of proposed SRO rule changes reviewed by TM has increased from 956 filings in 2005 to over 1,340 in 2010, a 40 percent increase in volume.⁹⁹ For each filing, TM needs to ensure the proposed rule is thoroughly described and analyzed in order to enable meaningful public comment. TM's approach to rule reviews is naturally risk-averse to ensure that every proposed rule is written in a manner that conforms to Federal Register and other technical requirements, and that no potentially negative market implications are overlooked. In addition, for proposed rule changes subject to SEC approval (approximately 25 percent of total filings), Dodd-Frank mandates a 45-day deadline for such rules to be approved or disapproved by the SEC, or for the SEC to institute proceedings to determine whether to disapprove the proposal, which further strains the agency's processes.¹⁰⁰ Given these factors, there is an opportunity for the agency to redesign the process end-to-end so as to more efficiently meet the requirements specified under Dodd-Frank and the operational needs of the agency and SROs.

Indeed, TM has already considered different ways to streamline the SRO rule review process and reduce the number of re-filings. For example, supervisors in TM informally segment rules depending on their complexity, assigning the most difficult filings to senior staff members. This type of segmentation could be explicitly designed into the rule review process. TM has also revised the rule review process flow to adhere to the Dodd-Frank statutory deadline for SEC action. The SEC could also seek legislative changes to modify the rule review process in ways that go beyond the current statutory framework.

⁹⁹ *In Brief FY 2005 – 2010 Congressional Justification.*

¹⁰⁰ Dodd-Frank Wall Street Reform and Consumer Protection Act. S 916.

For example, Congress could amend the Exchange Act to give the SEC the authority to allow SROs to self-certify certain types of rules that they write. The Exchange Act could also be revised so that TM is only required to review SRO rule filings of a high-risk type or significance. Such changes would reduce the volume of filings submitted and allow staff to focus on the most complex and consequential rules.

Aside from optimizing the SRO rule review process, the SEC could also benefit from new processes regarding how SROs should interact with and transmit information to the agency. For example, although OCIE meets regularly with SROs, they are not currently required to regularly disclose information to the SEC regarding their regulatory operations. As OCIE moves to more of a risk-based inspection approach, it will need to regularly access information about the SROs to inform its risk assessments. As such, there is a need to formalize the processes by which SROs submit data to the agency, as well as how that information is then cataloged and distributed to various divisions and offices.

Finally, the SEC would benefit from increased coordination with SROs on risk assessment processes and data. For example, as the front line regulator for broker-dealers, FINRA conducts extensive risk assessment activities in support of its examinations. The SEC could use this analysis, which is not currently shared with the agency, to improve its own examination targeting efforts and support its oversight of broker-dealers. As such, increased coordination represents an opportunity to drive increased efficiency and reduced duplication of effort.

Summary

The SEC is actively connected to all SROs, acting as both an oversight body and a co-regulator. Nonetheless, against the backdrop of constraints, an increasingly complex and fragmented market environment, and an expanded mandate under recent legislation, the SEC/SRO relationship has become strained in terms of structure, competencies, and processes. While there is acknowledgement of deficiencies in the relationship and the agency has begun working to remedy them, more can be done within the current context to build the agency's ability to more effectively oversee and partner with the SRO community.

Further detail on each assessment is located in Chapter 7.

5 Strategic direction for the SEC

5.1 Structural disconnects to address

As described in Chapter 4, the SEC has begun addressing many of the areas of concern affecting the agency. These initiatives were indeed necessary and undoubtedly a critical first step. However, more needs to be done. In BCG's strong view, any initiative that the agency undertakes must go beyond its tactical objectives and align with the need to address fundamental and long-persisting challenges that have prevented the agency from building required capabilities to the extent desired. These challenges manifest themselves in three major disconnects, outlined in Exhibit 5.1-1 below:

Exhibit 5.1-1: Fundamental disconnects



Source: BCG analysis

Disconnect 1: There is an “expectation disconnect” between what the agency’s stakeholders expect from the SEC and what the agency is actually authorized by Congress to do. As just one example, there appear to be expectations that the Division of Corporation Finance (CF) make judgments on the merits of corporate filings, opine on whether a security is a good investment, and evaluate if a firm “should” become a public entity. In fact, the division’s activities are limited to reviewing registrant disclosure in order to assess compliance with applicable securities laws. While the agency or its stakeholders could be tempted to resolve this disconnect by expanding the scope of the SEC’s activities, the SEC is already stretched in its current role and resources. Rather, addressing this disconnect requires the SEC to clarify public expectations through stronger communications, and that key stakeholders proactively understand the SEC’s role and the constraints faced by the agency. Addressing the fragmentation

of the agency's external communication approach as discussed in Section 4.1 will help ameliorate this problem.

Disconnect 2: The second is a “resource disconnect”—that is, a disconnect between what Congress has authorized the SEC to do and the resources available to the agency. Congress has authorized the SEC to conduct a broad scope of activities including registration responsibilities for broker-dealers, investment advisers, public companies, and four new classes of swap entities under Dodd-Frank; broad rulemaking authority; exam authority over broker-dealers, investment advisers, investment companies, exchanges, clearing agencies, transfer agents, municipal advisors, security-based swap entities, and NRSROs; broad oversight responsibilities for SROs; and investigative and enforcement authority for all federal securities law violations. Indeed, the SEC regulates a large market—it receives more than 3,000 securities filings per day, and has oversight responsibilities of more than 5,000 broker-dealer firms and more than 11,000 investment advisers.

As discussed in Section 3.4.4, while the SEC's funding has grown over the decade, in recent years the growth has not kept pace with the SEC's expanded role. Consequently, while the agency can certainly use its resources more efficiently (as discussed further in Chapter 4), it still faces a “resource disconnect”.

Disconnect 3: The third is a “responsiveness disconnect”—that is, a disconnect between the responsiveness that is required of the SEC given the dynamic nature of the markets it is charged with regulating and the rigid nature of the SEC that results from its constraints.

The SEC regulates highly dynamic markets and needs to respond to changes in it. However, at the same time the SEC faces a number of constraints, including Congressional mandates (e.g., the Paperwork Reduction Act), governance requirements (e.g., the Commission structure), and complex hiring authorities, as well as capability gaps (e.g., risk management capabilities, technology sophistication) that collectively translate into the SEC being relatively rigid. Finally, the agency has a risk-averse culture which slows decision-making.

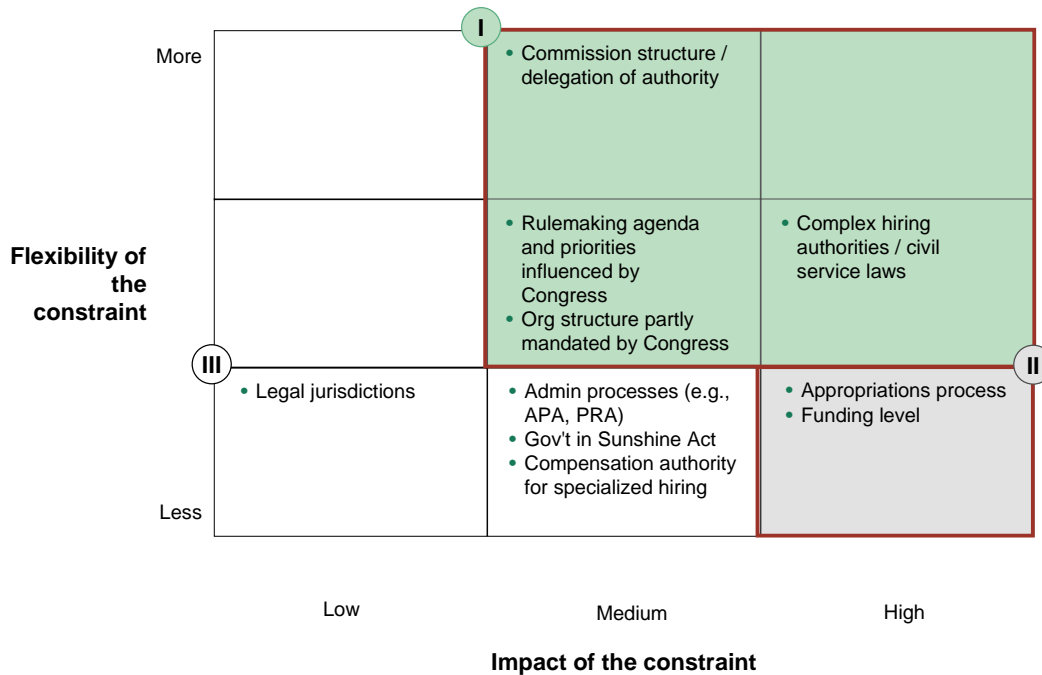
5.2 Overcoming disconnects

Overcoming these disconnects will require the SEC to increase its efficiency, build a set of forward-looking capabilities, address chronic gaps, and seek selective relaxation of constraints that the agency faces. In this chapter, we describe the constraints which may need to be relaxed, as well as the forward-looking capabilities that will be required. Chapter 6 outlines specific recommendations for initiatives that the SEC should undertake in this context.

5.2.1 Relaxation of select constraints

One lever that would help the SEC to begin addressing the structural disconnects is achieving greater flexibility in select constraints. A useful way to look at the SEC’s constraints is to cluster them by their relative flexibility and impact, illustrated in Exhibit 5.2.1-1.

Exhibit 5.2.1-1: Relative impact and flexibility of constraints



Source: BCG analysis

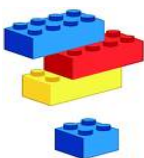
Focus should be placed first and foremost on the relaxation of constraints with both greater flexibility and impact (Group I). Group I constraints are those which specifically affect the SEC and would not require a government-wide change, but where relaxation would still have a material impact. Given their impact on the agency, funding constraints constitute the next key area of focus (Group II), although these apply across the government. Constraints with less flexibility and lower impact should be prioritized third (Group III). Relaxation of some of these constraints will go a long way towards successfully implementing the recommendations described in Chapter 6.

5.2.2 Development of forward looking capabilities

BCG strongly recommends that the SEC develop a set of required capabilities as another lever to address the structural disconnects. Each of these capabilities builds upon elements of organization, people, technology, and relationships with SROs, which we believe are all interconnected. The SEC needs to build its capabilities in five areas:



Risk IQ: Understanding, monitoring, and evaluating external and enterprise-wide risks—“connecting the dots”—and providing actionable transparency to appropriate levels of the organization



Ability to adapt: Maintaining the ability to deliver on the mission effectively in a rapidly changing and dynamic marketplace, e.g., through internal collaboration and fast decision-making processes



Leveraging communities of aligned interest: Promoting effective regulation through alignment and collaboration with external partners








Technology sophistication: Maintaining awareness of technology advances in the securities markets and deploying advanced technology capabilities that increase the SEC’s efficiency and effectiveness



Strong credibility: Credibly demonstrating the SEC’s presence, power, and influence to all relevant stakeholders

While the SEC has a good foundation and momentum to draw upon as it seeks excellence in these areas, there is certainly more to do. The following table (see Exhibit 5.3-1) outlines specific elements of each of these capabilities, along the lines of the four matters of study, which are required to be addressed.

Exhibit 5.3-1: Future vision of SEC capabilities

	Organization Design	People	Technology	SRO
 Risk IQ capabilities	<ul style="list-style-type: none"> • Effective risk management functions, informing policy decisions • Actionable transparency 	<ul style="list-style-type: none"> • Risk management, functional, industry and analytical expertise 	<ul style="list-style-type: none"> • Strong data analytics systems and tools • Knowledge management tools 	<ul style="list-style-type: none"> • Effective leverage of SROs to enhance market intelligence • Portfolio approach to regulation
 Ability to adapt	<ul style="list-style-type: none"> • Clear roles and fast decision-making • Efficient organizational pyramid • Efficient business processes • Networked organization 	<ul style="list-style-type: none"> • Ability of people pipeline to recruit, train, manage talent • Adequate capacity • Flexibility to reallocate resources 	<ul style="list-style-type: none"> • Superior alignment of IT and divisions • Balanced approach to IT resourcing 	<ul style="list-style-type: none"> • Streamlined and effective SRO rule review processes
 Leveraging Communities of aligned Interest	<ul style="list-style-type: none"> • Coordinated, consistent and defined interaction with stakeholders having aligned or adjacent interests 	<ul style="list-style-type: none"> • Effective use of contractors and vendors 	<ul style="list-style-type: none"> • Seamless leverage of technology and data between SROs / SEC 	<ul style="list-style-type: none"> • Strong, coordinated SEC/ SRO interaction model
 Technology sophistication	<ul style="list-style-type: none"> • Efficient structure, collaboration and clear accountabilities for IT 	<ul style="list-style-type: none"> • Sophisticated technology skill sets 	<ul style="list-style-type: none"> • Strong technology innovation • Use of IT to drive efficiency & effectiveness 	<ul style="list-style-type: none"> • Understanding of critical technology deployment at SROs
 Strong credibility	<ul style="list-style-type: none"> • Comprehensive and well-defined internal/ external communication strategy 	<ul style="list-style-type: none"> • Invigorated employee engagement • Mission-aligned values 	<ul style="list-style-type: none"> • Advanced systems 	<ul style="list-style-type: none"> • Perceived as strong overseer of SROs

Source: BCG analysis

Risk IQ: Excellence in this capability requires the SEC to be able to gather information across the SEC, SROs, and broader communities of aligned interest, prioritize this information, connect the dots, develop actionable insights, and then communicate these insights back as appropriate to the relevant entities to act upon them. Such a capability will strengthen SEC oversight, for example with respect to complex financial institutions. These institutions conduct many activities—including acting as a broker-dealer, providing investment management services, acting as a participant in various markets, managing dark pools, and advising public companies—and the SEC needs to be able to see across different business lines, not just today but with a view towards where the institution is going, and effectively “connect the dots.”

Developing a strong risk IQ capability will enable the SEC to have actionable information in order to be responsive as market needs necessitate. This in turn partially addresses the “responsiveness disconnect” discussed earlier.

Indeed, as discussed in Chapter 4, the SEC has already begun to take a number of steps to enhance its risk IQ capabilities. These include the creation of the Division of Risk, Strategy and Financial Innovation (RSFI), the establishment of cross-division “trends” meetings, and the upgrade of the tips, complaints and referrals (TCR) system.

To achieve excellence in this area, the SEC needs to further build on its risk management function to exemplify best practices, define clear role charters for RSFI, and embed risk capabilities in the operating divisions. The SEC needs

talent that understands risk management, securities markets, technology, and that has strong data and analytics abilities. The SEC also needs to be equipped with the tools and systems to analyze and act upon data and information and finally, to have in place mechanisms with SROs and other regulators to gather data and enhance its market intelligence. As the SEC develops this capability further, it should also look at enterprise-wide risks, including operational and reputational risks to the agency.

Ability to adapt: Excellence here requires that the SEC be able to actively align its resources against mission critical activities, flexibly deploy them as market conditions change, and efficiently execute key activities and processes.

To achieve excellence in this area, the SEC needs a flat hierarchy and a strongly connected network of experts across divisions, offices, and regions. In addition, the SEC needs the right number of people coupled with the flexibility to reallocate and/or scale resources when needed, a cultural mind-set that enables the organization to proactively anticipate emerging trends, and technology that provides decision-makers with the information needed in order to take action.

The ability to adapt will enable the SEC to effectively act on the information gathered through its risk IQ capability. In combination, these capabilities substantially address the “responsiveness disconnect” described earlier.

As discussed in Chapter 4, the SEC has recognized this need and made progress against this capability through recent initiatives. However, as noted there, significantly more needs to be done to make the organization adaptable.

Leveraging communities of aligned interest: Excellence here requires that the SEC identify key stakeholders with aligned interests, proactively engage them in meaningful dialogue, utilize that dialogue to foster information and data sharing, and ultimately leverage the respective strengths of the SEC and these stakeholders for mission critical activities. As an example, the SEC should explore additional collaboration opportunities with SROs and gain seamless access to SRO data. Finally, the SEC should enhance collaboration with other regulators through platforms such as the Financial Stability Oversight Council (FSOC), as well as maintain frequent informal engagement.

There is recognition of the need to effectively leverage communities of aligned interest and the agency has made progress in building this capability. For example, the SEC is working closely with the MSRB to adopt rules governing municipal advisors, coordinating with FINRA and the Federal Reserve to find ways to improve the broker-dealer exam program, and has recently proposed creating a Consolidated Audit Trail. In addition, the new whistleblower program required by Dodd-Frank will leverage tips and complaints from industry actors to inform the SEC’s enforcement efforts.

This capability will enable the SEC to stretch its resources further and focus on the most critical activities. This will help the agency address the “resource disconnect”.

Technology sophistication: Excellence here requires that the SEC embed in its processes an understanding of technology's role in today's markets and also ensure that its own technological capabilities are sophisticated enough to keep pace with the entities it regulates.

To develop excellence in this area, the SEC needs to create a sustained, multi-year technology vision and strategy to invest in systems and tools. That strategy should also develop a workforce with a deep understanding of the technology used by market participants and SROs, an evolving awareness of trends and emerging technologies, and the ability to develop and manage complex technology services.

This capability will enhance the SEC's efficiency and apply new technology to track, understand, and proactively respond to market advances. This will help the agency address the "resource disconnect" and "responsiveness disconnect".

Indeed, there is recognition of the importance of technology in fulfilling the agency's mission and, as discussed in Chapter 4, it has recently taken a number of steps to increase the SEC's technology sophistication.

Strong credibility: Excellence in this area requires that the SEC be seen as a strong performer, which implies that it has in place effective programs, people, technology, and relationships with SROs. Developing this capability also requires effective communication to internal and external stakeholders, and the fostering of credible deterrence.

This capability enables the SEC to better align key stakeholders' expectations with a more realistic view of the agency and its responsibilities. This will help the agency address the "expectation disconnect".

Collectively, the five capabilities above portray a vision for building the future SEC, one with an increased ability to address the structural disconnects that the agency faces today. The initiatives launched in the last couple of years are a good start toward building these. However, much remains to be done. The next section of the report describes how the SEC can best build upon the foundation already created.

6 Recommended initiatives

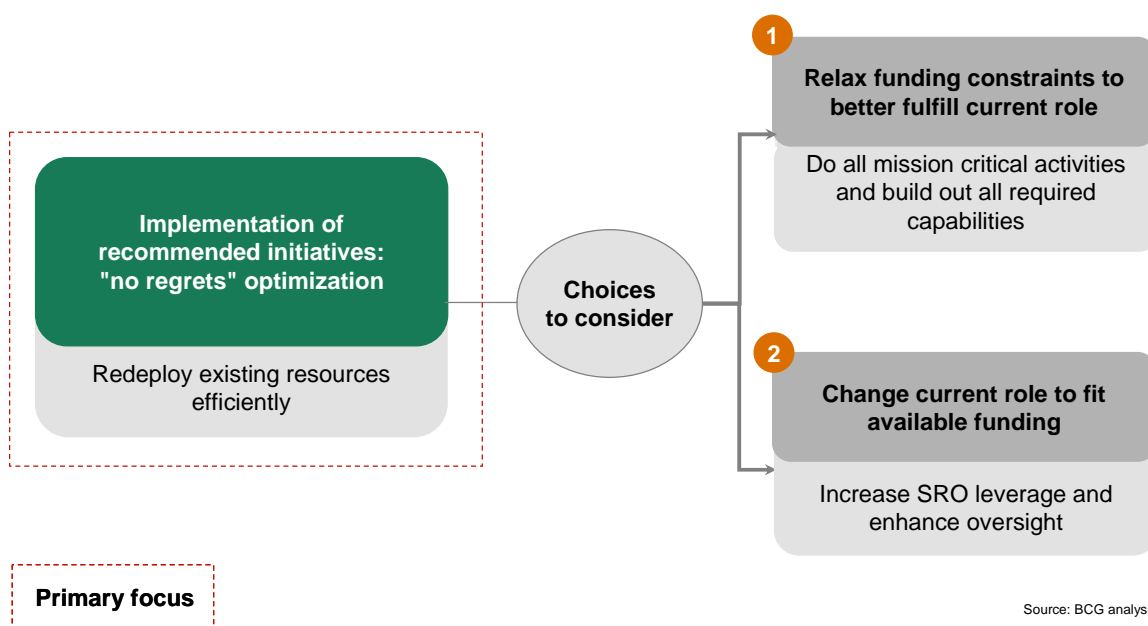
As described in Chapter 3, the SEC oversees a large, complex, and rapidly changing securities market. In addition to its continuing responsibilities under pre-existing legal authorizations, the agency is taking steps to adapt to the renewed regulatory focus on systemic risk as well as the expanded authorizations and responsibilities under Dodd-Frank.

The agency has been shouldering these expanded responsibilities in the face of real constraints, as described in Chapter 3. It has done so by stretching its organization, people, and legacy technology. Given the crucial role of the SEC at this time of transformational change in the securities markets, it is vital that the agency align its available resources against the highest priority mission-related activities, and invest in the necessary capabilities for its future.

As is clear from the wide range of initiatives the agency has already undertaken, the SEC is on the path to using its resources better and investing in key capabilities. Some of these initiatives have been completed (e.g., the reorganization of Enforcement) and are already delivering good results, while some continue to be implemented (e.g., the reorganization of OCIE, the build out of RSFI, and the implementation of the new performance management system). Furthermore, concrete steps have been taken in other areas (e.g., hiring of a COO and a new CIO, and the Tips, Complaints, and Referrals (TCR) first phase rollout). The SEC's senior management has taken steps to create greater collaboration and communication within their respective areas as well as across the agency. The agency has also been driving efforts to create a Consolidated Audit Trail (CAT) and working with SROs to ensure a comprehensive view of market data.

Having said this, there is more to do. There are mission critical activities that the SEC is not performing that force it to make intelligent but hard trade-offs. There is enabling infrastructure that the SEC requires to support its operating divisions and regulatory activities but is able to only partially invest in. The strategic challenge for the agency is to implement these changes while continuing to deliver on its expanded mandate given the foregoing. This chapter proposes a strategy to address this challenge in a way that optimizes its resources and strengthens the agency within its current context and outlines a roadmap for a future in which some of its constraints are relaxed. We have structured this discussion as outlined in Exhibit 6.1-1.

Exhibit 6.1-1: Focus on “no regrets” optimization



The SEC’s primary focus in the near term should be optimization. Absent significant change in the agency’s role and/or relaxation of funding constraints, it has to find ways to do more with existing resources. This will require a reprioritization of regulatory activities and the redeployment of available resources in a more efficient way. In turn, these actions will free up some resources for investment in the agency’s required capabilities. Doing so will enhance the SEC’s focus on the most critical regulatory activities, partially create the capabilities required of the agency moving forward, and create a foundation to build upon for the future as the SEC’s role evolves and/or more resources become available. It is crucial to note that while this strategy will strengthen the SEC, it will still leave the agency short of what it deems necessary in terms of activities and capabilities.

Choice 1 illustrates what the SEC could do more fully if its constraints were relaxed. The agency would no longer have to make as many hard trade-offs among regulatory activities and would be able to fully build out the capabilities that enhance its effectiveness. The agency could also expand crucial programs (e.g., investor adviser exams) consistent with mission needs.

While it is possible to extend Choice 1 to consider a materially larger SEC that even takes on some responsibilities currently performed by SROs, we believe that such consideration requires a real debate about the role of the agency. There are clear advantages to the consolidation of greater regulatory responsibilities into the SEC (e.g., increased visibility, control, and the elimination of perceived conflicts of interest); however, these should be balanced against the material expansion in budget implied as well as consequent management complexity.

Choice 2 illustrates a radical redesign of the SEC's role to fit its available funding. In the event that available resources are insufficient to invest in all the capabilities required by the SEC to perform its regulatory activities, it will be useful to consider a role redefinition for the agency. The SEC could consider materially expanding the role of existing SROs and support the creation of new SROs (as appropriate) to handle selected regulatory activities that the agency currently handles. This will selectively shift the funding burden from the SEC (and Congress) to the SROs (and the industry). The agency would redeploy its available resources to substantially strengthen its rulemaking, exam, and enforcement functions and redesign its organizational capabilities to be consistent with a radically redesigned role.

While the bulk of our recommendations focus on optimizing the agency, the debate on the appropriate role of SROs is implicit in Choices 1 and 2. This is a very important debate, not just from an investment, capability, and resource standpoint but also from the perspective of regulatory philosophy. There are strong arguments on either side of the debate as described in Chapter 3. Regardless of how this debate is eventually resolved, we believe that the SEC has the opportunity to take specific actions today to optimize its available resources, which will enable a greater focus on the highest-priority regulatory activities with materially enhanced efficiency. If planned and executed well, these actions will also create foundational capabilities that are relevant in both Choices 1 and 2. Thus, while the debate on the role of SROs continues, the SEC can make concrete progress today that is not in conflict with the resolution of this debate.

6.1 “No regrets” optimization

The SEC can take specific steps to redeploy available resources in a way that will enhance its effectiveness and efficiency. BCG recommends that the agency:

- ***Reprioritize regulatory activities:*** The SEC should engage in a rigorous assessment of its highest-priority needs in regulatory policy and operations, and reallocate resources accordingly
- ***Reshape the organization:*** The SEC should reshape its organizational structure, roles, and governance to maximize efficiency, effectiveness, and collaboration, as well as to drive continuous improvement
- ***Invest in enabling infrastructure:*** The SEC should invest in key enabling infrastructure, including technology, human resources, risk management, and high-priority staff skills
- ***Enhance SRO engagement model:*** The SEC should implement initiatives to enhance its role as both an overseer of, and co-regulator with, SROs

Given its resource constraints, the SEC should **reprioritize** its regulatory activities. The SEC's various divisions and offices have identified several high-priority activities they deem critical to initiate or expand upon but are currently unable to undertake. Given that at least some of these activities are of greater priority than current activities (as suggested by the divisions and offices themselves), the SEC should consider scaling back or stopping some vital but lesser priority activities to free up resources. The agency should also consider identifying selected activities that outside institutions with aligned interests (e.g., SROs) may be able to perform. The agency is best placed to identify where, if any, such flexibilities exist and to make the inevitably hard trade-offs, keeping in mind the risks such a reprioritization implies. If the SEC does not receive greater resources in the near-term, it will not be able to defer this reprioritization in the hopes of using more resources to effect solutions.

While the foregoing reprioritization will allow the SEC to redirect its mission-focused resources to higher-priority activities, it by itself will neither make the agency's organization more efficient nor release significant resources for investment in new capabilities (e.g., technology). By selectively **reshaping** its structure, the SEC has the opportunity to become an agile and efficient organization with clear roles, accountabilities, and reporting lines which will improve decision-making, collaboration, people management, and staff engagement. This reshaping, along with the reprioritization of regulatory activities, will likely change the roles required going forward. The SEC should also undertake a comprehensive review of all its costs and processes to identify potential areas of savings which will help to drive continuous improvement. This could lead to some resource release, which could then be reinvested in technology, people, and crucial capabilities.

The SEC should also seek to **invest**, to the extent possible, in further enhancing selected enabling infrastructure: technology, human resources, risk management, and high-priority staff skills. While the full build out of these capabilities to the degree desired will require additional resources, some investment is necessary even now as a means to execute the agency's mission more efficiently. For example, increased investment in workflow technology can help free up FTEs that can be used in better ways. Similarly investment in human resource management capabilities can help with the implementation of some organizational reshaping initiatives crucial for efficiency. Finally, investment in risk management can extend the concept of RSFI in a way that will allow the agency to quickly aggregate, analyze, and take action on information from across the agency, co-regulators, and related SROs.

Finally, with its reprioritized regulatory activities, an agile and efficient organization, and stronger enabling infrastructure, the SEC should **enhance its engagement model with SROs**. It should take steps to further strengthen its oversight of SROs, for example by establishing rigorous SRO disclosure requirements. The SEC should also improve its ability to partner with and

leverage SROs by developing a more coordinated approach to SRO interactions and studying options to optimize the SRO rule review and approval processes.

To drive disciplined implementation of these initiatives, the SEC should establish a dedicated Project Management Office (PMO) with robust initiative progress reporting, as well as strong governance and oversight to enable rapid course correction in the event of progress being stalled.

Collectively, these sets of initiatives will help the SEC address some of the chronic gaps it faces, build many required forward-looking capabilities, and use its available resources better. However, it is important to note that the benefits possible under current constraints are limited, considering the amount of investment required to build the forward-looking capabilities alluded to in Chapter 5. Thus, the agency will still not be performing several regulatory activities that it deems necessary for its mission, nor will it have the ability to build out all the capabilities it needs to oversee the fast-changing markets (e.g., all of the technology skills and systems required to keep pace with increases in high-frequency trading). This results in clear risks that Congress should be aware of as it contemplates the ongoing role of, and the right resource allocation for, the agency.

6.1.1 Reprioritize regulatory activities

6.1.1.1 Initiative 1: Reprioritize regulatory activities

Given resource constraints that prevent the SEC from executing all mission critical activities that its senior managers deem necessary and consistent with its statutory mission, it is imperative that the agency align its resources against the highest-priority activities. In this section, BCG recommends an initiative to help the SEC undertake a rigorous reprioritization of its ongoing work, as well as activities that it deems critical to strengthen or commence. We first discuss the initiative and four categories of actions that the SEC should consider, as well as selected examples for each category derived from interviews with SEC senior management.

Description and benefits

The SEC is already making some difficult trade-offs between valuable activities, and this will need to continue given the impact of Dodd-Frank and the evolving securities markets on the agency's priorities. Assuming that funding constraints are likely to persist, BCG recommends that the SEC undertake a robust agency-wide process to evaluate and reprioritize its mission critical activities and re-align resources accordingly. In doing so, each division and office should classify its respective mission critical activities into four categories:

1. *High-priority activities that SEC management deems critical to strengthen or commence*
2. *Activities that the SEC could, if necessary, scale back or stop entirely*
3. *Activities where the SEC could consider delegating responsibilities externally, e.g., to SROs*
4. *Mandated activities where SEC management would request implementation flexibility*

Below, we present examples of activities gleaned from a series of interviews with senior leadership from the SEC's operating divisions.¹⁰¹ We discuss one selected example for each category in more depth, detailing the activity as well as potential benefits and risks that could arise from reprioritization. Note that these examples are not intended to be comprehensive and are presented for illustrative purposes only. *Furthermore, this is an exercise that only the SEC can undertake; BCG takes no view on which regulatory activities should be prioritized or in what way.*

If the agency reprioritizes its mission critical activities, it will create some flexibility in the deployment of available resources. This exercise will also promote alignment among the SEC's senior management with regard to agency-wide priorities. Finally, the SEC will also benefit by transparently stating the risks inherent in scaling back, delegating, or not commencing some activities. Making these risks explicit will illustrate the difficult but necessary trade-offs that exist given the SEC's current context and will particularly address the "expectations" disconnect described earlier.

1. Activities SEC management deems critical to strengthen or commence

As noted above, there are a number of high-priority mission critical activities (identified by the operating divisions) that the agency is currently not performing to the extent senior management seeks to. Illustrative examples are listed below:

- Strengthen the triage of Suspicious Activity Reports
- Increase strategic partnership with other regulators
- Deepen monitoring of the markets, clearing agencies, and securities firms
- Enhance market analysis capabilities, for example the use of data to understand money market fund exposure to non-US issuer risk
- Strengthen selected ongoing disclosure review, such as public company transactions, proxy statements, and complex financial institutions
- Conduct effective oversight of new registrants, such as those newly under the SEC's purview as a result of Dodd-Frank (e.g., swap registrants and private fund advisers)

¹⁰¹ We use the term "operating divisions" as including the five Divisions and OCIE.

- Strengthen the examination program, both in terms of frequency (e.g., investment adviser examinations) and depth (e.g., using more dedicated teams, such as large firm monitors)

The examples above illustrate a subset of activities that the operating divisions indicated are a high priority for expansion. However, given the agency's constraints, it is unlikely that the SEC will have sufficient resources to perform all of these activities, even if it reprioritizes its current work. It is important to explicitly state which activities the SEC will not be able to commence, as well as the associated risks. For example, OCIE deems it necessary to **expand its examination of investment advisers** while maintaining a risk-based approach. Historically, OCIE reviews 9 to 18 percent of investment advisers annually.¹⁰² In comparison, 45 to 55 percent of broker-dealers are examined by the SEC or FINRA each year. Even if OCIE prioritized strengthening the investment adviser exam program, the resources required would be prohibitive in the current context. For example, doubling the percentage of investment advisers examined annually would require an additional 350 to 400 FTEs. While reprioritizing will ensure that the SEC dedicates resources to its highest agency-wide priorities, it will still not provide sufficient resource flexibility for the SEC to take on every mission critical activity.

2. Activities the SEC could scale back or stop if necessary

Beyond those activities that the SEC could delegate to SROs or other entities, there is a set of activities that the agency could further scale back or stop entirely, if absolutely necessary. The SEC is already making trade-offs by scaling back existing activities to meet the requirements and deadlines included in Dodd-Frank. This clearly poses risks, which should be transparently acknowledged by all stakeholders. Illustrative examples are listed below, with one example discussed in greater detail:

- Discretionary rulemaking projects
- SRO rule review by leveraging self-certification
- Intensity of Sarbanes-Oxley-mandated disclosure review for small companies
- Broker-dealer examinations by further leveraging FINRA

As an example, the Division of Trading and Markets (TM) could potentially reduce resources dedicated to **SRO rule review** by leveraging a self-certification process. Currently, certain rule changes proposed by an SRO must be filed with and reviewed by SEC staff in TM, although some rules take effect upon filing and others will be deemed approved automatically if deadlines pass without action by the SEC. If Congress amended the Exchange Act, TM could use an alternate model for certain SROs or filing types wherein SROs self-certify proposed rule changes using a pre-determined set of guidelines. Self-certified changes would then be reviewed by the regulator. The Commission has proposed rules that

¹⁰² *In Brief FY 2006 – 2011 Congressional Justification, section 914*

would use this model for swap-execution facilities; this model will also be employed by the CFTC. This would still require resources for rule review, but self-certification would streamline the review process and reduce the effort required. One risk is that TM may not review all of the self-certified filings thoroughly or quickly enough to prevent harmful rules from taking effect (e.g., excessive fees for market participants). In addition, filings that raise significant policy issues would still require adequate time for the Commission to make its judgment based on the best interests of the public. Market participants harmed by an SRO rule would likely bring it to the SEC's attention, but by that point damage would have already occurred. In addition, reducing TM's involvement with the SRO rulemaking process could make it more difficult to maintain an overarching view of changes occurring in the market.

3. Activities the SEC could consider delegating responsibilities externally

In selected cases, the SEC could also reduce its resource needs by delegating activities to an SRO or other entity with aligned interests. The examples discussed here address potential areas of delegation in the current context, where the SEC's role does not fundamentally change. In Choice 2, the SEC would radically reconsider its role and explore increasing third party leverage. In this case, delegation would require that Congress authorize additional non-conflicted SROs. Two illustrative examples for the current context are listed below, with one example discussed in greater detail:

- Collection and distribution of funds disgorged through legal proceedings
- Section 31 examinations of fee payments by SROs

As an example, consider the annual **Section 31 examinations** conducted by OCIE. Under Section 31 of the Exchange Act, SROs are required to pay fees to the Commission based on the sales of certain securities. OCIE examines the SROs to ensure that the SEC receives the correct payments. Instead, the SEC could require SROs to obtain a third-party audit demonstrating payment of the correct amounts. This would both reduce the SEC's workload and increase the quality of the examination, as OCIE's staff does not include auditors, nor does it have sufficient resources to conduct a full audit of each SRO. The SEC would appear to face minimal risks in delegating this activity.

Again, this is a partial but representative list of activities that the SEC could consider delegating to other organizations. Doing so would provide the SEC with the flexibility to shift resources otherwise used to perform these tasks to support higher-priority activities as discussed above.

4. Mandated activities where SEC senior management would request implementation flexibility

Operating division management identified an illustrative set of example activities where the SEC would request implementation flexibility from Congress, including:

- Mandatory examinations of all NRSROs annually and a public report on examination results (OCIE would prefer the discretion to use a risk-based approach)
- Mandatory disclosure review required by Sarbanes-Oxley for small public issuers and investment companies
- Certain mandatory rulemaking projects

As an example, the SEC would seek flexibility on Sarbanes-Oxley's requirement to conduct **disclosure review for small public issuers and investment companies**. Sarbanes-Oxley requires the SEC to review financial statement disclosures for all public companies, including investment companies, at least once every three years. The smallest public companies constitute approximately 60 percent of issuers but less than one percent of total market capitalization. While the Division of Corporation Finance (CF) would still conduct some disclosure review of small issuers, it would use a risk-based approach to target companies with a high risk profile or for which a specific tip or complaint was received. Similarly, the Division of Investment Management (IM) would seek flexibility with respect to mandated reviews of investment company financial statements given the already high degree of SEC scrutiny on investment fund prospectuses.

Implementation approach

To fully consider the categories of activities described above, the SEC should implement this reprioritization initiative in two steps. First, each division and office should conduct an internal prioritization exercise to understand which activities it considers critical to strengthen or add and which it could scale back, stop, or delegate. These activities should be ranked in order of priority (i.e. activities the division would choose to strengthen first, activities it would choose to scale back first), based on a clear and consistent set of criteria (e.g., alignment with agency mission, risks to investors). Managers should also estimate the resources associated with each activity. *BCG takes no view on which activities should be prioritized; this is an exercise that should be completed by the SEC.*

Next, the Chairman's office should establish a cross-divisional working group that integrates each division's and office's assessment into a broad portfolio of priorities. This working group should develop agency-wide priorities with regard to where the agency should take advantage of flexibility. These broad priorities should determine the reallocation of resources freed up through scaling back, stopping, or delegating activities. This process should take no more than six months. The SEC should also reprise the process on an annual basis.

Costs

This initiative should not result in any additional costs for the SEC. While it will require a commitment of management time initially and on an ongoing

basis (to a lesser degree), once completed it will free up resources to be redeployed to other priorities.

Risks

The primary risk to implementation for this initiative is that the SEC may not be able to implement its reprioritization due to organizational rigidities. It is also possible that Congress will not grant the SEC the implementation flexibility required to reprioritize certain activities. In addition, even if the SEC reprioritizes successfully, there will still be several high-priority, mission critical activities that the agency does not have the resources to commence. It is crucial that the SEC transparently communicate these risks to the appropriate stakeholders so that they can be mitigated to the fullest extent possible.

6.1.2 Reshape the organization

In this section, BCG recommends that the SEC make fundamental decisions about its organization design, specifically with regard to its divisional structure, operations management, and regional model. We also propose that the SEC seek flexibility from Congress on Dodd-Frank mandated offices, review the interaction between the Commission and agency staff (e.g., delegation of authority), and initiate a continuous improvement program to drive efficiency.

These initiatives are a vital lever for the SEC to ensure that the agency allocates its available resources in the most efficient and effective way possible. The SEC's senior management should also recognize that this is a "leadership moment" for the agency, and that they have an opportunity to make tough decisions about organizational priorities as collaboratively as possible—through a disciplined, transparent, and equitable process.

In particular, BCG recommends that the SEC implement four specific initiatives to reshape the organization:

Systematically redesign the organization: As the SEC redesigns its organization, it should address three key design areas of focus:

1. *Structural design of operating divisions (including OCIE)*
2. *Operations management and support office structure*
3. *Strategy and design of the regional model*

In addition, the redesign should examine how the various organizational units collaborate with each other. Finally, it should ensure that the organization design is consistent with the reprioritized activities and that the agency's resources are deployed most efficiently.

While we have described concrete options and the respective benefits and risks for each of the areas outlined above, the selected option must be consistent

with the systematic reprioritization of the agency's core activities described previously. The agency needs to complete the design and embrace the change to ensure ownership, accountability, and implementation support for the redesign going forward. All the options described in this context are feasible; however, choosing one *a priori* creates the risk of having to redesign once again, following activity reprioritization.

Per BCG experience, such organizational reshaping is best done through a cascading process that redesigns the organization, strengthens accountability and collaboration through the clear definition of role charters, and removes excess management layers to improve efficiency and effectiveness. A systematic reshaping and flattening of the organizational pyramid will empower employees and speed decision-making. The impact of the reshaping could vary across the agency driven by organizational context and already completed reshaping initiatives.

Seek flexibility from Congress on Dodd-Frank mandated offices: Dodd-Frank requires the SEC to create four new offices with direct reporting relationships to the Chairman. Given that some of these functions already exist within the SEC, BCG recommends that Congress authorize flexibility for the agency to organize these new offices in a way to reduce duplication with existing divisions and offices.

Review Commission/staff interaction processes and delegation of authority: BCG recommends that the SEC review the Commission/staff interaction processes to: 1) provide clarity on delegated authority; 2) increase transparency for the Commission in areas where authority is delegated; and 3) increase efficiency in Commission/staff interactions in areas where authority is retained by the Commission.

Implement a continuous improvement program: BCG recommends that the agency undertake an initiative to systematically reduce costs throughout the organization. This could include levers such as demand management, sourcing, business process optimization, factor cost optimization, and contractor-to-employee conversion.

6.1.2.1 Initiative 2a: Systematically redesign the organization

Description and benefits

BCG recommends the SEC follow a disciplined and transparent cascading process to redesign the organization, adjust management and team role charters, and remove excess management layers to improve organization effectiveness and reduce management costs (i.e. delayering). This cascading approach implies a layer-by-layer process that starts at the top and flows through the organization, repeating the steps of redesigning and role chartering for every layer of the organization.

In the first phase of this initiative, the SEC needs to address fundamental questions about its operating model, specifically in the areas described below. These areas of focus should be addressed in the context of the reprioritization as discussed in Section 6.1.

1. *Structural design of operating divisions:* The SEC needs to address issues concerning the separation of broker-dealer and investment adviser regulation and the distance between exam and rulemaking functions
2. *Operations management and support office structure:* The SEC needs to ensure operational effectiveness and efficiency agency-wide as well as in the divisions and regional offices. In addition, the SEC should simplify its support office structure and empower the role of the COO
3. *Strategy and design of the regional model:* The SEC should assess whether today's regional structure can effectively support the national programs it has created. In developing a regional strategy, the agency should focus on: 1) location approach; 2) the balance between, and roles of, regional versus home office staff; and 3) the regional reporting structure

In the second phase of this initiative, after the agency has reached a decision on the operating model and key questions outlined above, the SEC should conduct a layer-by-layer role chartering, which will allow the agency to fundamentally rethink every role at the SEC in light of the reprioritization of mission critical activities. This will allow the agency to reinforce clarity of accountability, resolve decision right tensions, and identify and agree on critical interdependencies. This effort will also facilitate a critical assessment of long-standing processes and how to make them more efficient, thereby building on efforts already under way (e.g., in CF and OCIE).

In parallel, the SEC should systematically delayer selected organizational units. This would include increasing spans of control, eliminating redundant reporting layers and positions and—where applicable—redefining the management role to emphasize talent management skills. This will afford the agency with greater flexibility in redeploying available resources and FTEs against the reprioritized set of mission critical activities and other capability-building initiatives. A flatter organization typically enables faster information sharing and the delegation of decisions to the right level of expertise. Finally, delayering would increase the empowerment of employees in lower organizational layers, thus yielding a more engaged workforce.

Implementation approach

The proposed layer-by-layer redesign and role chartering exercise involves each manager defining the supporting organization and roles needed in order to perform assigned responsibilities, and then staffing those roles accordingly. The process is then repeated at the next layer down, cascading through the

organization until it reaches the bottom. The role chartering process works by bringing together management teams and enabling them to coalesce around how they can individually and collectively “get the job done”—that is, deliver on the agency’s mission.

A successful role chartering process depends on management commitment to, and ownership of, four key outcomes:

- Clear individual accountabilities for mission critical objectives assigned solely to the responsible management team member. The accumulation of these accountabilities defines the expected achievements for the entire organizational unit
- Clear shared accountabilities, where individual management team members jointly agree on which mission critical interdependencies are shared, and with whom—resulting in joint commitments to successful outcomes
- The key metrics that indicate the success of these individual and shared accountabilities
- The high-priority decision rights that need to be assigned to empower each individual in the management team to meet their accountabilities

Throughout this process, managers will design their organization within a set of pre-defined design principles that include targets for the spans of control and layers consistent with the context of each organizational unit. If a manager determines that a particular role is no longer necessary as a result of activity reprioritization, the agency may choose to include the role as part of a reduction-in-force (RIF). A PMO usually plays a strong role in coordinating this effort across different organizational units.

Each relevant division or office should own this process, starting with the most senior managers and cascading through the organization. A PMO should also provide guidance and support. In conjunction, the SEC should work in partnership with, and engage, the union throughout the organization redesign process. The entire redesign should take no longer than six to nine months, with each relevant division and office proceeding in parallel. It will, however, take longer to resolve final RIF decisions and to fulfill appropriate legal and contractual requirements.

Costs

The primary cost associated with role chartering is a significant upfront investment of managerial staff time. Generally, the process takes four to six weeks for each management layer, with a weekly time commitment of approximately 20 percent by each manager. With regard to the delaying aspect of this effort, the costs will be twofold. First, any RIF will incur various costs—for example, potential severance costs of up to \$25,000 per employee, depending on tenure, or costs related to accrued leave. Second, management time will be

expended, primarily at the leadership and middle management levels. Any RIF will also require additional time from human resources personnel. However, if this initiative is approached in a targeted way and cascaded through the organization, the incremental time demand should not be so great as to require new capacity.

Risks

Any organizational reshaping exercise comes with the attendant possibilities of losing some focus on day-to-day priorities, creating confusion around accountabilities and decision rights, misaligning roles and personnel from a capability perspective, and disengaging employees. The recommended process outlined above, in conjunction with a strong PMO, should significantly mitigate these risks excluding that of personnel mismatch. The risk of a personnel mismatch is a real concern given the constraints of civil service laws which grant “bump and retreat” rights according to tenure. In the case of a RIF, “bump and retreat” rights give the senior employees who have risen through the ranks the right to reclaim former positions. The benefit of such rights is that it provides a way to keep experienced personnel, even if their current role is eliminated. However, the risk can be that this approach limits flexibility in filling positions.

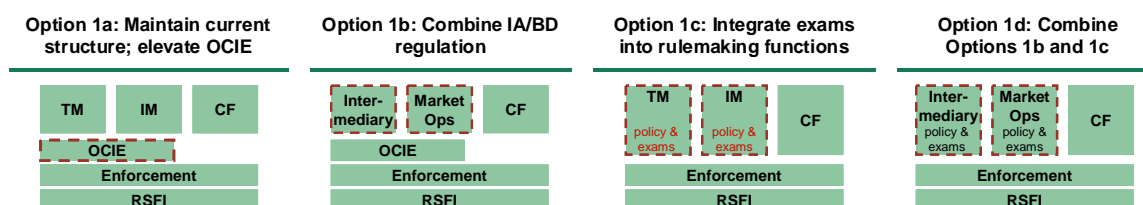
6.1.2.1.1 Additional details on three areas of focus

As discussed earlier, during the redesign of its organization, the SEC needs to consider three specific aspects of its operating model: the structural design of its operating divisions, its operational management approach, and its location strategy and regional model. We discuss each area of focus in turn to provide additional color on this initiative.

1. Area of focus: Structural design of operating divisions

The SEC’s five operating divisions, together with OCIE, carry out the majority of the agency’s mission-related programs. The current divisional structure follows a rigid regulatory framework and, aside from the creation of RSFI, has not fundamentally changed in the past fifteen years. Looking ahead, the SEC should shape an organization that keeps pace with the fluid and ever-changing markets that it regulates. Specifically, the SEC needs to address the structural separation of broker-dealer and investment adviser regulation and the structural distance between exam and rulemaking functions. We have laid out four options for the SEC to consider. The decision on these will be made by the SEC through the redesign process described earlier.

Exhibit 6.1.2.1-1: Options for structural design of the SEC's operating divisions



Source: BCG analysis

Option 1a: Maintain current structure and elevate OCIE to division status

Under this option, the SEC would retain its current divisional structure. Where divisional boundaries create challenges, either because the SEC's structure does not reflect changes in the securities markets or because there are structural distances between thematically linked units,¹⁰³ the SEC would strive to overcome these challenges by implementing strong collaboration mechanisms. These could take the form of a designated function (e.g., exam liaison offices), defined working teams (such as the cross-divisional team working on the Section 913 Study) or clearly defined processes (e.g., for joint rulemaking projects). To strengthen OCIE's coordinating role for the exam program, the SEC should consider elevating OCIE to division status in this option.

This option has several benefits:

- Minimizing change in TM and IM's current structure would prevent major burden on both divisions, at a time when they are significantly stretched by the implementation requirements resulting from Dodd-Frank
- Elevating OCIE to division status would further strengthen OCIE and support its efforts to establish a streamlined and consistent National Exam Program. As the second largest operating unit in the SEC, OCIE accounts for approximately 25 percent of SEC staff and budget. Maintaining OCIE as a separate division would equip it with greater independence, standing and authority, and would also provide for greater consistency throughout the examination program.

The downsides of keeping the current structure and bridging structural distances via collaboration are:

- The SEC's structure would still not be fully aligned with the business realities of the investment adviser and broker-dealer industries that it regulates
- The agency would not achieve the in-depth knowledge flow between exam and rulemaking functions that could result from structural integration. It would also limit a potential career path for examiners to move into rulemaking functions within the same division

¹⁰³ For an overview of structural challenges, refer to Chapter 4.

- Given the Dodd-Frank provision in Section 965, the SEC would risk duplicating exam functions in OCIE (home office and regional offices) and the rulemaking divisions and an increasingly fragmented exam program

Option 1b: Redesign TM and IM to combine investment adviser and broker-dealer regulation

Under this option, while recognizing the decision with respect to harmonizing investment adviser and broker-dealer regulation has yet to be made, the SEC would redraw the boundaries between IM and TM to combine investment adviser and broker-dealer regulation in one division. The SEC would essentially restructure TM and IM to create two new divisions. TM's existing market oversight and operations functions would be spun off into a new division, tasked with responsibility for regulating the securities markets. The remaining broker-dealer regulatory functions would then be combined with the functions currently in IM. This second new division would be responsible for regulating intermediaries' practices.

This option has the following principal benefit:

- It would create an organization that reflects the highly integrated nature of the financial services industry and allow for harmonized investment adviser and broker-dealer regulation as was recently recommended by SEC staff¹⁰⁴

However, the downsides of this option are:

- The ultimate degree of harmonization will depend on Congressional actions regarding the laws and regulatory frameworks that apply to investment adviser and broker-dealer regulation. However, the debate over the extent of harmonization is still ongoing, with the study under Section 913 of Dodd-Frank having been delivered by SEC staff in January 2011
- IM and TM are currently focused on rule-writing requirements resulting from Dodd-Frank, and a major reorganization might stretch management capacity, thus impacting the timetable for Dodd-Frank implementation
- This option would still not address the structural distance between exam and rulemaking functions

Option 1c: Integrate the exam function into the rulemaking divisions of IM and TM

Under this option, the SEC would re-integrate the exam functions back into IM and TM, replacing OCIE as a standalone office. This would mirror the structure prior to the creation of OCIE in 1995 and would potentially support the

¹⁰⁴ *Study on Investment Advisers and Broker-Dealers*. It is important to note that, while SEC staff has issued a recommendation, the Commission has not yet proposed new rulemaking on harmonizing broker-dealer and investment adviser regulation.

intent behind Section 965 of Dodd-Frank, which requires IM and TM to establish a staff of examiners.¹⁰⁵

Structurally combining the two functions has two main benefits:

- It would result in proximity and all of the associated benefits between rulemaking and exam functions
- It would provide a richer career path, as employees can start in the division as an examiner and then choose to move into a more policy-focused role, bringing with them the breadth of knowledge stemming from on-the-ground examinations

On the other hand, the downsides and risks are:

- It would constrain OCIE's previous efforts to establish a streamlined, consistent, and connected National Exam Program, and would result in increased fragmentation of exam resources across divisions
- It could lead to specialized exam groups for broker-dealers and investment advisers, limiting the exam program's flexibility to draw on both sets of expertise
- It could limit the SEC's ability to reduce duplication in the exam program, realize synergies, and streamline communication between the exam staff and other divisions (e.g., Enforcement)
- While it creates a career path from exam into operating divisional policy and rulemaking, it would take away the management career path within OCIE as a functional organization

Option 1d: Combine options 1b and 1c

This option combines the two proposals described above, with the respective benefits and risks outlined earlier

2. Area of focus: Operations management and support office structure

As the SEC redesigns its organization, it needs to continue its efforts on operational effectiveness and efficiency. It should look to simplify its support office structure, and also clarify and empower the role of the COO.

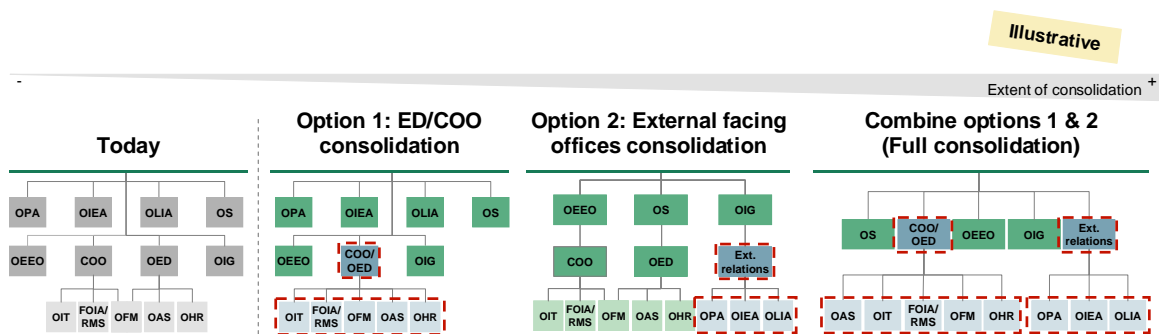
Simplifying the support office structure has two components (as depicted in Exhibit 6.1.2.1-2 below): 1) consolidating the COO and ED offices into one; and 2) consolidating the external facing functions of the Office of Public Affairs (OPA), the Office of Investor Education and Advocacy (OIEA), and the Office of Legislative and Intergovernmental Affairs (OLIA) under a new Office of External Relations. The first of these would enable the SEC to adopt an agency-wide approach to improving efficiency under a single point of accountability and

¹⁰⁵ Section 961 of Dodd-Frank references OCIE, however, suggesting uncertainty with respect to Congress's intent regarding OCIE.

focused leadership. The second would enable a more efficient means of ensuring consistent and aligned external facing communications and stakeholder management.

Consequently, the SEC has three distinct options in addition to the current structure, as depicted in Exhibit 6.1.2.1-2:

Exhibit 6.1.2.1-2: Options for consolidating administrative support offices



Source: BCG analysis

Option 2a: Consolidate the ED and COO into one office

In its combined form, the responsibility of the COO would be to maximize the use of the SEC’s administrative resources by overseeing the strategic planning, information technology program, financial management, records management, human resources and administrative functions of the agency. With regard to the role of the COO, the SEC would seek to empower it: in addition to directly overseeing the administrative support offices, the COO would serve as a “Center of Excellence” for efficient business processes by coordinating closely with the managing executives (who carry out COO-like functions) in the divisions and offices to provide guidance and facilitate best practice sharing. The interaction between the COO and the divisional managing executives could take a number of forms: 1) informal coordination; 2) dotted-line reporting of the managing executives; or 3) a dual reporting relationship to both the COO and the division director. To avoid the complexities of dual relationships and to ensure closeness to the division’s operations, BCG recommends a coordination model, whereby the managing executives report to the division director and are less formally connected to the COO (e.g., through a committee structure). In addition, the role chartering process should be used to clarify accountabilities and decision rights for the COO and managing executives. We propose that each division introduce a managing executive role to serve as the division’s COO, with responsibility over all operational aspects. This will allow division directors to focus on the policy agenda. Finally, the agency COO would also be in charge of the strategic planning and budget processes, which represent important tools for cross-divisional collaboration and should be used to communicate and embed the agency’s overall vision within every division and office.

One could imagine the role of the COO as a broader one, with a focus that extends beyond administrative functions. We do not recommend such a role for the SEC; it is preferable, in our view, to retain key operational decision-making under the purview of division directors and their managing executives in order to maintain proximity to the specific processes and procedures, and otherwise align with divisional strategic priorities. However, the risk to keeping the authority for division operations separate is that the agency COO would then require the close cooperation and dedication of divisional directors and other managers. If divisional cooperation were not fully available given other priorities, this would limit the potential of the COO role.

Option 2b: Consolidate external facing offices under one new Office of External Relations

Under this option, OPA, OLIA, and OIEA would be consolidated under a new Office of External Relations to ensure maximum consistency in the SEC's communication with external audiences. This new overarching office would also contain any other external relations functions, such as responsibility for the agency's website, which is currently under the purview of the Office of the Secretary (OS). As part of its primary accountabilities, this office would institute agency-wide procedures to ensure that all external communication (e.g., speeches, press statements) are pre-approved. It could also use its infrastructure to support internal SEC communications, where appropriate. The consolidation of these offices would reduce organizational complexity while at the same time allowing for increased efficiency and alignment of the SEC's external facing communications and enhanced stakeholder management.

However, by creating another layer between the Chairman and external-facing offices (e.g., OLIA, which prepares the Chairman for Congressional testimony), minor inefficiencies and communication challenges could result. If this option is not executed well, there is the possibility that the specialized skill could get diluted. Similarly, combining OIEA, OPA and OLIA would eliminate the firewall between different types of agency communications.

Option 2c: Consolidate ED and COO and consolidate external facing offices

This option combines the two consolidation proposals described above, with the respective benefits and risks outlined earlier.

3. Area of focus: Strategy and design of the regional model

Over the past two years, the SEC has expended significant effort to streamline and strengthen its enforcement and exam programs. In both cases, the agency has worked to establish consistent and interconnected nationwide programs that extend across all regional offices. Throughout this process, the agency has balanced strengthening the regions (through measures such as delegated authority in Enforcement) with greater home office oversight (through regular reporting processes). As the SEC completes this journey, it needs to

critically assess whether today's regional structure optimally supports the national programs it has created. In developing an effective regional strategy, the agency should:

3(a): Define a clear location approach for the SEC

3(b): Clarify the balance and roles between regional and home office staff

3(c): Consider options for regional reporting relationships

3(a): Define a clear location approach for the SEC: The SEC should develop a location approach, taking into account the costs and benefits of each regional office and the regional structure as a whole. This location approach should determine whether it is appropriate to retain the current regional office structure, selectively consolidate certain offices, or restructure its regional approach altogether (perhaps through establishing fewer but larger regional hubs). The new location approach should support the agency's emphasis on specialization, staffing flexibility, and consistent nationwide programs. Given the SEC's current and likely future funding constraints, consolidating regional offices might free up resources that the agency could re-invest in further building other critical capabilities. The benefits of potential consolidation should be weighed carefully against the benefits of a broader regional model, such as closer involvement with local regulatory communities and markets.

Were the SEC to opt to consolidate regional offices, it would likely have to address concerns across a variety of stakeholders, including local jurisdictions, the union, Congress, and the SEC's regional staff. The agency would also risk losing some of its high-performing staff in the regions as well as the relationships and local knowledge established in the respective regional offices. Depending on the scale of restructuring, a consolidation of regional offices would likely impose implementation risks such as disruptions or slow downs in the affected exam and enforcement programs. These risks should be mitigated through detailed upfront planning.

3(b): Optimize the balance and roles between regional and home office staff: In conjunction with developing a location approach, the SEC should clarify the role and optimal deployment of its investigators and examiners between the home office and regional offices. This initiative primarily applies to Enforcement, where regional and home office responsibilities have historically been an area of ambiguity and contention, and are currently in the process of being clarified.

Establishing clearly delineated roles for regional and home office personnel will enable the agency to utilize its limited resources efficiently. Role clarity would help prevent duplicative efforts and reduce existing tensions between regions and the home office. This should be closely linked to the development of the location approach described above. OCIE, as part of its redesign, has already begun to clarify the roles of home and regional office staff: home office staff will focus primarily on establishing SEC-wide policies, coordinating with policy divisions, providing oversight and guidance to regional

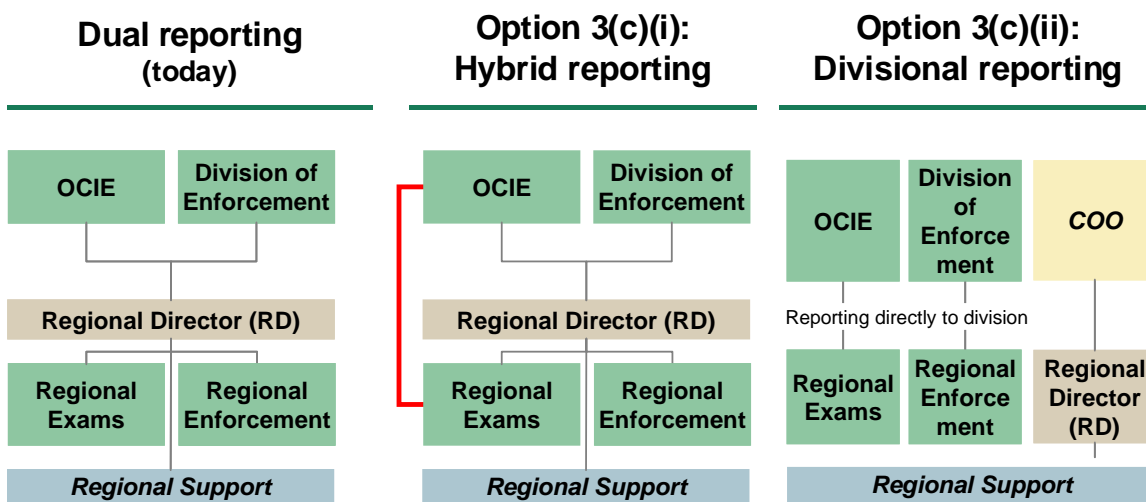
offices, and conducting clearly defined types of exams (e.g., FINRA oversight exams and international exams).

Enforcement should take action to resolve the role ambiguities mentioned above. In doing so, the Division should build on existing efforts, such as the steps it has taken towards: 1) increasing the transparency of the case assignment process to regional offices (e.g., through the new TCR process); and 2) reviewing the case assignment rationale. In conjunction with the working group on the location approach, Enforcement would assess the costs, risks, benefits, and implementation approach for each option.

Ambiguity regarding the role and responsibilities of regional and home office staff creates the risk of inhibiting collaboration and open communication between different team/offices, could lead to duplication, and makes it harder to ensure that activities are carried out by staff who not only have the most relevant expertise but also do so in the most efficient manner.

3(c): Regional reporting relationships: Finally, the SEC should assess its current regional reporting structure. Today’s dual reporting structure between the exam and enforcement programs implies an indirect link between home office and regional program staff. This makes it difficult to ensure nationwide consistency, alignment, and knowledge sharing. This risk is more pronounced in OCIE, partly because of the historically stronger link between the regional offices and Enforcement. The SEC should rethink parts of this model and consider the two alternative options as described in Exhibit 6.1.2.1-3:

Exhibit 6.1.2.1-3: Options for regional reporting relationships



Source: BCG analysis

Option 3(c)(i): Hybrid reporting with direct link between OCIE and the local exam program

Under this approach, the SEC would establish a direct reporting line between the associate director for the respective regional exam programs and the OCIE home office, while retaining the reporting line to the regional director. In addition, the dual reporting structure to Enforcement and OCIE for the regional director would remain as is. There are two primary benefits to this approach. First, the reporting relationship between the regional associate director and OCIE would provide OCIE leadership with more direct oversight into regional office exam programs, thereby enabling the home office to ensure consistency and program-wide prioritization. Second, the regional director—who is ultimately responsible for overseeing the regional exam program in his/her office—would be more directly supported by OCIE leadership.

Under this approach, OCIE would change the existing associate director role in the home office to be responsible for liaising with the exam associate directors in the regions. The associate directors in the home office and the regions would coordinate in the development of exam plans, which the Director of OCIE and the regional director would jointly review as they set the goals, objectives, and priorities for the local exam program. The regional director's responsibilities over regional enforcement functions would remain unchanged.

This option may increase complexity in the regional reporting structure. Regional exam associate directors would have two reporting relationships, which has the potential of diffusing role clarity. This can be mitigated by using the role chartering process, as previously described, to define specific individual and shared accountabilities.

Option 3(c)(ii): Divisional reporting

As an alternative, more radical approach, the SEC could elevate the role of associate regional directors in Enforcement and OCIE and establish a direct reporting line from the regional programs to the respective departments at headquarters. In doing so, the roles of the associate regional director, regional director, and the agency COO would change:

- The associate regional directors would provide senior leadership to their respective programs (examination and enforcement) at the regional office level. They would work with headquarters to establish programmatic and operational priorities, and assume responsibility for day-to-day management and administration duties. Each would report to his or her respective associate director at headquarters
- The regional director, who would report to the COO, would be primarily responsible for overseeing all regional support functions, coordinating cross-divisional affairs for the office, and liaising with co-regulators in the regions (such as SROs and peer regulators)

- The COO would take on an expanded role by assuming responsibility for ensuring adequate administrative support for the regional offices

Under this option, the regional reporting lines would reflect the SEC's overall organization structure along offices and divisions, thus allowing clearer accountabilities for programs and initiatives. In addition, it would further streamline the direct flow of information between headquarters and the regions. Finally, providing the COO with a direct reporting line from the regional offices' administrative support functions would enable the SEC to increase its focus on ensuring operational efficiency in the regions.

Given that this approach requires material changes, there are a number of risks. Under the existing structure, regional directors can ensure alignment between the enforcement and exam programs, and adjust resources and focus as necessary. This option could hamper the regional offices' ability to make those adjustments, given that authority would lie with the two associate directors who may at times have competing priorities. In addition, this option would distance the existing regional directors from programs in the respective offices, which may create attrition issues. Finally, during the transition phase, there is a risk that existing management at the associate director level would need to adapt quickly to the expanded role while continuing pre-existing responsibilities.

4. *Area of focus: Increasing collaboration mechanisms*

Role chartering, as described earlier, represents one mechanism through which the SEC can improve collaboration. In addition, further opportunities include structural, cultural, technological and process solutions:

- **Structural solutions:** Throughout the redesign process, the agency should strive to create an organizational structure—both across and within divisions and offices—that facilitates critical coordination and collaboration. This could include creating specific functions tasked with coordination (like the Enforcement liaison offices of IM, TM, and CF), launching rotational programs across the divisions and offices, or establishing internal divisional structures that align with other divisions (such as Enforcement's Asset Management Unit and IM). A strong internal communications function would also increase transparency on agency-wide topics. In addition, the agency should review its governance and committee structure, formalize some of the agency's recently established Dodd-Frank related meetings (e.g., the General Counsel's regular meetings with the rulemaking functions), more effectively utilize existing meetings (e.g., ITCP, IOC) and introduce selected new committees or meetings (e.g., on risk topics)
- **Cultural solutions:** It is crucial that the SEC's senior management continues its emphasis on the importance of collaboration and communication to foster an open culture. To this end, the SEC should

clearly outline expectations for collaboration for all staff during the role chartering process, contemplate adding collaboration as a component of performance reviews, and adjust incentives to encourage cross-divisional collaboration

- **Technological solutions:** To facilitate information sharing across divisions, the SEC should develop enabling technology solutions (e.g., a knowledge management system), increase the connectivity of its existing systems, and leverage its solutions enterprise-wide (e.g., the new TCR system)
- **Process solutions:** As part of the lean process redesign described later in this section, the SEC should seek to embed collaboration objectives in its key processes. For example, the new TCR process is highly collaborative, much like the working group that helped establish it. In addition, the agency should fully utilize agency-wide processes, such as the strategic planning process, to communicate agency-wide goals and align those with division specific objectives

6.1.2.2 Initiative 2b: Seek flexibility from Congress on Dodd-Frank mandated offices

Description and benefits

Dodd-Frank requires that the SEC create four new offices that will report directly to the Chairman: 1) Office of Municipal Securities (OMS); 2) Office of Credit Rating Agencies (OCRA); 3) Office of the Investor Advocate (OIAD); and 4) Office of Minority and Women Inclusion (OMWI). These offices are primarily intended to increase visibility for the functions they contain, enhancing the degree of focus and resources accorded to them. However, many functions to be performed by these new offices are already performed by existing units within the SEC today. Placing those activities in new offices will create organizational complexity and resource fragmentation. While the objectives of Dodd-Frank are understandable, they could be achieved in a different way that addresses these concerns.

BCG recommends that Congress grant the SEC flexibility to design its organizational structure efficiently, consistent with the activities required by Dodd-Frank. We propose a structure for each office below that would streamline organizational complexity, eliminate duplication of functions, and leverage existing knowledge/infrastructure.

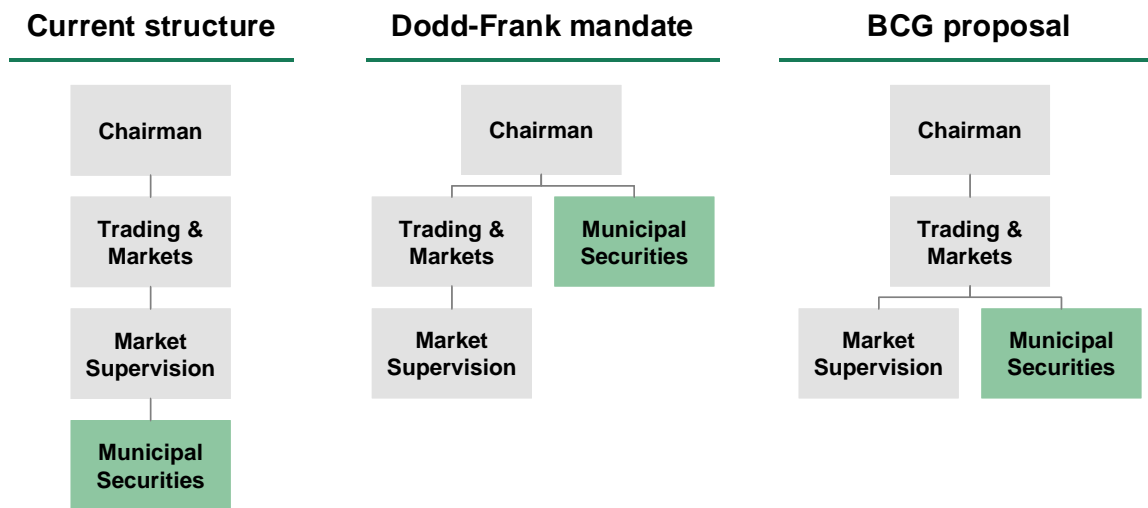
Implementation approach

The reorganization would be owned by the relevant divisions and offices, in consultation with the Chairman's office. The timeline depends on Congressional action but, once flexibility is granted, the process should take no more than six months.

Office of Municipal Securities: Currently, OMS is housed in TM as part of the Office of Market Supervision. Dodd-Frank requires that OMS move out of TM and become an independent office reporting directly to the Chairman. By elevating OMS, Dodd-Frank increases the focus on municipal securities, which became a priority after the liquidity crisis in the auction-rate securities market.¹⁰⁶ Its increased stature should strengthen the office’s relationship with the Municipal Securities Rulemaking Board and enhance OMS’s ability to advocate for its own budget, thus increasing the agency resources devoted to municipal securities. However, this will add to the Chairman’s already large number of direct reports and require investment in infrastructure and support for a relatively small office.

A more efficient option that may allow the SEC to achieve the goals of Dodd-Frank is that municipal securities oversight could remain in TM, but with a direct reporting line to the Division Director (see Exhibit 6.1.2.2-1). This would address the objective of increasing senior leadership visibility into municipal securities issues while avoiding the complexity noted above. Needless to say, however, this office needs to be staffed adequately to address the oversight needs related to the municipal securities market.

Exhibit 6.1.2.2-1: Current and potential organizational structures for OMS



Source: BCG analysis

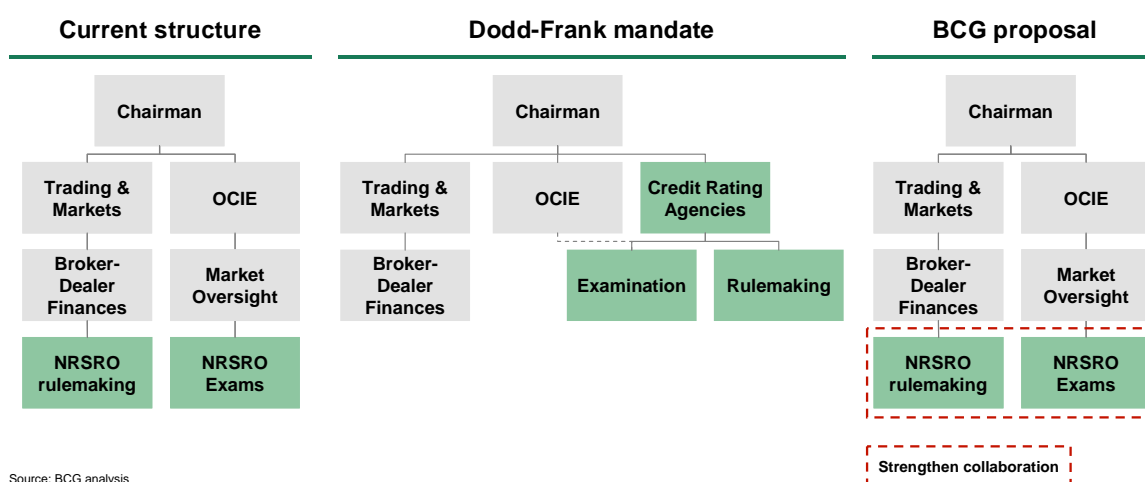
Office of Credit Rating Agencies: Dodd-Frank seeks to enhance the focus on Nationally Recognized Statistical Rating Organizations (NRSROs) by combining the rulemaking and examination functions into one office. Currently, these functions are contained in TM and OCIE, respectively. The creation of this office is partly the result of the controversy surrounding the rating agencies’

¹⁰⁶ Anderson, Jenny and Vikas Bajaj. “New Trouble in Auction-Rate Securities.” *New York Times* 15 Feb. 2008. Print.

assessment of mortgage-backed securities and other complex financial instruments leading up to the 2008 financial crisis.¹⁰⁷ Creating an independent office directly reporting to the Chairman could increase oversight of NRSROs. In addition, synergies may result from housing both rulemaking and examinations in one office, as staff develops a specialized expertise in NRSROs across rulemaking and examination processes. However, this will add to the Chairman’s already large number of direct reports, require investment in infrastructure and support for a relatively small office, and increase fragmentation of the SEC’s already stretched exam program.

A more efficient option would be for the SEC to maintain its current structure while still meeting the objectives of Dodd-Frank (see Exhibit 6.1.2.2-2). OCIE’s NRSRO exam program is relatively new. In fact, it was instituted in 2009 in direct response to many of the same concerns that prompted the Dodd-Frank provision. In addition to streamlining organizational complexity, the current structure helps maintain consistency in the SEC’s exam program and in the drafting and interpretation of relevant rules. It also provides a richer potential career path for staff assigned to NRSROs. However, were Congress to grant the needed flexibility, the SEC should consider formalizing collaboration mechanisms between TM and OCIE to mitigate the risk of silos developing in the future.

Exhibit 6.1.2.2-2: Current and potential organizational structures for OCRA



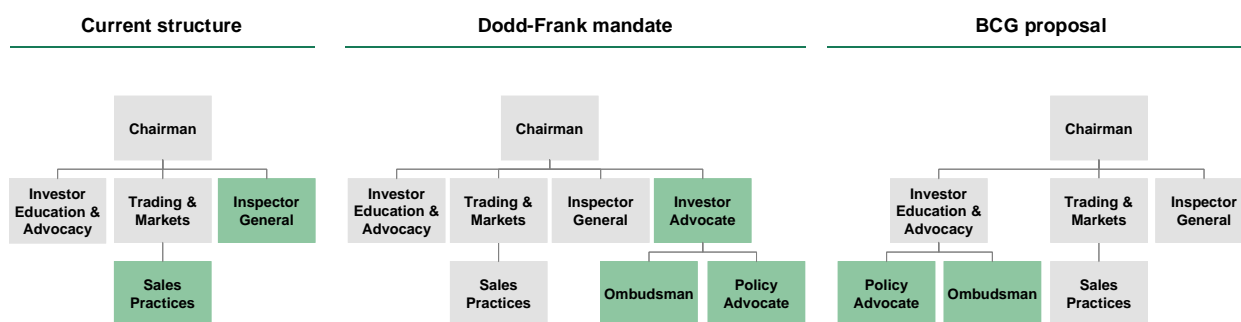
Source: BCG analysis

Office of the Investor Advocate: OIAD is intended to combine several functions to create a central point of contact and independent advocate for investors. As noted in Section 7.1.5.2, these functions are currently assigned primarily to the Office of the Inspector General (OIG) and OIEA. OIAD also houses a new external Ombudsman who will liaise with the public. In creating OIAD, investors will have a clear point of contact with the SEC who can advocate with the rest of the agency.

¹⁰⁷ Gillen, David. “In Ratings Agencies, Investors Still Trust.” *New York Times* 4 June 2009. Print.

As with the other Dodd-Frank mandated offices described above, a more efficient option would be to leverage the SEC’s existing organization structure while integrating the Ombudsman position into OIEA (see Exhibit 6.1.2.2-3). This reduces duplication of effort and provides a consolidated point of contact for investors. Meanwhile, OIEA can capitalize on its growing relationship with the Office of Sales Practices to advocate for investors in the policy-making process while continuing to serve in its traditional investor education and outreach role. Finally, this option minimizes organizational complexity by reducing the number of direct reports to the Chairman and the number of units required to collaborate on investor advocacy.

Exhibit 6.1.2.2-3: Current and potential organizational structures for OIAD



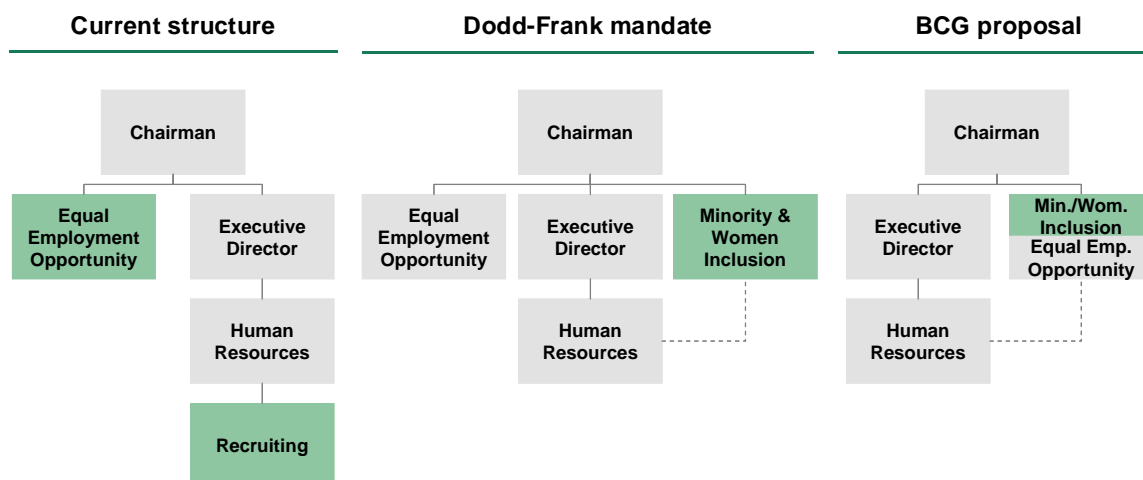
Source: BCG analysis

Office of Minority and Women Inclusion: The Dodd-Frank provision to create OMWI was primarily motivated by a desire to increase diversity in the federal contracting process and on Wall Street.¹⁰⁸ It also adds another management voice advocating for diversity and may increase the focus on diversity issues. Additionally, OMWI performs an assessment of diversity efforts by registrants—a new activity for the agency. However, many of the functions intended for OMWI are already performed by the Office of Equal Employment Opportunity (OEEO), which also reports directly to the Chairman.

Rather than create a separate office, the SEC could consolidate OEEO into OMWI (see Exhibit 6.1.2.2-4). OMWI would perform all of the activities currently tasked to OEEO as well as assess the diversity policies of regulated entities (the only mandated activity currently not performed by the SEC). This alternative structure is motivated, first and foremost, by the goal of creating a single, strong voice that can advocate for a consistent diversity strategy throughout the SEC. In addition, this option improves efficiency by reducing duplicative functions and organizational complexity. It also leverages OEEO’s knowledge of equal employment law and historic complaint data to inform diversity efforts.

¹⁰⁸ Roose.

Exhibit 6.1.2.2-4: Current and potential organizational structures for OMWI



Source: BCG analysis

Compared to the structure mandated by Dodd-Frank, this initiative would reduce costs. Instead of investing in four new independent offices, integrating these functions into the SEC's current organization leverages existing infrastructure (e.g., budget and strategic planning, support staff) and reduces the time required of the Chairman to oversee four additional direct reports.

There are clear implications for these proposals—for example, reduced independence and budget authorities for specific offices—however, hard trade-offs might be necessary. The primary risk is that after implementation, these topics may still not receive adequate attention from the SEC's senior management. If nothing changes, it is possible that the circumstances which prompted the creation of these offices could recur. In most cases, however, this risk is mitigated by retaining the function of each office even as the structure is consolidated (e.g., the Ombudsman role mandated within OIAD would still exist).

6.1.2.3 Initiative 2c: Review Commission-staff interaction processes and delegation of authority

Description and benefits

As described in Section 4.1, much of the SEC's daily operations and decisions outside of rulemaking have over time been delegated to the operating divisions. In areas where the Commission has delegated authority, it may lack desired visibility into staff decision-making. Conversely, in areas without delegated authority, governance requirements placed on the SEC slow the interaction process between the Commission and agency staff, impacting the SEC's efficiency and speed of decision-making. Given these challenges, the Commission should establish a process to regularly review its current delegation of authority and clarify which decision rights will belong to SEC staff and which it will retain. This review should include areas where the Commission may

delegate further and those where it may reclaim its authority, based on a clear and consistent set of criteria.

In some cases, it may benefit the SEC to further expand delegated authority (e.g., routine enforcement actions), but these delegations should be accompanied by robust accountabilities and oversight. To provide transparency into the portfolio of delegated authorities, SEC staff should—through a clear dashboard—regularly report to the Commissioners on relevant ongoing activities, major upcoming decisions, and potential issues the Commission can expect. It is also important that the SEC refine this dashboard over time with Commission input to ensure that it is providing appropriate visibility and oversight. In addition, the SEC should establish a process to identify the most important decisions within areas of delegated authority where the staff should specifically engage the Commission.

In areas where the Commission retains authority, the SEC should optimize the way in which staff interacts with the Commission to minimize the resources required, prioritize critical issues, and avoid delays in decision-making. As part of the lean process redesign described in Section 6.1.2, the SEC should review the procedures employed when SEC staff interacts with the Commission, with an emphasis on transparency and efficiency. This interaction is constrained by the Sunshine Act and will also require a review of the agency's statutory ability to streamline these processes.

The primary benefits of this initiative will be clarity with respect to delegated authority, increased transparency for the Commission in areas where authority is delegated, and increased efficiency in Commission-staff interactions where authority is retained by the Commission.

Implementation approach

Given the agency-wide scope of this initiative, it will require significant engagement from the Commission, the Chairman's office, and the SEC's operating divisions. This initiative will involve gathering input from stakeholders, coordinating dashboard development, and proposing changes to simplify Commission-related procedures. The Office of the General Counsel (OGC) should provide input on the SEC's statutory authority to streamline Commission practices and procedures. This initiative should take no more than three to six months.

Costs

This initiative would initially require a commitment of management and staff time. It would also require staff time to assemble the Commission dashboard on an ongoing basis.

Risks

If not designed appropriately, a dashboard could unnecessarily increase the reporting burden on SEC staff without a commensurate increase in actionable transparency for the Commission in delegated authorities. In addition, actions to streamline the process for engaging the Commission on areas where it retains authority may not be very effective absent relaxation of Sunshine Act constraints.

6.1.2.4 Initiative 2d: Implement a continuous improvement program

Description and benefits

The SEC needs to be constantly prepared for changing priorities driven by changes to the securities markets and regulations. This requires that the SEC possess the ability to use its available resources as efficiently as possible. Doing so will allow the agency maximum flexibility to dedicate resources to its highest-priority mission critical activities. To enhance the efficient use of resources, BCG recommends that the agency undertake an initiative to systematically reduce unnecessary costs throughout the organization.

This can be a very effective lever to release valuable resources and fund new initiatives required to meet emerging demands. Such a capability should not be limited to any one division or office, but instead needs to be institutionalized across the entire agency. A few examples of sub-initiatives that the SEC should investigate further include:

- ***Demand management:*** Demand management is a discipline where all demand for services is evaluated and prioritized on the basis of impact and cost required to meet the demand. To implement this discipline, the SEC will need to measure costs on a holistic basis, using a business case methodology that includes elements such as “total cost of ownership” in IT projects, qualitative and quantitative benefits, opportunity costs, investments, and risks. There are several places where such demand management could be employed. Examples include OIT projects and requests made to other shared services such as the Office of Human Resources (OHR) and the Office of Financial Management (OFM). Some strategies to implement demand management include charging for services rendered, altering service levels, and allocating a fixed amount of resources (including funding) to an activity
- ***Sourcing:*** It is sometimes advantageous to leverage external providers for certain services or commodities. Done well, external sourcing can lower costs, upgrade capabilities, and most importantly provide flexibility by way of varying the cost structure. However, when executed less effectively, external sourcing can add to the cost structure but not materially provide the expected benefit. The SEC has begun to employ sourcing techniques most recently and should continue to do so in the future. Examples of

recently initiated action include the outsourcing of financial reporting to a shared services organization across other agencies, and the restructuring of the IT infrastructure outsourcing contract from a fixed-price to a cost-plus contract with incentives for achieving specific performance metrics

- ***Business process optimization:*** Business processes can be optimized in a variety of ways to reduce costs, improve service quality, or reduce cycle time (the amount of time it takes to produce the desired output). Leading institutions employ a variety of techniques to achieve optimization. Examples include the use of automation and workflow technologies to improve productivity, elimination of waste using lean methodologies, bifurcation of simple and complex workloads, and standardization of the underlying activities. Although application of these techniques will require upfront investment, they will also generate substantial and sustainable benefits. Optimization of business processes should not be considered a one-time effort. Instead, processes should be examined periodically to look for incremental improvement opportunities
- ***Factor cost optimization:*** Optimization of factor costs involves looking for opportunities to reduce occupancy and salary costs. This could be achieved by relocating some of the SEC's resources in lower cost US cities (including, potentially, in selected low cost regional offices) rather than the big metropolitan centers where the bulk of the SEC's resources are located today. Activities that do not require an immediate turnaround or do not require face-to-face interaction could be good candidates for remote delivery
- ***Contractor-to-employee conversion:*** Due to restrictions on headcount, institutions often resort to employing contract resources for even some core activities. While the use of contractors can yield some benefits in the short-term, continued use of contractors for certain activities can result in additional costs. Typically, contractors cost more, often to factor the overhead costs of the contracting organization, and consume mostly similar resources (e.g., space, computing infrastructure, etc.) as employees. As a result, the total cost of a contracted resource can be significantly higher than an employee. Furthermore, in many situations, a contractor resource may not provide a special capability and may just be a more expensive substitute for an employee. Additionally, the excessive use of contractors could prevent the organization from retaining institutional knowledge that may be helpful beyond the scope of a particular project or assignment. The SEC should evaluate all its contractor resources and target converting tenured contractor positions into permanent employees

Such continuous improvement levers have been successfully implemented in many organizations. Collectively, these levers have the potential to initially yield savings, including some cost avoidance. On an ongoing basis, expected savings from new continuous improvement ideas may be somewhat smaller since

many of the obvious efficiency levers would have already been pulled. Nevertheless, some amount of savings will always be there. The savings realized by the SEC could be redirected towards priority initiatives, thereby reducing the incremental funding requirements. A continuous improvement capability within the SEC could be an important and sustaining source of funding for new initiatives. Such a capability could also have the additional benefit of improving the engagement levels of staff across the organization.

Implementation approach

This initiative should be led by the COO, although a continuous improvement capability should be embedded across the SEC in order to best identify opportunities for cost reduction. In order to jump-start this capability, the SEC should consider establishing a small multi-functional task force to drive the identification and implementation of continuous improvement ideas.

The task force should begin by identifying a list of possible cost reduction projects and conducting a rough sizing to determine where the biggest opportunities lie. Cost reduction opportunities should then be prioritized based on feasibility, potential savings, and associated risk. Beginning with the highest priority initiatives, the task force should then develop and execute a detailed project plan. Initially developing and costing the list of projects should take no longer than three months. The timeline for developing and executing each project plan will vary depending on the scope of the opportunity.

Costs

Initially, the COO will need to invest staff time in developing, costing, and prioritizing a set of cost reduction options. On an ongoing basis, identification and implementation of continuous improvement ideas should become embedded as part of the line organizations, thereby eliminating additional costs. In addition, many of the initiatives discussed above will require some upfront investment, particularly in the near-term. Examples of these investments could be for project resources to identify and implement improvement initiatives and for automation initiatives. However, given the potential cost savings noted above, this initiative should ultimately result in a net cost reduction for the SEC.

Risks

If the SEC's resources are not trained in continuous improvement techniques, there is a potential to compromise certain controls or value added activities in pursuit of achieving perceived efficiencies. There is also the risk of SEC staff getting frustrated with their inability to find "big" continuous improvement ideas that yield significant cost savings, leading to unproductive disengagement over time.

6.1.3 Invest in enabling infrastructure

As discussed in the introduction to this chapter, there is a set of key capabilities in which the SEC should invest. These include technology, the human resources function, and risk management. The SEC should also utilize resource flexibility to fill the skill and capacity gaps noted in Section 4.2, where possible. Below, we recommend a set of initiatives in each of these areas, describe the associated benefits, and discuss the costs and risks of implementation.

Strengthen technology and IT

Technology is a critical enabler for the SEC. The expansion in the agency's mandate and growing complexity in the securities markets have heightened the need for technology to play an expanded role. Today, the agency's technology needs are greater and more urgent than ever before.

The SEC's senior management recognizes this, and has spoken at length in public and private forums about the need for technology sophistication to be a key organizational capability. With this objective in mind, the SEC recently hired a COO and a new CIO and invested in several significant IT initiatives, such as TCR and an improved case management system. However, there is an awareness of additional technology needs.

The agency can continue to take action to further strengthen its technology capabilities and progress towards the vision articulated for the SEC in Chapter 5. In particular, the SEC should pursue three key initiatives:

Enhance and develop key systems: To drive internal efficiency and enable critical functionality, the SEC should enhance its existing systems and develop a suite of new systems.

Enhance OIT's ability to deliver technology solutions: To develop the technology capabilities it requires, the SEC should improve the effectiveness of its information technology function by undertaking a multi-faceted transformation of OIT.

Establish a Technology Center of Excellence: With the aim of developing a technology expertise and institutionalizing an awareness of the impact of technology on the securities markets, the SEC should establish a Technology Center of Excellence. This Center will also serve as a technology-related innovation function for the SEC.

In aggregate, implementing these initiatives will provide the SEC with: 1) the technology capabilities that are most critical for improving its productivity and meeting some of its emerging needs, 2) an IT function better equipped to deliver these capabilities, and 3) the foundation for an increased awareness of technology being utilized in the markets it regulates.

This set of initiatives is designed to provide the greatest possible improvement within available resources and lays the foundation for further technology enhancements. However, these initiatives will not deliver the full set of technology capabilities that the SEC requires long-term. In particular, staffing gaps in OIT will be narrowed but not fully closed and the agency will realize only some of the data analytics and knowledge management capabilities it requires.

6.1.3.1 Initiative 3a: Enhance and develop key systems

Description and benefits

To maximize the productivity and efficacy of its workforce, the SEC should develop new systems and enhance its existing systems. In terms of new systems, the SEC should implement technology solutions capable of 1) meeting its growing need for the ability to store and analyze large quantities of market data, and 2) making available internally its full range of information and knowledge resources. More specifically, the SEC should develop:

- ***A foundational data management and analytics capability:*** This capability includes access to sufficient data inputs for both external and internal data, a consolidated data warehouse that stores and transforms large quantities of data, and an analytic toolkit that can perform analyses on large sets of market data. Conducting these analyses requires systems capable of performing both rules-based analyses (e.g., using defined algorithms to identify and take action on targeted data) and ad-hoc analyses (e.g., analyses without defined algorithms). Such analyses will also require access to a sufficient body of structured data (e.g., trade, order, and quote data) and unstructured data (e.g., information taken from business documents such as internal emails)

The data management and analytics sub-initiative described above does not purport to replace the Consolidated Audit Trail (CAT). Rather, the sub-initiative would look to incorporate CAT as a primary data source for market participant data. In this regard, this initiative complements the existing CAT proposal

- ***A basic knowledge management capability:*** This capability includes technology systems that enable the SEC to collect and consolidate information across offices and divisions and foster internal collaboration. By bringing together all source information—information formally and informally collected in the course of operations combined with the institutional knowledge and expertise of the SEC staff—the organization would make better use of its resources. In particular, knowledge management would support knowledge capture and dissemination, emerging topics education, and internal collaboration

In addition to developing new systems, the SEC should drive internal efficiency by enhancing its existing systems. Such enhancements will: 1) improve the leveraging of data across systems, 2) increase the automation of the agency's business processes, and 3) reduce the burden of systems maintenance and support. More specifically, the SEC should seek to:

- ***Consolidate systems:*** The SEC should consolidate its large number of single-purpose solutions and leverage a common core architecture where possible. For example, the filing systems at the SEC are primarily small, custom solutions designed separately for each filing or groups of filings. By consolidating these systems, the SEC can reduce the system maintenance and development workload for OIT, increase the sharing and accessibility of data, and improve end-user efficiency
- ***Improve the connectivity of systems:*** The SEC should improve the connectivity of its systems to better leverage its data resources, increase collaboration, and improve its workflow. For example, by more closely linking its case management, document management, and TCR systems, the SEC can provide analysts with a more comprehensive view of the information available that may be relevant to an investigation or topic area
- ***Modernize systems:*** The SEC should modernize its key systems to reduce its long-term IT development, maintenance, and support costs and improve end-user productivity. For example, OIT estimates that a thorough modernization of EDGAR will result in significant long-term IT cost reductions and SEC-wide efficiency gains
- ***Identify opportunities for workflow enhancements:*** The SEC should further leverage technology to automate its business processes and improve the overall productivity of its professionals. There are several mature technologies available (such as case and workflow management and business process management) that can be deployed at the SEC for this purpose. The SEC has many of these technologies implemented within some of its business applications, but there is potential to significantly increase their use

The new systems described above will deliver efficiency improvements and necessary capabilities. They are, however, foundational. They are intended to address the SEC's most critical system needs and not the full breadth and depth of functionality that may be desired.

Implementation approach

This initiative should be implemented by OIT in close collaboration with internal SEC stakeholders for whom these systems will provide critical functionality. Implementation should follow a four-step process:

- Establish working groups to better understand the most critical business needs for new systems (e.g., data analytics and knowledge management) and opportunities for enhancing existing systems (e.g., TCR, Hub, and EDGAR). These working groups should include representatives of key stakeholders. The objective of the groups need not entail gathering of detailed business requirements but rather development of a high level vision for stakeholder needs that will be addressed in the technical solution

In the interest of efficiency and expediency, the SEC should work with its peer regulators to identify any existing technology solutions that might be appropriate for the SEC to leverage. The SEC should also seek to identify opportunities to collaborate with peer regulators and SROs in the development of new systems, where appropriate, as it has suggested might be possible with the proposed Consolidated Audit Trail

- Perform upfront planning via established OIT processes before developing or enhancing the technology solution. This step includes translating the initiative into a series of OIT projects with well defined scopes and following the recommended upfront planning processes for those projects
- Perform the development work, consistent with the appropriate development methodologies (e.g., using an established SDLC) and ongoing engagement and sign-offs from the respective internal client stakeholders
- Train users across the agency to maximize value from technology usage

Costs

The total one-time costs of this initiative are expected to be approximately \$21 to \$28 million. The ongoing costs are expected to be approximately \$5 to \$7 million. More specifically:

- *Developing a foundational data management system:* The initial implementation is expected to require approximately \$6 to \$10 million in FTE costs and more than \$10 million in hardware, software, and supporting infrastructure costs. Total ongoing costs in subsequent years would be \$3 to \$5 million. Implementation is likely to require two years from planning to deployment
- *Developing a basic knowledge management system:* The initial implementation will require approximately \$2 to \$3 million in FTE costs and \$1 to \$2 million for supporting hardware, software, and infrastructure. Total ongoing costs will be approximately \$1 million. Implementation will require one year from planning to deployment

- *Enhancing existing systems:* The initial upgrade and re-architecting costs will be \$1 to \$2 million in FTE costs and another approximately \$1 million in system costs. Ongoing maintenance and support will cost approximately \$1 million annually. These upgrades can be carried out over a couple of years

In total, implementation is expected to require two years and will require a significant level of OIT management and key stakeholder engagement.

Risks

The success of this initiative is highly dependent on the engagement of key stakeholders throughout the SEC. Without the necessary level of engagement, it is unlikely that OIT will be able to deliver a suite of integrated systems capable of meeting the wide range of user needs.

The lengthy and complex nature of the system development efforts described in this initiative suggests the potential for overruns of costs and established implementation timelines. To mitigate these risks, OIT and key stakeholders should be vigilant about adhering to best-in-class development processes and methodologies. For example, OIT and internal stakeholders should conduct rigorous up-front project planning (e.g., development of a thorough business case, detailed business and technical requirements, and a well-defined project scope) ahead of any development work.

Modifying applications that are currently in use carries the risk of hindering functionality and driving system instability during the period of transition. OIT can mitigate this risk by developing incremental changes where possible and rolling out larger changes in close coordination with stakeholders and users. Additionally, OIT should closely adhere to sound development practices (e.g., following the SDLC as described in Chapter 7) and align with its internal clients to ensure the system meets the needs of the full range of end users. Although there is a risk of introducing additional levels of complexity with a standardized workflow, OIT can mitigate this risk by employing modular design techniques to effectively connect these systems.

6.1.3.2 Initiative 3b: Enhance OIT's ability to deliver technology solutions

Description and benefits

For the SEC to effectively leverage technology, it requires a well-developed information technology function capable of delivering complex IT services. To enhance OIT's ability to deliver IT solutions, the SEC should:

- ***Define a technology vision and long-term strategy:*** In close coordination with SEC stakeholders, OIT should outline the SEC's technology needs and establish a clear set of priorities for delivering against them. It should

align the organization behind an enterprise architecture and provide a framework for assessing new and existing solutions in the context of this architecture. To support this work, OIT should establish a small functional office (approximately 2 to 3 FTEs) dedicated to defining and regularly revising a technology strategy

- ***Undertake efforts to address its most critical resourcing gaps:*** OIT should seek to narrow its current resourcing gap and optimize its resourcing mix. For its current level of demand, OIT faces a resourcing shortfall of approximately 125 FTEs in application development—particularly in business analysis, architecture, and project management. Meanwhile, OIT’s infrastructure and support team is over-staffed by approximately 65 external contractor FTEs, a fact already recognized by OIT’s leadership. Once pending efforts aimed at driving infrastructure and support efficiencies are implemented in mid-2011, these resources can be used to narrow the staffing gap in key application development roles. By doing so, OIT’s application development staffing shortfall can be reduced to approximately 60 FTEs

OIT should also seek to reduce its reliance on external resources. By bringing key functions such as up-front project planning in-house, the allocation of resources staffed externally would be reduced from approximately 80 percent of OIT personnel to 70 percent. Doing so would strengthen OIT’s alignment with its internal clients, reinforce its base of institutional knowledge, and save approximately \$1 million, which can be used to support the hiring of an additional approximately 5 FTEs in critical application development roles. Doing so will narrow OIT’s application development staffing gap to approximately 55 FTEs

- ***Strengthen and enforce its investment governance processes:*** To ensure that its development resources are efficiently deployed against its highest priorities, OIT should improve and enforce its investment governance processes. To do so, OIT should require that project proposals undergo a rigorous up-front planning process that includes a detailed business case, finalized business requirements, and a comprehensive view into the commitments required. Once this planning has been completed, the governance structure should evaluate project proposals in the context of the full breadth of demand for IT projects. It should clearly prioritize this demand in an annual or semi-annual review process. Further, when considering projects for approval and prioritization, the governance structure should evaluate the technical merit of the project and the availability of the resources required to complete it. To ensure compliance with these measures, OIT should define and enforce clear process gates at each major step of the investment governance process
- ***Leverage standardized tools and methodologies:*** To drive efficiency and enable more rigorous monitoring and accountability, OIT should deploy

and utilize standardized application development and project management tools and methodologies. It should require that *Clarity*, its project management application, be fully utilized throughout the development lifecycle. It should also update its SDLC to meet its current needs, and require that development projects uniformly adhere to it

- ***Optimize its organization design:*** OIT should adopt an organization design that emphasizes: 1) increased alignment with internal clients, specifically by establishing dedicated liaisons to all of the SEC’s divisions and offices; 2) improved coordination with “shadow” IT groups; and 3) increased efficiencies and synergies by centralizing activities such as application development and project management. It should also clearly define functional roles for strategic planning. This optimization should take place as part of the SEC-wide layer-by-layer role chartering and pyramid reshaping effort described in Section 6.1.2.1

This initiative will enhance OIT’s capabilities, position the organization to better deliver on the SEC’s information technology needs, and provide a foundation on which to build. For example, it improves OIT’s resource deployment and better aligns it with management priorities. It will not, however, address all of OIT’s staffing needs. For example, to fully meet its current demand, OIT will still require an additional approximately 55 application development FTEs.

Implementation approach

While some of these sub-initiatives are independent, in aggregate they represent a thorough overhaul of OIT that supports a transformation from a reactive organization to an energized partner of its internal clients.

To support this effort, OIT, in coordination with the Project Management Office (PMO) outlined in Section 6.1.4.4, should develop a detailed implementation plan that includes details on each of the five OIT sub-initiatives outlined above.

OIT should begin its transformation by defining a technology vision. To do so, it should establish a senior-level working group that draws from OIT and its key internal stakeholders. Once the vision is established, OIT’s leadership should outline a long-term strategy capable of executing the vision articulated by the working group.

With an organizational design in place, the OIT and the PMO should implement the proposed changes to resourcing—i.e. reducing OIT’s reliance on external contractors and shifting infrastructure and support FTEs to application development. It should then begin strengthening and enforcing its investment governance process and leveraging standardized tools and methodologies.

Costs

Enhancing OIT's ability to deliver complex IT services will require a significant organizational commitment. The burden on OIT's management, in particular, will be significant.

Fully implementing these measures is expected to require two years. However, this timeline is primarily driven by the complexity involved in the required resource shift. The other elements of the initiative—defining a technology vision and strategy, optimizing its organization design, strengthening and enforcing its investment governance process, and leveraging standardized tools and methodologies—can be accomplished in the first year.

The costs for this initiative are all FTE costs associated with the need to staff a small strategy function (2 to 3 FTEs) in OIT. The annual ongoing cost is expected to be less than \$1 million. These costs factor in expected gains in efficiency and opportunities to off-set costs with associated savings.

Risks

Like all transformations, there is a risk that this initiative will negatively impact OIT's performance while it is being undertaken. The potential impact of this risk is heightened by the fact that the initiative requires a multi-year effort, creating the possibility of an extended period of OIT performance gaps.

6.1.3.3 Initiative 3c: Establish a Technology Center of Excellence

Description and benefits

The significant role of technology in shaping market behaviors and structures argues that the SEC should develop a far greater technology awareness across the three facets described below:

- An understanding of the technologies currently employed by market participants and venues, with the aim of enabling regulatory activities
- An awareness of emerging technologies relevant to the securities markets, with the aim of enabling a forward-looking regulatory posture
- An awareness of those technology innovations that would make strong candidates for internal adoption by the SEC, with the aim of improving the SEC's capabilities

To build, disseminate, and institutionalize the technology awareness it requires, the SEC should establish a Technology Center of Excellence (COE). This COE would catalog existing and emerging technologies and conduct assessments into the impact of these technologies on market behaviors and structures, with a strong emphasis on identifying any regulatory implications. In the long-run, it should seek to identify and qualify new technologies for potential internal

adoption by the SEC. The COE would be responsible for broadly disseminating this information to relevant parties at the SEC, with the aim of materially contributing to the agency's internal capabilities and understanding of how technology is shaping the continued evolution of securities markets.

In terms of specific activities, the proposed Technology COE would:

- ***Catalog technologies relevant to the SEC and the securities markets*** by interacting with market participants, trading venues and SROs, engaging external constituents such as technology providers and academic institutions, performing independent research, and learning from enforcement and examination activities
- ***Assess the implications of these technologies*** on the securities markets and existing regulatory structures. For example, the Technology COE could seek to understand how emerging technologies relevant to high-frequency trading are likely to affect the securities markets, and anticipate any potential regulatory implications
- ***Assess the potential of relevant technologies for internal adoption by the SEC***: For example, the Technology COE could assess the value of cloud computing solutions for potential adoption in specific applications at the SEC. The Technology COE could also explore more radical ideas, such as the potential for the agency to leverage “virtual collaboration” by making more data available to the public to “crowd-source” intelligence gathering (while of course leveraging robust internal screening to vet what data goes out to the public as well as the tips that come back in)
- ***Support core SEC activities*** by providing divisions and offices with technology expertise. For example, the Technology COE could support the investigation of a high-frequency trader by performing an analysis of the trader's trading system and algorithm. Similarly, it could support the work with TM's Automation Review Program (ARP) by developing a detailed understanding of the emerging technologies currently being considered for adoption by exchanges and ATSS
- ***Embed its knowledge in the broader SEC*** via the direct support of examinations, investigations, enforcement, and rulemaking activities, the establishment of key topic working groups, and involvement in training events

Implementation approach

The proposed Technology COE would be a small office (less than five FTEs), structured as a joint partnership between TM, RSFI, and OIT. This structure would ensure the COE maintains a cross-functional focus and encourage a broad organizational reach for its outputs.

The Technology COE, while modest in scope at the outset, will lay the foundation for building and developing technology awareness within the SEC. Where appropriate, it should leverage resources from OIT (e.g., the new strategy function described in the previous initiative) and the expertise from external stakeholders such as SROs to maximize its impact. The SEC should evaluate the Technology COE's performance over time to determine whether additional scope and resources are required (e.g., to test new technologies for potential SEC adoption).

The ideal staff will have a background in technology and experience in those areas of the securities markets where technology has had the greatest impact. Technologists with direct exposure to high frequency trading or alternative trading systems would be model candidates. Additionally, the COE's unique role necessitates that it be capable of broadly infusing its expertise into the other divisions and offices of the SEC. This requires that the COE develop a culture of collaboration, supported by strong communication processes and forums.

The Technology COE can be established immediately, pending the identification of the required funding and a suitable leader and staff. Once the decision is made to establish the COE, a charter should be created. This charter should define the group's objectives and provide a high-level model for its interaction with its constituent offices and divisions. The SEC's core divisions and offices should contribute significantly to defining the group's charter.

Costs

The proposed Technology COE is a relatively low-cost means of addressing the current technology expertise gap at the SEC. Its implementation and ongoing cost is limited to that of the necessary staff and a modest travel budget. In total, at a staff of less than five FTEs, the annual initial and ongoing costs of the COE are both expected to be approximately \$1 million.

Risks

The Technology COE has no authority to conduct regulatory activity or implement technology solutions, and therefore, its work must be leveraged by other divisions and offices if it is to have relevancy or impact. There is a risk that the COE will not succeed in partnering effectively with its constituents and will not, as a result, materially contribute to the broader SEC's awareness of technology. The success of the Technology COE will be highly dependent on its staff's ability to effectively collaborate with other offices and divisions. Due to the COE's lack of interdependencies with other proposed initiatives, a failure to implement the COE will not affect the implementation or performance of other initiatives.

Summary

With the increasing complexity of the securities market and the expansion in the SEC's mandate, the agency's technology needs are at its greatest today. To develop and expand upon technology as an enabler for the SEC and its activities, the agency should pursue three initiatives:

- *Enhance and develop systems*
- *Enhance OIT's ability to deliver IT solutions*
- *Establish a Technology Center of Excellence*

In total, implementing these initiatives will require additional one-time investment of \$22 to \$29 million, and ongoing investment of \$7 to \$9 million per year. The first initiative strengthens the SEC's technology systems and thus improves the agency's technology capabilities while reducing operational risk. The second initiative enhances the SEC's ability to develop these technology systems, while the last initiative focuses on developing a more proactive and forward-looking technology awareness for the agency. To fund these initiatives, the SEC can utilize savings from other initiatives as well as the reserve fund provided for in Dodd-Frank.

Support the human resources function

An effective human resources (HR) function is an especially critical capability for an organization that relies as heavily on human resources as the SEC does, given that nearly seventy percent of the agency's budget is devoted to personnel. Supporting HR processes and planned initiatives will improve the agency's ability to source diverse, high-quality talent, enabling the build-out of critical capabilities, such as risk management and technology sophistication.

BCG recommends that the Office of Human Resources (OHR) undertake three initiatives:

Execute the planned OHR redesign: Executing on OHR's restructuring plans, building out the new HR Manager role, centralizing the SEC's training function, and developing a targeted recruiting process will improve OHR's ability to strategically support the rest of the SEC.

Complete roll-out of the new performance management system: Executing an effective change management program will help OHR successfully implement its new performance management system and connect it to compensation.

Create a surge capacity plan: Developing a short-term staffing plan will allow the SEC to mitigate problems caused by future short-term surges in workload.

6.1.3.4 Initiative 3d: Execute the planned OHR redesign

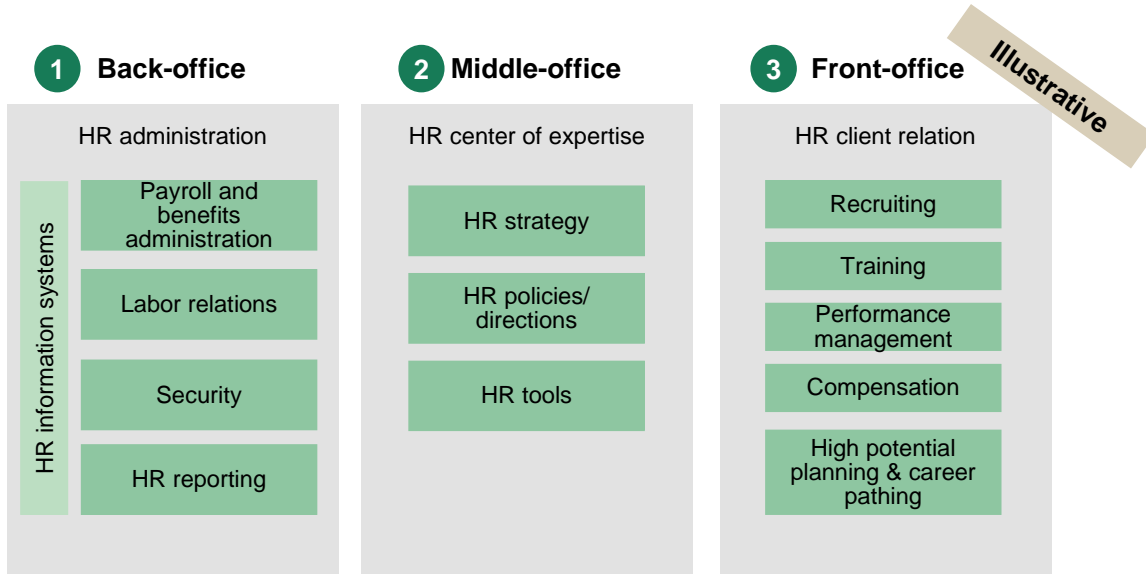
Description and benefits

A robust HR function supports the entirety of the SEC’s people pipeline and the agency’s ability to attract, train, and retain talent. OHR is in the midst of a redesign which it should continue and build upon to increase the level of HR support to the building of significantly improved people management practices within the agency. This should include five components:

- Implement the new “HR manager” role to interface with divisions/offices
- Clearly define front, middle, and back offices inside OHR
- Expand and centralize the SEC’s training function
- Create a more streamlined and targeted recruiting process
- Upgrade talent within the HR function

The **new HR manager role** is envisioned to report to OHR but will be dedicated to, and sit with, the SEC’s operating divisions. Smaller offices may have a shared HR manager. These managers will focus on division and office support and serve as OHR’s external face to the rest of the SEC. The HR managers will also take on talent management and recruiting responsibilities not filled by existing OHR staff. In addition, BCG supports OHR’s plan to **organize distinct middle and back offices**, as illustrated in Exhibit 6.1.3.4-1. This will enable the office to better define core HR responsibilities, increase consistency of policies and procedures across the agency, and align OHR staff competencies with appropriate accountabilities.

Exhibit 6.1.3.4-1: A human resources function illustrative office structure



Source: BCG analysis and experience

The SEC should also continue to **develop and centralize its training function**. The agency recently hired a new Chief Learning Officer (CLO) with FIRREA training experience. Plans are in place to centralize the SEC’s training function, develop a full curriculum, and establish several specialized “learning colleges.” In fact, the SEC recently hired a new “Dean” for the College of Leadership Development, also with prior FIRREA agency experience. In addition, the CLO intends to build out a robust knowledge management system, develop online internal communities of practice, and leverage technology to link training with performance management. BCG’s recommendation aligns with the CLO’s vision and OHR should continue to execute on these plans. In particular, the training team should continue to build out its leadership training program, which is just now completing a pilot, develop programs to support critical capability gaps and ensure appropriate onboarding training at all levels.

A robust and centralized training program can lead to improved performance across the SEC as employees develop a more diversified set of competencies in a consistent manner. In particular, broad leadership training and an increased emphasis on people management capabilities will ultimately improve employee engagement and productivity. Centralizing the training function will also allow OHR to track development needs across the agency and align training programs with organizational priorities.

Recruiting is a key component of workforce planning and the SEC’s ability to source the right talent. The SEC should adopt a **targeted recruiting strategy** that directs hiring managers to appropriate and diverse sources of talent. OHR should also streamline its recruiting processes to effectively utilize the hiring authorities accorded to it. Lastly, OHR should be able to provide hiring managers with consistent guidance on how to navigate these processes. Redesigning the recruiting process will result in timelier hiring that better populates the people pipeline with a more diverse candidate pool, with specific and appropriate skill sets. A simpler, more structured, and clearly communicated process will also reduce hiring manager frustration. While it is a more labor-intensive process for the recruiting team, it yields better outcomes and reduces back-office resource needs.

A reorganized OHR will be better able to support the SEC both in providing tactical guidance to help navigate HR processes and civil service laws, but also as a strategic partner on workforce planning and talent management. Clear accountabilities for OHR staff will also improve the consistency and quality of interaction between OHR and managers in other SEC divisions and offices. In addition, stronger front office functions will help ensure that the SEC is equipped with the right organizational capabilities and individual competencies to best deliver on its mission. This is particularly important as the SEC tries to strengthen key capabilities described in Chapter 5.

Implementation approach

To implement this redesign, the SEC should:

- ***Reorganize:*** Establish clear roles and accountabilities for front, middle, and back office functions and invest in OHR's front office talent
- ***Enhance training resources:*** Develop curricula and implement knowledge management systems based on agency-wide training priorities
- ***Streamline and target recruiting:*** Define a targeted recruiting strategy and appropriate streamlined hiring processes for various roles at the SEC, paralleled by a robust diversity recruiting efforts
- ***Manage change:*** Communicate new roles, policies, and procedures

Reorganize: OHR should create clear accountabilities to ensure that employees understand their roles and responsibilities in the new organization. This should be conducted as part of the agency-wide role chartering initiative described in Section 6.1.2 and be seen also as an opportunity to upgrade talent. Focusing especially on new positions like the HR manager or the recruiting team, OHR can develop clear role charters that outline duties, decision rights, and key performance indicators. In concert, OHR should also detail distinct accountabilities and collaboration mechanisms for the front, middle, and back offices. This will help ensure that employees in these offices understand their new role, what the reorganization means for them, and how to work together to provide seamless support for the SEC going forward. In particular, the role charter for the front office should include customer service standards to establish consistent, high-quality interaction with SEC managers. Likewise, the middle office should also develop an HR policy manual that can be utilized both by OHR employees and by the rest of the agency to simplify complex hiring authorities and civil service laws into practicable processes.

The SEC can support OHR by ensuring that the office has sufficient resources to fill necessary positions. In particular, the agency should invest in the training and recruiting teams, especially if these efforts expand as recommended later in this section. In addition, OHR should prioritize filling the front office HR manager roles approved in the FY 2011 budget. Benchmarking against external organizations indicates that the training team should expand by approximately 12 FTEs and that the recruiting team should include an additional 10 to 14 FTEs.¹⁰⁹ The majority of the recruiting resources required can be reallocated within OHR based on the redesign discussed below.

Enhance training resources: OHR should continue its efforts to centralize training and provide high-quality training services to divisions and offices and development of curricula. OHR's training team should prioritize development of training programs to address the capability and competency gaps identified in Section 7.2.2 (e.g., manager capabilities, data analytics).

¹⁰⁹ Further detail on these benchmarks is provided in Section 7.2.4.2.

In addition, OHR should work with the Office of Information Technology (OIT) to develop a foundational knowledge management system. The functionality of this system is discussed in more detail in Section 6.4.2 as an enhancement to the SEC's technology. From a training perspective, however, the system should allow managers to capture best practices and examples on a set of common topics. In addition to OHR's training team, each division and office should designate staff responsibilities for populating the knowledge management system with relevant materials and updating it regularly.

Streamline and target recruiting: First, OHR should resolve any ambiguity with regard to the hiring authority the SEC should use to fill a given staff need, including roles that the SEC may wish to expand in the future (e.g., risk management).¹¹⁰ Next, OHR should map out an appropriate process for each hiring authority that maximizes available procedural flexibilities to source the best talent, while remaining compliant with and respecting the objectives of federal civil service laws. In general, the SEC should recruit talent directly wherever possible using ES and ESHA flexibilities, rather than broadly posting vacancies. This will allow the agency to target talent with specific skill sets and reduce the number of applicants requiring review. In addition, as OHR posts fewer positions, the back office function can likely be streamlined and resources reallocated to the recruiting team.

As the SEC utilizes more of its flexibility to source talent directly, its recruitment and diversity strategies become increasingly important. OHR should work with hiring managers to create a detailed, long-term recruiting strategy. This strategy should identify key skill gaps and relevant sources to recruit appropriate talent with mission-aligned values. This will be especially critical as the SEC seeks to build new organizational capabilities where OHR has not traditionally had to hire large numbers of employees. In addition, since fewer positions will be posted as broadly as they are now, it is imperative that OHR develop a robust diversity recruiting strategy to ensure that the SEC has a rich pipeline of candidates.

Manage change: Throughout this initiative, OHR's leadership should execute a change management plan that clearly communicates process, accountabilities, and roles internally among staff and externally with division/office customers throughout the agency. This will help ensure that OHR staff and other SEC managers understand how and why the office is changing and what they can expect from OHR going forward. OHR should also be careful to engage stakeholders outside the SEC throughout the redesign. For example, it is essential that the recruiting process redesign involve the Office of Personnel Management (OPM), which designs and implements federal personnel management policies. Working successfully with OPM to maximize flexibility will be critical to streamlining and simplifying recruiting processes.

¹¹⁰ Chapter 7 includes a full discussion of the SEC's hiring authorities and the restrictions or freedoms associated with each.

OHR leadership should manage the overall reorganization and coordinate interaction with division/office customers and external stakeholders. OHR should leverage its existing Human Capital Advisory Committee to regularly seek input from other division and office managers. The CLO should retain responsibility for centralizing and developing the SEC's training function; the OHR leadership should oversee the recruiting process redesign, with management guidance and support from the current recruiting team. OIT should own the development of a knowledge management system, but the CLO and training team should be closely involved.

While the extent of this redesign is significant, OHR benefits from plans already in place and the redesign could be completed within 12 months, assuming that OHR can progress against different aspects of this initiative in parallel. However, other agency budget priorities could significantly impact this timeline. For example, without additional training team capacity, both curriculum development and implementation will be delayed significantly. Engagement of stakeholders should occur throughout the process, but OHR should place particular emphasis on communication as HR managers are placed in other divisions and offices and as new training and recruiting processes are rolled out. If possible given hiring timelines, OHR should consider pilot programs focused on refining the HR manager role, testing an initial set of curricula, and gathering feedback on new recruiting processes.

Costs

Initially, the reorganization will require an investment in leadership time to build out OHR's structure and accountabilities, determine training and curriculum development priorities, and engage with OPM on the recruiting process. On an ongoing basis, the costs would primarily be associated with additional FTEs for the training and recruiting teams. Based on the benchmarks and resource reallocation discussed above, OHR could expect ongoing costs of approximately \$2.5 million for new hires.¹¹¹ This assumes that the majority of investment in the recruiting team is based on reallocation of resources from back office to front office staff, as discussed above. This estimate does not account for time spent by staff in enhanced training programs, given that this does not require a cash outlay. It also does not account for potential savings that may result from productivity improvements due to codifying HR procedures and streamlining processes.

Risks

The primary risk in OHR's ability to complete its redesign is the SEC's ability to prioritize this initiative given its available resources. If the redesign proceeds, OHR faces additional implementation risks. Rigorous development of

¹¹¹ Fully loaded FTE costs, including salary, benefits, and overhead charges associated with OHR, OIT, OAS, and OFM resources required for new employees.

role charters and a change management plan that keep the redesign on track and clearly communicate changes are critical success factors.

In addition, there are risks specifically associated with the training and recruitment components of this initiative. A centralized training program must have credibility throughout the SEC. Otherwise, the training program may not be fully utilized, and other divisions and offices may be unwilling to give up their existing training programs. One way to establish credibility is to address specific office and division training needs; another is to link training programs to areas of improvement identified through EBPM. It is critical that SEC managers are involved in developing the new program and that the agency's senior leadership support the centralization of this function. Finally, the success of OHR's recruiting process redesign hinges on the SEC's ability to align with OPM. A lack of alignment could result in the reduced effectiveness of the process redesign and could impact the agency's ability to recruit talent. Without successful stakeholder engagement to mitigate this risk early in the process, the agency's ability to fully utilize the Excepted Service Hiring Authority may be limited.

6.1.3.5 Initiative 3e: Complete roll-out of performance management system and link to compensation

Description and benefits

A comprehensive performance management system tied to differentiated compensation incentives is an integral driver of talent retention and recognition. OHR recently introduced a new Evidence Based Performance Management system (EBPM) across the SEC that is structurally strong across a number of dimensions. It assesses both employee outputs and work behaviors, links individual objectives to agency goals, and is both vertically consistent within roles and horizontally consistent by grade. However, the SEC is at a critical juncture in the implementation of EBPM. Before the next performance cycle closes, OHR should develop a change management approach that communicates EBPM's benefits, conduct robust EBPM training for managers, and implement its plans to re-link performance with compensation. The SEC should also look to make EBPM data available to the agency's training program.

If successfully implemented, EBPM will provide several significant benefits for the SEC. First, it could result in increased retention and engagement of top performers who are recognized for their commitment to the agency and rewarded with meaningful financial incentives. The availability of these rewards can also incentivize all employees to exceed expectations, thus resulting in an overall increase in staff performance and engagement. Equally important, managers will be able to successfully track and document performance, allowing them to exit poor performers more quickly and with more transparency. Managers will also be better able to develop employees based on the specific competencies needed for each position and an employee's individual goals.

In addition, once the necessary systems are implemented, EBPM will allow OHR to track trends in areas for improvement and employee development goals, thus informing more effective training programs. Lastly, clear performance expectations, consequences for poor performance, and recognition for achievement will drive increases in employee engagement.

Implementation approach

The remaining roll-out of EBPM can be executed in three phases, each with parallel activities:

- ***Planning and development:*** Gather feedback and develop a change management strategy, manager training program, and performance-based compensation plan
- ***Execution:*** Engage in change management efforts, conduct training, and implement performance incentives; implement systems to capture performance assessment data
- ***Refinement:*** Establish a regular cadence to review EBPM and to use performance assessment data to refine training programs

In the first phase described above, OHR should develop a change management strategy that articulates the vision and rationale for EBPM and engages stakeholders across the SEC. This should include executing a comprehensive communication plan across the agency, gathering feedback from key stakeholders, designating dedicated “owners” for EBPM in each division and office, and rigorously reviewing and refining the system. In particular, the SEC’s senior management should demonstrate visible support for EBPM and commitment to its success.

During the planning phase, OHR should also develop robust management training on EBPM to be executed prior to the end of the performance cycle. The SEC’s training thus far has focused on compliance with the system and the necessary paperwork. In addition, training should discuss the benefits of EBPM in managing and developing staff. It should also demonstrate an effective performance assessment, both in terms of the written documentation and the conversation a manager would have with an employee. In particular, managers should be coached on how to deliver developmental feedback and address unsatisfactory performance.

It is also imperative that the SEC develop a plan to re-link pay with performance. OHR is already in the process of studying the compensation strategy further, with a goal of optimizing the SEC’s compensation budget allocation to effectively recruit and retain the best and most critical employees. EBPM’s performance incentives should align with this strategy to determine how merit pay and performance bonuses are awarded. In addition, top talent should be rewarded with a meaningful differentiation in compensation, as should employees at a higher grade level and those with management responsibilities.

OHR will need to determine the extent to which this is possible under civil service laws and the agency's collective bargaining agreement, but it is nonetheless a critical step in establishing meaningful consequences for both strong and weak performance.

Effective performance-based compensation requires a meaningful pool of funds available for merit pay. This could come from two sources. First, the agency could make a percentage of each employee's annual federal salary increase contingent on performance. Another option is that the SEC could enlarge the pool of funds available for one-time performance bonuses. Each option has different cost implications, discussed in the cost section below.

Before the next performance assessment period, OHR should execute its change management strategy, including communications and training. It will be especially important to engage stakeholders on performance-based compensation. Timely and effective consultation and negotiation with the union will be critical to successful implementation. Change management and training should extend through the performance assessment period. OHR should also partner with OIT to implement technologies that facilitate the performance review process and make the resulting data easily accessible to OHR and senior leadership.

Lastly, OHR should both use EBPM to refine its training programs and establish regular review of EBPM itself. The training team should regularly access performance assessment data to identify trends across the SEC in areas for improvement and developmental goals, then create training programs based on this information. In addition, OHR should regularly review EBPM's processes and assessment criteria, incorporating feedback from managers and employees.

Similar to the prior initiatives discussed, OHR should continue to lead the implementation of EBPM. OHR should collect ongoing feedback from line managers and employees from other SEC offices and divisions. The planning and execution phases of this initiative should require up to nine months, while the refinement phase should continue on an ongoing basis.

Costs

Successful implementation of EBPM will require both upfront and ongoing expenditures. Initially, the SEC will need to continue dedicating staff time over the next year to managing the roll-out. In addition, managers will require training, both upfront and on an ongoing basis.

As noted above, effective performance-based compensation would require the SEC to set aside a meaningful pool of funds for merit pay. The first option described would not require any additional costs, since it would designate a portion of the federal salary increase allocated to each employee as performance-based. In fact, this could reduce costs if fewer employees receive the full award. However, increasing the SEC's pool for one-time performance bonuses would

require added costs. Currently, the SEC pays only approximately 0.5 percent of its total compensation budget in award bonuses each year (\$2 to \$3 million). To align with public sector benchmarks, the SEC would need to raise this to at least 3 percent, or \$15 to \$20 million.¹¹²

Risks

The SEC risks an unsuccessful roll-out of EBPM if it is unable to convince managers of the benefits of the system such that they fully invest in its implementation. The ability of an organization to engage and motivate staff through performance management relies on front-line managers who fully utilize the system. If the SEC's managers view EBPM as another area for compliance, rather than as a useful tool, the organization will not reap all of the potential benefits of the system and it may actually be damaging to overall employee engagement.

6.1.3.6 Initiative 3f: Create a surge capacity plan

Description and benefits

Historically, the SEC has experienced sudden sharp increases in workload as a result of events outside of its control, as well as seasonal variations related to fiscal year-end disclosure (e.g., reviewing confidential treatment requests). Despite this, the agency is staffed primarily by permanent employees. The SEC should develop the ability to quickly scale its workforce up and down to ensure that it always has adequate capacity and is able to flexibly respond to changing mandates or market conditions. To do so, the SEC should examine past shortages, plan for future scenarios by pre-identifying short-term staffing options, and ensure that its contracting procedures are streamlined such that the process for bringing temporary employees on board is both timely and accessible.

The primary benefit of developing a surge capacity plan is that the SEC will be better equipped to respond to market events and Congressional mandates (e.g., Sarbanes-Oxley, Dodd-Frank) that create sharp but sometimes temporary surges in workload. The agency's ability to adapt to changing circumstances will be enhanced by more effective use of contractors and short-term staffing solutions. Furthermore, the ability to rapidly scale up staff will help prevent burn-out among the SEC's current employees. Having a plan in place will also help the SEC recruit diverse talent with appropriate skill sets even when it needs to quickly scale up its workforce.

Implementation approach

To implement this initiative, the SEC should:

- Understand current and past short-term workload increases

¹¹² See Section 7.2.4.2 for additional detail.

- Develop scenarios for future surges and identify short-term staffing options
- Streamline the personnel contracting process and develop guidelines

First, the SEC should document current and past capacity shortages to learn what kind of events lead to short-term workload surges, how large they are, how long they last, and how the agency has dealt with them in the past. This effort can build on work performed by BCG to model the SEC's historic and future capacity.¹¹³ OHR and the Office of Administrative Services (OAS) should jointly lead the effort to gather this data and to identify scenarios that might, in the future, lead to sudden increases in workload.

In addition, OHR and OAS can develop a menu of options for sourcing short-term staff (e.g., Fellows program, SEC retirees and former employees, temporary staff, contractors) and determine which options best respond to each scenario's needs, incorporating input from senior managers. This process should require no more than six months. Once surge capacity options are identified, OHR and OAS can also begin the ongoing process of developing relationships with short-term staffing providers (e.g., contractors and universities).

OHR and OAS should also partner to streamline the personnel contracting process, since this may be a significant source of short-term capacity. In particular, they should map the required interaction points between managers in divisions and offices and OAS to minimize the administrative requirements to seek surge capacity in response to an anticipated scenario. OHR should develop a clear set of guidelines for managers seeking short-term resources and HR managers should be prepared to guide each division or office through the process.

Lastly, OAS and the divisions and offices should develop a model to provide adequate oversight to contractor agreements and performance. Simplifying the contracting process, developing guidelines for managers, and establishing monitoring and review systems can be completed concurrent with the scenario planning described above. OHR and OAS should develop a communication plan to explain changes to managers, which should be executed over no more than three months.

Costs

The primary cost of this initiative is the staff time required to conduct scenario planning, formulate a menu of short-term staffing options, and streamline the requisite procedures. This will require both dedicated FTEs from OHR and OAS, as well as management staff time for scenario planning.

¹¹³ For more details, see Section 7.2.3 for a description of BCG's approach to capacity modeling and related findings.

Risks

Increasing the ease with which managers utilize contractors brings the risk of overuse or lack of appropriate oversight. Without strict guidelines, offices and divisions may bring in extra capacity for projects that could be handled in-house with only minor strain on human resources, thus driving up costs. OHR and OAS should work to control contractor usage and ensure that they are utilized only in appropriate circumstances. Conversely, it is possible that the scenario planning process could result in underutilization of short-term staff if circumstances do not fit one of the predefined scenarios.

Summary

A strong human resources function is critical in organizations like the SEC which invest heavily in human capital. To better support the agency's HR function, BCG recommends three initiatives:

- *Execute the planned OHR redesign*
- *Complete roll-out of the new performance management system*
- *Create a surge capacity plan*

In sum, these initiatives will cost roughly \$2.5 million per year. The ongoing cost could increase by as much as \$15 million per year if the SEC decided to enhance its performance bonus pool to levels comparable with external benchmarks. These recommendations will enhance the SEC's ability to hire and retain a diverse high-quality workforce that is aligned with the agency's long-term human capital needs. They will also simplify the use of contractors and other sources of short-term staffing and improve employee morale. Thus, implementing these initiatives will also help the SEC develop all five of the mission critical capabilities discussed in Chapter 5.

6.1.3.7 Initiative 3g: Enhance Risk Management

Description and benefits

A strong risk IQ capability is essential for the SEC in its oversight of the constantly changing securities markets. The ability to track key market trends and developments in a timely and actionable manner is vital in order for the agency to apply its focus and resources accordingly. If implemented well, this will not only further strengthen the agency's effectiveness and make its resource deployment more efficient, it will enhance its communication across divisions as well as external communities with aligned/adjacent interests (e.g., other regulators, SROs).

In the ideal situation, the SEC would have the ability to surface key market trends and market-related as well as enterprise-wide risks, amplify weak signals so that they can be normatively compared with stronger signals, analyze and

prioritize these, develop integrated and actionable perspectives based on this information, and recommend specific actions to the appropriate division, office, or manager to take necessary action. Such a capability will allow the agency to look externally for risks, look out in time for them, as well as become more capable of anticipating, monitoring, and mitigating internal operational risks.

The SEC already has a risk management vision which it has begun implementing through the creation of RSFI as a division reporting to the Chairman. This division has approximately 60 staff of economists and analysts who are experts in assessing cross-divisional risk issues. However, as discussed in Section 4.2, the SEC could benefit from strengthening its risk management capabilities and building capacity in this area. We recommend that the agency invest further to build out this capability consistent with best practices already being adopted by peer agencies like the Federal Reserve Bank of New York and the FDIC. We also recommend that the agency shape a “distributed model” for the risk organization so that, in addition to the analytic resources available within RSFI, such resources are embedded in all divisions and offices (starting initially with the largest operating divisions and offices and the COO’s office) with dotted line reporting to division directors while retaining independence via a direct line reporting to RSFI. In this model, the distributed resources would be thought partners to their divisional colleagues in their day-to-day responsibilities while also acting as a communication channel for market trends and risk signals to and from the RSFI. Making this dual reporting model work effectively will require effective role chartering (as described in Section 6.1.2) to ensure consistency across the organization.

The resources within RSFI would liaise with those in the divisions and offices as well as with SROs to aggregate information on market trends and risk signals, analyze them in an integrated manner, and develop/publish actionable perspectives to be shared appropriately for action. In addition, the SEC should collaborate with co-regulators (e.g., the CFTC, FINRA) and the Financial Stability Oversight Council to leverage data and systems pertaining to systemic risk. To do this effectively, RSFI will need access to market data and analytic tools standard in risk organizations at sophisticated financial institutions. Sections 4.3 and 6.1.3.2 describe the required technology systems in greater detail.

Of course, risk management works well in layers—where the divisions and offices are the first line of defense through their day-to-day activities, Risk Management acts as a strong second line of defense that provides independent perspectives, and periodic audits by the IG/GAO provide a necessary third line of defense (especially on enterprise-wide risk issues).

Implementation approach

The key steps to implement this initiative include:

- Design a distributed risk management model (building on public sector best practices)

- Develop clear role charters for risk management staff
- Recruit or train staff with the appropriate skill sets to be embedded in divisions and offices and to build out RSFI
- Develop information exchange mechanisms with SROs and co-regulators and invest in market data/analytic tools.

First, the SEC needs to differentiate responsibilities between division and office risk management functions and RSFI. In concert with the agency-wide role chartering initiative described in Section 6.1.2, the agency should also develop clear role charters that codify responsibilities, accountabilities, performance metrics, and decision rights for risk management staff, as well as required skill sets. Finally, the SEC should develop a clear and consistent set of criteria (e.g., risk exposure, information needs) to prioritize where risk management resources should be allocated first.

After defining the relevant role charters and skill sets, the SEC should invest in its risk management staff. This can be accomplished either by hiring new staff or by training existing staff to fill risk management roles. Overall, BCG benchmarks suggest best practice institutions have approximately one percent of total staff dedicated to risk management. At the SEC, this would imply approximately 40 FTEs dedicated to risk management. While RSFI currently has approximately 60 FTEs, many of these are dedicated to specific economic analysis and litigation support (an equally important activity but distinct from risk management). Given this, an additional 10 to 15 FTEs with the right skills will initially be required to build out the distributed model. Because competing priorities have the potential to delay the SEC's investment in risk management, resources should be allocated as available, consistent with agency-wide priorities.

Lastly, to effectively analyze and mitigate potential risks, the SEC needs the ability to regularly acquire relevant data from SROs and co-regulators in a consistent and accessible format. This will also require an investment in technology that enables the SEC to store and analyze large quantities of market data. Section 6.1.3.2 further describes the systems required to develop a foundational data management and analytics capability.

Given its existing expertise in this area, RSFI should own this initiative. However, because risk management will be embedded throughout the SEC, input from senior management across the agency is critical. While the timeline of this effort will be impacted by resource availability, it should take approximately six to twelve months to complete.

Costs

This initiative will entail both an initial upfront investment in technology and ongoing costs associated with hiring new FTEs. Technology costs are incorporated in Initiative 3a, and so they are not included here. Assuming that the majority of division and office risk management staff needs are filled through

hiring rather than training, this initiative would cost approximately \$2 to \$4 million annually.

Risks

The principal risk in this initiative is that the risk management function is not designed well and not embraced by the rest of the agency. Such a situation can create unproductive communication gaps which defeat the very purpose of the organization.

6.1.3.8 Initiative 3h: Hire staff to build high-priority staff skills

Description and benefits

Section 4.2 discusses several areas where the SEC would benefit from increasing capacity, building new organizational capabilities, and improving individual competencies. Assuming that funding constraints remain, it is unlikely that the SEC will be able to hire enough staff to fill these gaps with new employees. That does not mean, however, that the agency will be completely unable to address these needs. First, the SEC can build high-priority skills by filling vacancies caused by attrition with employees who meet these needs. In addition, if the SEC executes the initiatives described in Sections 6.1.1 and 6.1.2 to reprioritize the agency's activities and reshape its organization, this will likely provide some resource flexibility. If funds remain available after investing in key capabilities and strengthening oversight, BCG recommends utilizing these resources to hire additional staff aligned with the SEC's highest priority capability needs.

The primary benefit of addressing these capability gaps will be to better align the SEC's workforce with its human capital needs. In order to continue executing on its complex and changing responsibilities, it is essential that the SEC develop the right organizational capabilities, hire people with the appropriate skill sets and experience, and build capacity in critical areas.

Implementation approach

To implement this initiative, the SEC should:

- Prioritize critical skill and capacity needs across the agency
- Utilize redesigned processes to fill gaps based on remaining resource flexibility
- Build remaining capabilities through vacancies left by voluntary attrition

As discussed in Chapter 4, BCG's analysis already indicates a number of key areas where the SEC could devote additional staff resources (e.g., industry expertise, support staff, data analytics). The SEC's senior management should

use this assessment to prioritize hiring efforts, and target filling these skill and capacity gaps across the agency. Given the limited funds available in the current context, it is essential to develop a holistic set of priorities that maximize the overall utility derived from any investment of resources, rather than each division or office optimizing against its specific needs.

After executing the other initiatives described in this chapter, the SEC may have some remaining resource flexibility. This depends on the extent to which the agency is able to reduce costs and reshape its organizational design, as well as the cost of investing in human resources, technology, risk management, and more effective oversight. Any remaining resources should be applied to the skill and capacity needs determined to be the highest priorities. The SEC should utilize redesigned recruiting and hiring processes to fill these positions in the most timely and efficient manner possible.

It is likely that the SEC's remaining resource flexibility will not be sufficient to fill all of the skill and capacity gaps identified. Given the current constraints, the agency can continue to address skill gaps slowly, to replace staff losses through normal attrition. As employees leave the agency, the SEC may choose to hire staff with different skill sets to fill those vacancies or to repurpose those positions in order to build new skills or capacity elsewhere. In addition to defining priorities, leadership should also identify roles or functions where open positions should not be filled automatically and establish a process to regularly review vacancies and determine if they would be better utilized in another area.

Due to the emphasis on agency-wide alignment in this initiative, as well as the potential sensitivity of reallocating resources, the Chairman's office should drive the prioritization process. This will also require participation from senior leadership across the SEC's divisions and offices. The initial process of establishing agency priorities should take no more than three months. Once priorities are set, OHR should codify and execute this strategy utilizing the agency's redesigned recruiting process. The timeline to begin filling those gaps will depend on the speed with which other initiatives are completed and the rate of attrition at the agency. Once resources are available, the recruiting and hiring processes should take no more than six months.

Costs

The primary cost during the initial phase of this initiative will be management time. Once the SEC begins hiring staff, additional ongoing costs associated with new FTEs should be offset either by resources identified through other initiatives or by attrition of existing personnel.

Risks

This initiative may require resource tradeoffs to be made among division and office senior management, and any lack of collaboration could jeopardize results. The process described above will require strong leadership from the

Chairman's office to ensure that the broad interests of the SEC are represented. In addition, it is essential that the SEC's leadership agree on the set of criteria used to prioritize areas of investment.

In addition, depending on the degree to which resources are made available through the SEC's cost reduction and reshaping efforts, the agency may not be able to devote new resources to filling its current skill and capacity needs. In this case, it will have to rely on attrition to make resources available. Given the SEC's historically low rate of attrition, this will significantly delay the agency's ability to build high-priority skills. It could also require shifting vacant positions to serve a different purpose, which may be a more contentious process than hiring for new roles.

6.1.4 Enhance SRO engagement model

To oversee the securities markets, the SEC leverages its own capabilities as well as those of the SROs. The SEC oversees the SROs in some contexts (e.g., when inspecting SRO operations or reviewing SRO rule filings) and regulates alongside them in others (e.g., when pursuing joint enforcement actions).

There are three initiatives that the SEC should undertake to enhance both its oversight and co-regulator roles:

- *Strengthen oversight of SROs*
- *Centralize and coordinate approach to SRO interactions*
- *Strengthen processes for SRO rule proposals*

There are several reasons the SEC should enhance the SRO engagement model. First, the markets that the SEC oversees are becoming increasingly complex, large and fragmented, suggesting a heightened need for coordination with, and oversight of, the SROs that operate in those markets. Second, the demutualization of exchange SROs that has occurred over the past two decades has increased the potential conflict of interest between an SRO's regulatory operations and their business operations, suggesting a need for stronger regulatory standards to ensure consistency across SROs' structure, governance and resourcing. Third, a stronger relationship with SROs improves the SEC's ability to leverage SROs' expertise and resources to monitor trends and emerging risks in the securities markets.

A key assumption we make in this section is that the current regulatory landscape remains as is.

6.1.4.1 Initiative 4a: Strengthen oversight of SROs

Description and benefits

Given the role of SROs in the regulatory framework, it is vital that the SEC develop both a clear set of standards for how SROs are to regulate and a means for assessing whether SROs are complying with those standards. The SEC already has certain measures in place for this. To strengthen its oversight of SROs, however, there are additional actions that can be taken; each will strengthen the SEC's oversight of SROs:

- Enhance SRO disclosures regarding their regulatory operations¹¹⁴
- Institute metrics to monitor SROs and minimum standards for their regulatory activities
- Enhance FINRA oversight

Enhance SRO disclosures regarding regulatory operations: The SEC currently oversees SROs in two ways: TM reviews SROs rule proposals and OCIE conducts periodic inspections. The SEC could supplement this oversight by requiring that SROs make regular disclosures to the SEC regarding their regulatory operations. These disclosures could include information such as the SROs regulatory budgets and staffing levels every year. Many SROs already present annual or quarterly reports containing similar data to their respective Board of Directors; these reports could also be made available to staff at the agency. Furthermore, the SEC could require that SROs submit a notification if certain events take place, such as the implementation of a new surveillance system or hiring of a new Chief Regulatory Officer. It may be appropriate that heightened disclosures be required for select SROs. Such information can then be incorporated into risk-based methodologies for selecting and scoping SRO inspections and used to monitor SRO regulatory performance when on-site inspections have not been conducted.

Institute metrics to monitor SROs and minimum standards for their regulatory activities: The SEC could also strengthen its oversight of SROs by developing a set of metrics to assess SRO regulatory effectiveness. SROs would then be routinely scored against these metrics—in effect supplying the SEC with a continually updated performance “scorecard” for each SRO. Once created, these scorecards would improve the SEC's oversight of SROs by enabling the agency to monitor changes in SRO regulatory effectiveness over time and relative to one another. The SRO scorecards could also be used to prioritize inspections and inform future discussions with SROs and otherwise supplement the overall risk-based inspection program administered by OCIE. Over time, performance metrics should also provide the data and analysis needed to establish minimum standards for SROs in terms of how their regulatory operations ought to be

¹¹⁴ Indeed, the Commission has suggested similar measures in the past. Self-Regulatory Organizations—Various Amendments, 69 Fed. Reg. 71,126 (proposed Dec. 8, 2004).

structured and resourced. Some standards may be applicable to all SROs, while others will likely be customized to specific SROs.

Enhance FINRA oversight: FINRA is the largest SRO under the SEC’s jurisdiction¹¹⁵ and is seeking to further expand the scope of its regulatory activities.¹¹⁶ As such, the SEC’s current level of oversight over FINRA should be enhanced; presently, oversight is limited to TM’s review of FINRA’s rule filings and OCIE’s inspection program. The SEC should pay particular attention to oversight of FINRA’s Market Regulation, Member Regulation, and Enforcement departments, as most of FINRA’s most critical regulatory activities are conducted in those groups.¹¹⁷

Specifically, the agency should assign dedicated inspectors to oversee FINRA. These inspectors should work to become familiar with FINRA’s operations through frequent on-site inspections and review of FINRA’s financial and operational data. Some of these dedicated inspectors should focus on FINRA’s Market Regulation department. These staff should have experience in securities markets and be well-versed in emerging trends and technologies. In addition, a second group of inspectors should focus on the Member Regulation and Enforcement departments. These inspectors should be well-versed and experienced in broker-dealer and investment adviser operations. The inspectors should work with staff in TM to understand the context and substance behind rules submitted by FINRA and how those rules impact FINRA’s operations. The inspectors should also partner closely with the generalist OCIE examiners dedicated to conducting FINRA oversight exams. Such oversight exams are an important aspect of maintaining a comprehensive level of oversight for FINRA.

A more structured approach to oversight of FINRA will enable the SEC to enhance its oversight, “stay out ahead” of any potential regulatory issues and also foster increased role clarity for SEC staff.

Implementation approach

OCIE, through its SRO Inspections team, is currently conducting a baseline assessment of each SRO in order to calibrate its risk-based inspection program.¹¹⁸

¹¹⁵ FINRA oversees approximately 4,600 brokerage firms and is responsible for aggregating and providing market surveillance for approximately 80 percent of U.S. equity trading. Indeed, the SEC’s oversight of FINRA is already being studied pursuant to Dodd-Frank. *Dodd-Frank Wall Street Reform and Consumer Protection Act*, S 964.

¹¹⁶ Ketchum, Richard G. Financial Industry Regulatory Authority. *Comment Letter Re: Commission Study on Enhancing Investment Adviser Examinations Mandated by Section 914 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010*, 2010. Print.

¹¹⁷ FINRA’s Market Regulation department is responsible for conducting market surveillance for equity and options trading, including surveillance performed contractually on behalf of exchange SROs. The Member Regulation department is responsible for examining all broker-dealers registered with FINRA for compliance with FINRA rule and US securities laws.

¹¹⁸ The staff at OCIE is currently conducting a comprehensive review of FINRA operations, including its governance, regulation and enterprise risk management. OCIE is collaborating with

This strategic assessment should serve as a starting point for determining what information should be included in the new SRO disclosures, and how frequently/under what circumstances the disclosures should be made. OCIE should also coordinate with TM, which routinely inspects and gathers data from SROs regarding their IT system capabilities.

The SEC should also leverage its baseline assessment to develop metrics and standards for assessing SRO effectiveness. The SEC should develop a potential set of metrics and then share these with the SROs and other stakeholders for feedback. Once the appropriate metrics are finalized, the SEC should formalize them in a “scorecard” that would be rolled out to the SROs. This rollout should begin with a pilot program at one SRO and eventually expand to all SROs.

Once initiated, both the enhanced disclosure sub-initiative and the metrics/standards sub-initiative should take approximately 12 months to implement.

In terms of enhanced oversight of FINRA, as the initial step, the SEC should determine the appropriate number of resources to be fully dedicated to inspecting FINRA and ensure that inspectors are adequately trained. The SEC should also put in place processes to ensure that resource levels dedicated to FINRA oversight are rigorously and regularly reviewed. As part of this implementation, the SEC should study what other compliance mechanisms may be appropriate for FINRA, leveraging the ongoing GAO report as appropriate.¹¹⁹

The Office of SRO Inspections (located within OCIE) should lead this initiative, with input from other divisions and offices as needed.

Costs

Implementing the heightened disclosure and metrics/standards will require approximately three to five dedicated FTEs at an ongoing annual cost of approximately \$1 million. These actions will also require some management support from OCIE and occasional contributions from staff in TM and other divisions to help design the SRO information disclosure protocols and metrics/standards. Enhancing oversight of FINRA will involve initially the costs of the inspectors, whose number will be determined by the SEC.

Risks

With respect to the enhanced disclosure sub-initiative, the end goal is to enhance oversight of SROs by conducting risk-based inspections. If the apparatus created by this initiative is not managed well, it will become costly or inefficient.

the GAO on this new approach. In addition, OCIE is conducting examinations of high risk FINRA areas including its surveillance of high-frequency trading and fixed-income transactions.

¹¹⁹ Ibid.

In terms of the development of metrics and standards, there is the potential that the metrics and standards that are developed may not accurately reflect SRO regulatory performance. Enhanced oversight of FINRA also poses certain risks. First, the inspectors focused on FINRA may not be able to detect broader, systemic trends and issues. Second, OCIE may over-emphasize its oversight of FINRA over other smaller, but still important SROs.

6.1.4.2 Initiative 4b: Centralize and coordinate approach to SRO interactions

Description and benefits

Currently, the SEC interacts with SROs mostly on an as-needed basis, as is the case with oversight inspections, rule filing reviews and enforcement actions. These interactions should be centrally managed and documented, and inter-division coordination with SROs should be enhanced. For example, if an SRO provides data to OCIE during an inspection, a central coordinating body should quickly be able to determine whether someone in TM or RSFI would also benefit from that data, and in what form. This initiative is intended to enhance the SEC's functioning as a co-regulator with SROs.

Specifically, the SEC should:

- ***Create an “SRO Contact Team” to be a central, coordinating point of contact for all SROs:*** This team would serve as a liaison to the SROs and coordinate leaders from various divisions and offices. The team would also maintain an historical record of all material interactions and information exchanged with each SRO.

More specifically, it should document all SRO interactions, manage information received from the SROs, and be a point of contact for all SRO-related questions and concerns. Every SRO should be assigned and introduced to a designated contact person on the team. As discussed below, the team should also coordinate an internal “college of regulators” to collectively engage the SROs and SRO roundtable discussions to facilitate information sharing and make new introductions between the SROs and agency staff. It should also handle the logistics around increasing agency participation at industry events. On a regular basis, the team should also issue reports detailing the frequency and impact of interactions with the SROs, metrics on what data/information has been shared, as well as what industry events the SEC has participated in. Finally, the team should regularly survey the SROs and relevant divisions and offices at the SEC to ensure the frequency and quality of interactions is appropriate.

The “SRO Contact Team” would have approximately three administrative FTEs, including a supervisor. Additionally, each division and office previously mentioned should appoint approximately one to two staff

members to work on the team part-time (approximately one FTE equivalent). These staff members would serve as the primary points of contact to the SROs and act as a liaison between their original organizational unit division and office and the SRO Contact Team. Staff members from these divisions and offices could serve on a rotating basis.

- ***Institute a series of SRO roundtable discussions:*** The SEC, and specifically those individuals who sit on the internal “College of Regulators,” should regularly meet with managers and experts at the SROs to discuss general market trends, emerging risks and ways to mitigate, and otherwise build rapport among the SEC and SROs
- ***Enhance agency presence at securities industry events,*** such as regional and national conferences and summits held by SROs, other federal and state regulators, and/or market participant associations. This could be achieved by maintaining a consistent agency presence at key industry events by sending representatives from appropriate divisions

Centralizing and coordinating the SEC’s interactions with the SROs through the proposed “SRO Contact Team” will help the SEC:

- Understand and react to market trends and emerging risks faster
- Improve its dialogue with the SROs
- Increase access to market and market participant data from the SROs
- Improve inter- and intra-division collaboration and leverage of SRO expertise (i.e. “connect the dots” between ENF, OCIE, TM, RFSI, and the SROs)
- Enhance the agency’s presence in the industry

Implementation approach

Execution of this initiative, specifically the creation and administration of the SRO Contact Team, should be jointly owned and managed by TM, OCIE, ENF, and RSFI. Initially, a charter should be written detailing the team’s objectives and how it will interact with the key stakeholders (the SROs and the relevant agency division or office). The charter should articulate clear role mandates for the new team and the other organizational units involved. The team should then begin to hire/appoint staff to execute against the charter. This process will take approximately six to twelve months to complete, resulting in an official launch of the new team.

Costs

This initiative will require approximately three administrative personnel at an approximate cost of \$0.5 million to write the team charter, organize key activities and run the SRO Contact Team on an ongoing basis. Additionally, there

will be a cost of approximately \$1 to \$1.5 million to cover five to seven professional staff assigned from TM, OCIE, ENF, and RSFI. If the number of SROs or frequency of interactions increases substantially, the SEC may need to assign more staff to manage team activities.

Risks

One risk with this initiative is that it may be difficult for the new team to initially gain credibility and change the current SEC and SRO interaction culture; staff members in all the SROs are accustomed to dealing with their personal contacts in various divisions, and divisions and offices may neglect to work through or notify the SRO Contact Team when they engage an SRO. A second risk is that this initiative is not properly coordinated with the other SRO initiatives. For example, if SROs are required to disclose certain information to the SEC, the SRO Contact Team would need to partner with OCIE to define how that information is logged and processed and who is responsible for ensuring the disclosures are submitted properly.

6.1.4.3 Initiative 4c: Strengthen processes for SRO rule proposals

Description and benefits

As the number of SROs has increased, so has the volume of rule filings. Given the increasing workload, this initiative improves the processes and skills underpinning TM's rule review and approval responsibilities.

There are several actions the SEC should take to streamline the SRO rule review and approval processes; indeed, some of these actions are already being executed or considered by TM leadership. Specifically, the SEC should:

- Clarify and publish clearer standards (e.g., precedents) for when and under what circumstances an SRO must file a rule
- Instill a greater degree of transparency by communicating the status of specific steps in the review of a given rule to SROs and publishing a more detailed process map
- Create and publish templates for common rule filings that SROs can use
- Develop criteria to segment different types of filings and customize the approval process for each type. Currently, filings are informally segmented by TM staff as they are submitted; there should be more explicit standards and methodologies for how each filing should be evaluated

- Develop a robust process for identifying and escalating complex rule filings to senior division leaders and the Commission, thus reducing the number of revisions and iterations between TM staff and the SRO staff
- Establish a structure for bringing in OCIE when evaluating complex filings in order to leverage the expertise OCIE inspectors offer and provide OCIE with relevant context so that they know how to inspect for compliance in the future
- Study whether to adopt a portfolio approach to reviewing rules, i.e. in addition to reviews of each rule in isolation, consider reviewing similar types of rules together and consider the context of all the rules that already exist (this may necessitate relaxation of existing statutory timeframes for rule reviews, particularly the 45-day window for reviewing SRO rule proposals)
- Study whether to recommend that Congress amend the Exchange Act so that some rules may be self-certified by the SROs and/or stop reviewing certain types of rule filings (these actions require selectively relaxing the current statutory requirements)

In addition to process improvements, TM should also enhance the skill diversity and tools available to the staff attorneys who review the rule filings. TM has already begun hiring professionals with first-hand background and expertise in securities markets, and is considering whether to develop a separate office to focus on market analytics and research. In addition to these efforts, TM should develop better training and metrics for how staff members review SRO rules and establish policies. The agency should also create a formal internal network of experts whom staff attorneys can turn to when they have specific market or technology related questions.¹²⁰ Finally, the SRTS system used to manage rule filings should be adjusted to provide more transparency and capture more detail on the logic and nuances behind complex rule filing decisions. (Such a system upgrade may require additional funding beyond what is possible in the current context).

Implementation approach

TM should lead the execution of these change efforts. Senior TM staff members should be placed in charge of executing specific actions, such as creating rule filing templates or working with the agency's trainers to design customized training modules. The timing of any action will need to be balanced against other division priorities. For example, right now TM is focused on meeting the extensive rulemaking requirements mandated in Dodd-Frank. Once the bulk of that effort is complete, TM should have more resources and management bandwidth to implement a significant process change or any of the other measures described above.

¹²⁰ Such a network could also support examiners in OCIE.

Costs

The level of resources and time required to implement any given change will vary depending on the type of action. Implementing an end-to-end process redesign could require 12 to 18 months with a dedicated team of four to six FTEs at a cost of approximately \$1 to \$2 million. A simpler, more targeted change, such as creating rule filing templates, could likely be implemented more quickly with fewer FTEs. Hiring additional staff with first-hand securities markets experience would incur costs scalable to the number and seniority of professionals recruited. Any improvement to SRTS or other IT systems would need to be carefully scoped before assigning a cost estimate.

Risks

The primary risk associated with this initiative is that, if changes are not adequately communicated to the SROs and staff attorneys in TM, it could create confusion and bottlenecks in the rule review process. TM can best mitigate this risk by assigning clear owners for all actions and clearly communicating any changes.

Summary

The SEC should seek to build stronger relationships with SROs, both as an overseer and a co-regulator. Specifically, the SEC should pursue three initiatives:

- *Strengthen oversight of SROs*
- *Centralize and coordinate approach to SRO interactions*
- *Strengthen processes for SRO rule proposals*

These initiatives strengthen the SEC's oversight capabilities and advance the SEC's ability to more effectively partner and collaborate with SROs.

6.1.5 Implementation plan

As discussed at the beginning of this chapter, BCG's recommendations to make the SEC more efficient and effective fall into four categories of initiatives, as listed below:

Re-prioritize regulatory activities

- Initiative 1a: Reprioritize regulatory activities

Reshape the organization

- Initiative 2a: Systematically redesign the organization
- Initiative 2b: Seek flexibility from Congress on certain Dodd-Frank mandated offices
- Initiative 2c: Review Commission-staff interaction processes and delegation of authority
- Initiative 2d: Implement a continuous improvement program

Invest in enabling infrastructure

- Initiative 3a: Enhance and develop key systems
- Initiative 3b: Enhance OIT's ability to deliver technology solutions
- Initiative 3c: Establish a Technology Center of Excellence
- Initiative 3d: Execute the planned OHR redesign
- Initiative 3e: Complete roll-out of the new performance management system
- Initiative 3f: Create a surge capacity plan
- Initiative 3g: Enhance risk management
- Initiative 3h: Hire staff to build high-priority staff skills

Enhance SRO engagement model

- Initiative 4a: Strengthen oversight of SROs
- Initiative 4b: Centralize and coordinate approach to SRO interactions
- Initiative 4c: Strengthen processes for SRO rule proposals

We recommend these initiatives to be sequenced based on the following criteria:

- ***Resource needs:*** Does this initiative free up or require resources?
- ***Dependencies and prerequisites:*** Is the initiative a prerequisite to the start of another initiative? Is commencing the initiative dependent on the completion of another initiative or an agency project currently in-flight?
- ***Management bandwidth:*** Do the relevant divisions/offices have sufficient management bandwidth to oversee this initiative at the proposed time of implementation?
- ***Execution capability:*** Does the initiative require specialized expertise new to the agency, e.g., lean process redesign?

Initiatives that will eventually free up resources and/or are prerequisites to other projects should be launched first. In addition, initiatives should be sequenced such that no single division or office is disproportionately burdened with too many ongoing projects at once which must be performed alongside their

existing workload. Based on this logic, BCG has developed an illustrative prioritization of the initiatives. Given this portfolio of initiatives, a Program Management Office (PMO) capability will be required, whose first task should be to undertake a much more detailed prioritization and planning effort.

Based on our illustrative prioritization, BCG has clustered the initiatives into three waves, starting immediately with resourcing the execution teams and initiating the planning process. Some of the initiatives will begin to deliver efficiency and effectiveness benefits to the SEC in the near term. Other initiatives, such as plans to develop new IT systems, will take longer to fully implement and begin realizing benefits.

Wave 1 would consist of the following initiatives:

- Implement a continuous improvement program
- Reprioritize regulatory activities
- Systematically redesign the organization
- Rollout performance management system
- Seek flexibility on Dodd-Frank mandated offices
- Review Commission/staff interaction processes and delegation of authority

This first wave of initiatives will immediately contribute to making the SEC more efficient. In addition, two of these initiatives are projected to become a source of funds. First, the initiative to ***implement a continuous improvement program***, such as lean process design, could potentially release up to approximately \$25 million in annual run-rate savings based on a very high-level estimate and BCG experience at other institutions.¹²¹ Second, the initiative to ***systematically redesign the organization*** could potentially release up to approximately \$25 million in annual run-rate savings, although there is potential for a lag between when the initiative is launched and when the savings are realized. Together, these two initiatives could generate up to approximately \$50 million in annual run-rate savings to the agency. Reprioritizing regulatory activities will also create resource flexibility in some areas that can then be redirected to other, more mission critical areas. The agency has already begun to rollout a performance management system, and such efforts should be completed as part of this first wave. Finally, the agency can and should immediately begin to review Commission/staff interaction processes and seek flexibility on the Dodd-Frank mandated offices to prevent unnecessary restructuring and movement of staff and resources.

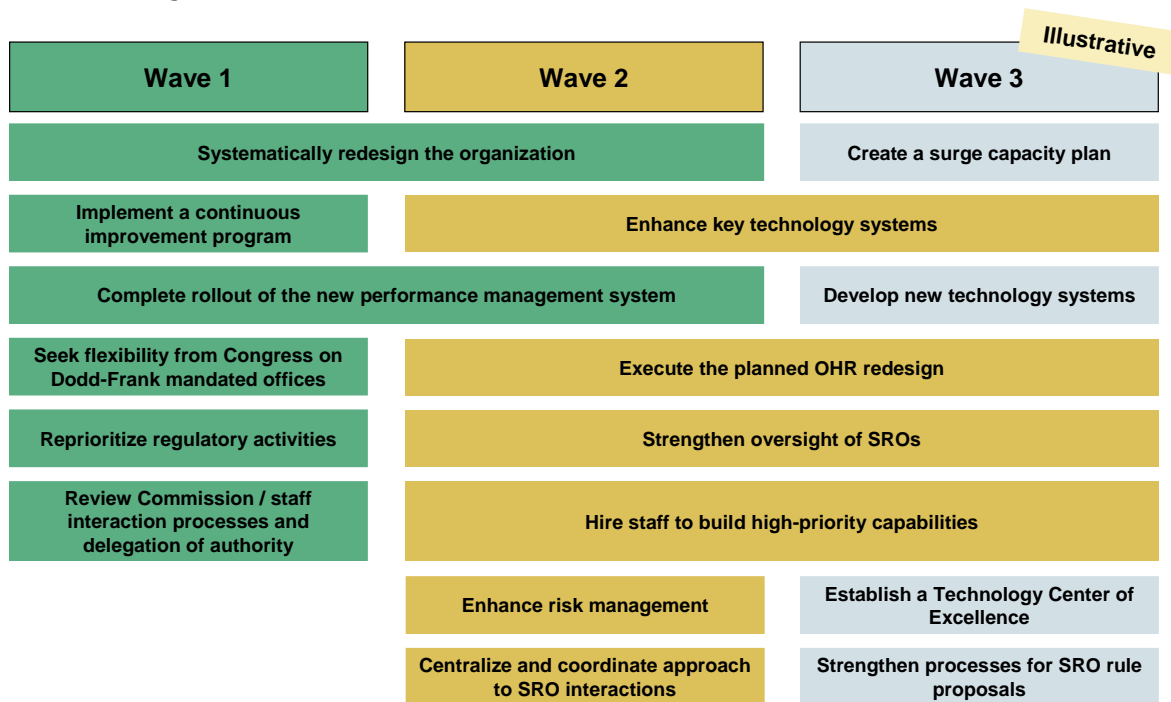
Implementing the Wave 1 initiatives will require the agency to invest in certain capabilities and resources. Specifically, the agency will need to incur an

¹²¹ This figure is meant to be directional only and could materially change. A more precise estimate would need to be developed pending a more detailed cost reduction diagnostic to be performed by the SEC.

estimated one-time cost of approximately \$7 to \$10 million.¹²² This cost would go towards establishing a PMO to oversee implementation of the portfolio of initiatives and to staff teams and prepare plans to execute the continuous improvement and organization redesign efforts. Additional resources would be needed after the organization redesign is complete to meet restructuring costs. Given the value and savings these initiatives are expected to generate, BCG highly recommends the agency pursue them.

The remaining initiatives in the portfolio should be launched in subsequent Waves 2 and 3. Exhibit 6.1.5-1 is an illustrative example of how all the initiatives could be sequenced from Waves 1 through 3.¹²³ Each wave is estimated to take six to nine months to complete, with Wave 1 beginning immediately.

Exhibit 6.1.5-1: Illustrative rollout of initiatives across three waves



Source: BCG analysis

Initiatives launched in Waves 2 and 3 are estimated to cost approximately \$35 to \$45 million in total. Of this amount, the majority would be towards the purchase and maintenance of technology systems. Additional costs reflect the need to hire/allocate dedicated staff members. With appropriate sequencing and timing, these costs could potentially be off-set by the savings generated through the continuous improvement and organization redesign initiatives implemented in Wave 1. Of course, to the extent there are excess funds from the continuous

¹²² Note that this cost estimate does not reflect time required for management oversight of the initiatives, external project support, severance, or transitional inefficiencies that may occur during implementation of the initiatives.

¹²³ The precise ordering and launch timing should be determined by the PMO after a more detailed assessment of the costs and management bandwidth required for each initiative.

improvement and organization redesign initiatives, these excess funds could be used to further invest in required capabilities.

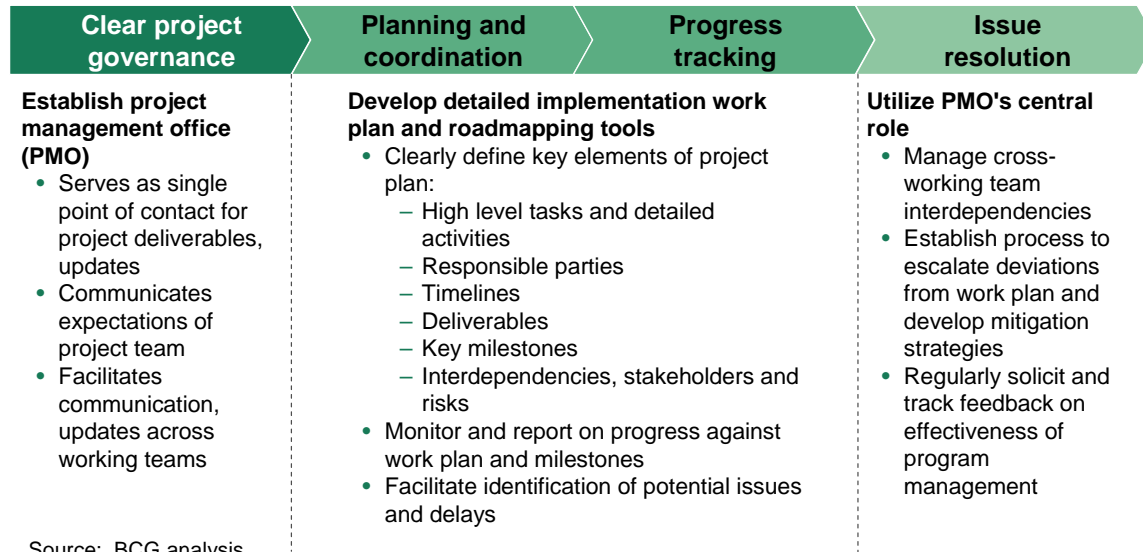
Aside from resource availability, delivering on this portfolio of initiatives will require precise planning and a systematic change management effort. In our experience, there are six core dimensions necessary for creating successful and sustained change: 1) create the change agenda; 2) mobilize the organization; 3) hardwire change; 4) manage for results; 5) sustain and reinvent; and 6) communicate both strategically and consistently. The SEC will need to deliver against each in order to be successful.

Create the change agenda: As an initial step in the effort, SEC senior management will need to build a case for change. This begins by articulating a desired vision or end-state for the effort. After this, SEC senior management will need to ensure the alignment and commitment of the broader leadership team across the agency.

Mobilize the organization: The next step in the effort involves preparing the agency's broader leadership to visibly embody change. The SEC will need to set up activist governance vehicles, including a *robust and empowered PMO* to focus on day-to-day implementation and provide guidance and oversight, as well as initiative teams to drive the initiatives forward.

A strong PMO would perform four key roles: 1) establish clear project governance and serve as a liaison among the initiative teams and senior leadership, 2) plan, coordinate and monitor the launch of each initiative, 3) track progress against milestones and budget, and 4) resolve any cross-team issues that may arise. It would seem reasonable that the PMO would be part of the COO's organization and consist of supervisors and staff. Additional external support may also be needed depending on the number of initiatives and scale and speed of execution proposed. Exhibit 6.1.5-1 provides additional detail on the key functions and activities performed by the PMO.

Exhibit 6.1.5-2: Key PMO roles and activities



Hardwire change: Next, the SEC will need to “hardwire change” into the agency to ensure lasting results. To accomplish this, the SEC needs to develop specific “roadmaps” for each initiative and rigor-test these to ensure they have clear objectives, milestones, and risk mitigation plans.

Manage for results: The SEC will need to manage the transformation initiatives with discipline, rigor and oversight. It should arm its leaders with forward-looking visibility to mission-oriented results—by, for example, providing a program-wide view of progress while enabling surgical deep-dives on an exception basis.

Sustain and reinvent: As the SEC moves beyond executing on the specific initiatives, it should take steps to ensure that all changes are durable and lasting.

Communicate strategically, consistently: Throughout the effort, the SEC should focus on its communication. It should create, monitor and adjust an ongoing communications strategy by tailoring messaging to specific stakeholder needs, utilizing continuous feedback loops, and crafting a common language.

As noted in Chapter 5, we believe it is critical for the SEC to develop a set of five key capabilities that will allow the agency to address both the structural disconnects that impact the agency as well as prepare it for the challenges of the ever changing markets it regulates. The initiatives presented here will not, on their own, fully optimize these capabilities absent further constraint relaxation. The initiatives will, however, enhance and grow these capabilities.

6.2 Choice 1: Relax funding constraints to better fulfill current role

Given that the current context requires the SEC to make hard trade-offs in terms of mission critical activities as well as critical organizational capabilities, it is incumbent on Congress to carefully evaluate if these trade-offs are “acceptable” given its own priorities. As it evaluates this, Congress should consider what it would take for the agency to fully implement all regulatory activities it would ideally undertake and to build out all key capabilities that will enhance its efficiency and effectiveness.

While assessing which activities the SEC *should* undertake is beyond the scope of BCG’s study, senior management itself has identified several high-priority regulatory activities they cannot implement today even with the efficiencies described above, including the agency’s demand for technology and expertise. Implementing these activities will require relaxation of certain constraints and increase in resources. Based upon a very preliminary estimate, a range of an incremental \$200 to \$300 million may be required for the initiatives described in Choice 1. A more precise estimate is only possible depending on the results of the optimization initiatives recommended earlier.

Building out technology capabilities: As described above, technology has a critical role to play in improving the efficiency and effectiveness of the SEC: technological capabilities are vital to keeping up with the technology-driven evolution of the securities markets. While some of the agency’s technology needs have been addressed through efficiency gains within OIT and the rest of the SEC, additional funding would be required to fully leverage technology along the following initiatives:

- Fully close OIT’s resourcing gap in application development and project delivery (an additional approximately 55 FTEs)
- Continue to build out the Technology COE to include additional analyst resources and a technology lab to test and qualify emerging technologies for business application within the SEC
- Modernize EDGAR to include business process re-engineering of workflow, enhanced usability for internal and external users, and upgrading of EDGAR systems
- Implement a robust knowledge management system (building on the basic capability outlined in Initiative 3a) with a richer set of data and institutional knowledge, and social-networking functionality to improve collaboration
- Implement an enterprise-wide tracking solution to capture workflow of rules, filing reviews, correspondences, etc. across the agency (TCR could

be used as a model, but the tracking solution would extend well beyond just tips, complaints, and referrals)

- Implement a robust enterprise-wide filing solution to allow input and storage of a variety of filing types, and enable central access and analysis on the filings data by ensuring they are stored with common data formats that can be cross-referenced
- Implement robust data management and analytics, including an enterprise-wide data warehouse that will manage intake, cleaning, and normalizing of data and also enable analytics capabilities for all classes of data (building on the basic capability outlined in Initiative 3a)
- Build out a new data center that is able to support the complete infrastructure needs of SEC and reduce operational risks
- Supplement the support infrastructure for new staff recruited as necessary (e.g., staff hired to address the capacity shortfall)

Addressing capacity shortfalls in the divisions: Many of the divisions have significant shortfalls in the professional staff needed to carry out the current scope of activities. Based on a detailed workload analysis, we believe that, in the aggregate, the five divisions and OCIE are facing a shortfall of 375 to 425 FTEs to cover the current scope of activities, including what is needed to meet Dodd-Frank requirements. This number will be lower following the implementation of the optimization initiatives which will reduce resource need and free up capacity for redeployment.

Investing in new capabilities: As discussed earlier, the agency has identified several mission critical activities that it considers to be high priorities for investment. Some of these activities are listed below:

- Expand the RSFI activities to include more holistic risk management functions such as developing risk policies and guidelines, identifying metrics to monitor market trends, evaluating systemic risk across regulated entities and performing supplemental analyses to provide an independent perspective
- Expand the SEC's industry and analytic expertise in the different divisions, for example, establishing a market analysis group within Trading and Markets to analyze the impact of new rules on market performance
- Increase the coverage, frequency and intensity of examinations of the various regulated entities (e.g., investment advisers, investment companies and broker-dealers, swap execution facilities)

- Expand disclosure for public company filings, transactions, and proxy statements
- Increase the number of enforcement actions including increased follow-up on subpoenas and contempt proceedings from earlier enforcement actions

Enhancing SRO relationships: As discussed above, it is critical that the SEC maintain firm oversight of SRO regulatory activities. The optimizing initiatives discussed above will certainly enable the SEC to more effectively carry out that oversight, but the SEC may determine that it is necessary to go further in ensuring that SROs conduct regulation adequately. The SEC can further enhance its oversight of SROs through the following:

- Build out systems to automatically manage and track receipt of all SRO filings in a standard format. This system should, among other capabilities, generate alerts for missing information or significant changes to SRO operations, and should be easily searchable and shareable
- Establish an automated system to track metrics reporting and generate customizable scorecards both for internal use and for sharing with SROs
- Develop the technology systems and resources necessary to routinely audit SRO surveillance systems
- Link SEC systems with FINRA systems to enable the SEC to access all relevant data without making individual requests. This capability would streamline SEC investigations and enforcements relating to broker-dealers. Data could also be leveraged in assessing FINRA¹²⁴
- Hire additional staff to serve as permanent points of contact for SROs—depending on needs, SROs would have one or more dedicated SEC personnel
- Increase SEC participation at securities industry events to raise the agency’s profile and strengthen SRO relationships
- Fill all existing vacancies in OCIE’s SRO Inspections Office
- Hire and build a broader network of experts, including skills needed for reviewing SRO rule proposals

¹²⁴ This initiative would require the SEC to navigate certain legislative requirements, including Privacy Act requirements.

In our estimate, these measures strengthen the SEC's regulatory activities and capabilities to deliver on them. They do not, however, expand the role of the SEC by, for example, taking on responsibilities from SROs. As described in Chapter 3, there are strong arguments and global precedents to consolidate more regulatory activities from SROs into the national regulator. This will reduce real and/or perceived conflicts of interest that SROs may have, ensure greater control and visibility into market information for the SEC, and clarify the governance of securities regulation.

Having said this, there are drawbacks to this approach. It will require a material expansion of the SEC's budget. If the agency were to expand its role in any material way, the resources required to implement this would also need to expand. These resources would either need to be authorized by Congress (through the annual budget process), be borne by the industry, or a hybrid of the two. Further, the expanded role would create additional organizational complexity and place even greater demands on senior leadership management capacity. Finally, while the agency will likely take all steps necessary to be close to the markets it oversees, it is structurally difficult to have the same market awareness as do the SROs in the current structure.

This is an ongoing and crucial debate. If Congress determines that the SEC's role should incorporate substantially more activities (presently being performed by SROs), the agency will only be able to take on any such change with materially expanded resources. Absent this, the agency will absolutely not be in a position to take on greater responsibilities.

6.3 Choice 2: Change current role to fit available funding

In the event that the funding environment does not change, an alternative option is for the SEC's role to be changed to fit the available budget. The SEC would then need to rethink what activities it should perform and delegate greater authority to SROs than it does today. It would also need to rethink its operating model: This "new SEC" would change from being an "actor" that actively regulates markets and market participants to an "overseer" that primarily monitors the regulatory actions of others to whom it has delegated regulatory activities. It is important to make clear that this would be a change in the role of the SEC vis-à-vis SROs and *not* a change in the mission of the SEC or the extent of regulation.

As discussed in Chapter 3, there has been significant debate regarding the appropriate role of SROs within the overall regulatory framework. The SEC would therefore need to actively solicit input from all stakeholders in evaluating all options, and consider how it can partner with stakeholders to delegate its activities more effectively.

There are a number of regulatory activities that the SEC would likely want to retain even under a scenario where it is significantly more reliant upon SROs

and acts primarily as an oversight body. Chief among these is enforcement and the authority to review, approve and revise all rules themselves—regardless of whether those rules were originally created by the agency or by SROs. Additionally, the SEC would likely want to retain responsibility for monitoring, anticipating and responding to emerging risks in the securities markets. Even if the agency delegates a significant portion of its regulatory activities, it should still possess a strong risk management and analysis function to fortify its oversight of SROs and demonstrate its credible presence to market participants and other stakeholders. Finally, the SEC would want to retain an unfettered right to pursue whatever regulatory action it sees fit—whether it be specific enforcement actions, examinations or another activity.

For illustrative purposes we provide one option for how such a re-distribution might be approached and what the operating model implications would be for the SEC.

Redistribution: Broadly, there are two ways for the SEC to think about how to increase its reliance on SROs. First, the SEC could “functionally outsource”—that is, rely on SROs more heavily (if not completely) for specific steps in the regulatory value chain. Second, the SEC could extend its reliance on SROs with respect to select regulated entities (e.g., broker-dealers, investment advisers).

For example, the SEC could delegate selected regulatory activities for investment advisers to one or more SROs. Indeed, to operate in a funding-constrained environment the SEC could establish an SRO for investment advisers to implement registration, examination and some enforcement authority. With respect to examinations, an SRO should be able to more effectively pass costs onto registered entities, meaning that significantly more investment adviser examinations would be possible given the SEC’s funding constraints. Finally, delegation of some enforcement authority naturally follows examination authority: if the SEC relies on SROs to inspect investment-advisers for violations, it would also rely on them to investigate and prosecute those violations. However, given the differences between investment adviser oversight and broker-dealer oversight, delegating authority for investment advisers to an SRO under this scenario would not necessarily be straightforward: the SEC should develop careful guidelines to SROs for overseeing investment advisers and ensure that those guidelines are followed meticulously. In addition, the SEC should also be mindful of how new regulatory costs will affect the investment-adviser industry: investment advisers may pass these new fees on to investors in a way that makes investing unaffordable for many. No matter what authorities are delegated, the SEC would of course retain the right to undertake any regulatory activity it deems appropriate.

Operating model: With the redistribution of activities, SEC can re-tool its operating model, shifting from an “actor” that performs regulatory activities to an “overseer” that primarily monitors the regulatory actions of those SROs on whom it relies.

To be successful in this oversight role, the SEC's core focus would be on ensuring that the SROs have the right structure, competencies and processes in place to effectively perform the responsibilities that the agency has delegated to them. Consider, for example, OCIE's potential role in this scenario. While today OCIE conducts some examinations of broker-dealers along with FINRA, in Choice 2 OCIE would likely instead focus its efforts largely on ensuring the robustness of various SRO examination programs: for example, ensuring that the SROs have the right risk-based prioritization processes in place, assessing the examination processes and competencies of SRO examination staff, monitoring whether the recommendations from SRO examinations are actually implemented in a timely manner, and back-testing SRO performance. Moreover, the SEC would likely need embedded agency staff in every SRO, dedicated agency teams for each SRO, and a strong cadre of staff who are intimately familiar with the SROs and the entities the SROs regulate. The agency would also need linked technology systems with SROs and significant access to SRO data.

Choice 2 is most suitable if constraints on the SEC persist or become more severe. No matter the constraints, however, the SEC should only approach this option incrementally, as the consequences of insufficient oversight are severe. To best ensure that redistribution does not affect regulatory quality, the SEC should consider how it can partner with stakeholders to delegate effectively. Again, we do not opine on whether it is appropriate to give more or less regulatory responsibility to the SROs, nor do we assess whether SROs are conceptually good for the regulatory framework. We lay out this option as something for Congress to consider as it debates the role of the SEC going forward.

* * *

The recommendations outlined as part of the optimization initiatives will create real and sustained efficiency and effectiveness improvement for the SEC. We would recommend that they be implemented immediately and rigorously on a "no regrets" basis, because they are foundational to the agency's future and should, in any case, be the first major initiatives to be launched, whichever of the two further options Congress may choose.

As noted earlier, carrying out the SEC's mission requires both a regulatory framework with clear authorizations and a robust set of internal capabilities to deliver against these authorizations; our study addresses only the second of these factors. Ultimately, BCG recommendations on the latter should be considered together with the former for their collective impact on the agency's mission. While we recognize the inherent difficulty in developing metrics to measure performance against mission, true accountability is hard to attribute absent a thoughtful set of outcome-oriented metrics. If designed well, these metrics could then be cascaded through the agency to establish clear alignment at the division/office, manager, and individual contributor levels. The SEC already utilizes a set of performance measures that it reports on annually in its

Performance Accountability Report. However, BCG recommends that the SEC conduct a study on the feasibility of such outcome-oriented metrics.

In the final analysis, however, it may be that the most important measure of success will be how effectively the agency addresses three chronic, structural disconnects it has historically faced and continues to face today; namely:

- Between stakeholder expectations and its legal authorizations,
- Between its authorizations and available resources, and
- Between the dynamism of the markets it oversees and the rigidities from its constraints and culture.

APPENDIX

7 Appendix

As per the Statement of Work—and in context of the changing regulatory environment, the evolving capital markets and the constraints placed on the SEC—BCG assessed the organization against the four matters of study:

- Organization design
- Personnel and resources
- Technology and resources
- Relationships with SROs

This chapter contains analyses that supplement the observations and conclusions in the main document. The following sections describe the approach BCG utilized to assess the agency in each matter of study and our findings. Wherever possible, we adopted a forward-looking perspective, evaluating the SEC in the context of the increasing demands being placed on the organization.

7.1 Organization design

7.1.1 Approach

As part of the Section 967 Study mandated by Dodd-Frank, BCG undertook an assessment of the SEC's organization design. Organization design encompasses the organization's **structure** as well as its **collaboration mechanisms and accountabilities** (such as role charters, which include individual and shared accountabilities). The assessment focused on three key questions related to the SEC's structure and collaboration and accountability:

Structure

- Organizational units: What organizational units does the SEC have?
 - General overview
 - Operating divisions and exam program
 - Administrative support offices
 - Dodd-Frank mandated offices
- How are these units structured?
 - Balance between regional offices and headquarters
 - Shape of the organizational pyramid

Collaboration and accountability: What is the interaction model?

- Communication and collaboration
- Governance and accountabilities

At the outset of the study, BCG conducted baseline interviews with the directors of each division and office at the SEC, including interviews with members from selected regional offices. These interviews were followed by in-depth discussions with senior managers of key organizational units. Additionally, we leveraged public and confidential studies, and reviewed organizational charts and key agency-wide processes such as the strategic planning and budget process. To assess the organizational structure vertically, we mapped the reporting lines for each SEC employee in the five divisions and OCIE and assessed the shape of the organizational pyramid utilizing proprietary BCG methodologies. The assessment took into account the history of the SEC as well as recent improvement initiatives already undertaken by the SEC.

7.1.2 Structure: Overview

7.1.2.1 Key questions explored

- *What organizational units make up the SEC's structure today?*
- *What is the number of direct reports to the Chairman and the resulting implications?*

7.1.2.2 Findings

Currently, the SEC consists of five operating divisions, eighteen offices, and eleven regional offices:¹²⁵

Five operating divisions

- The **Division of Enforcement** (Enforcement), including enforcement staff in the regional offices form the SEC's enforcement program, investigates and brings civil charges based on violations of the federal securities laws
- The **Division of Corporation Finance** (CF) performs functions to ensure that investors have access to materially complete and accurate information, and to deter fraud and misrepresentation in the public offering, trading, voting, and tendering of securities
- The **Division of Trading and Markets** (TM) conducts activities to establish and maintain standards for fair, orderly, and efficient markets, while fostering investor protection and confidence in the markets
- The **Division of Investment Management** (IM) seeks to minimize the financial risks to investors from fraud, mismanagement, self-dealing, and misleading or incomplete disclosure in the investment company and investment adviser segments of the financial services industry
- The **Division of Risk, Strategy, and Financial Innovation** (RSFI) covers three broad areas of responsibility: risk and economic analysis, strategic

¹²⁵ *Organization of the SEC*. U.S. Securities and Exchange Commission. Web. 1 Feb. 2011.

research, and financial innovation. Its activities relate to policymaking, rulemaking, and examination and enforcement matters agency-wide

Program offices

- The **Office of Compliance Inspections and Examinations (OCIE)** including exam staff in the regional offices form the SEC's examination program, which conducts examinations of registrants such as investment advisers, investment companies, broker-dealers, self-regulatory organizations, credit rating agencies (before Dodd-Frank), transfer agents, and clearing agencies
- The **Office of the General Counsel (OGC)** serves as the chief legal officer of the SEC and provides independent legal analysis and advice to the Chairman, Commissioners, and operating divisions on all aspects of the SEC's activities. The General Counsel also defends the SEC in federal district courts, represents the SEC in all appellate matters and amicus curiae filings, and oversees the SEC's bankruptcy program
- The **Office of the Chief Accountant (OCA)** serves as the chief advisor on all accounting and auditing policy and oversees the PCAOB and private sector standards setting
- The **Office of Investor Education and Advocacy (OIEA)** serves investors who contact the SEC, ensuring that retail investors' perspectives inform the agency's regulatory policies and disclosure programs. This office also works to improve investors' financial literacy
- The **Office of International Affairs (OIA)** advises the Commission and coordinates with other offices and divisions on international legal and policy issues and advances international regulatory and enforcement cooperation. It promotes converged high regulatory standards worldwide and facilitates technical assistance programs in foreign countries
- The **Office of Administrative Law Judges (OALJ)** adjudicates allegations of securities law violations

Agency direction and administrative support offices

- The **Chairman** is responsible for overseeing all aspects of agency operations, and the **Chairman and Commissioners** are responsible for the review and approval of enforcement cases and the development, consideration, and execution of policies and rules
- The **Office of Legislative and Intergovernmental Affairs (OLIA)** works with Members of Congress on issues that affect the SEC
- The **Office of Public Affairs (OPA)** coordinates the SEC's communications with the media and the general public
- The **Office of the Secretary (OS)** reviews all documents issued by the SEC, and prepares and maintains records of agency actions
- The **Office of the Chief Operating Officer (OCOO)** oversees the Office of Freedom of Information Act and Records Management Services (OFOIA), the Office of Information Technology (OIT) and the Office of Financial

- Management (OFM). The **Office of the Executive Director** (OED) oversees the Office of Human Resources (OHR) and the Office of Administrative Services (OAS) and jointly manages OFM with the OCOO. Together, the OCOO and OED are responsible for maximizing the use of SEC resources by overseeing the strategic planning, information technology (IT) program, financial management, records management, human resources, and administrative functions of the agency
- The **Office of Equal Employment Opportunity** (OEEO) ensures that the SEC is an equal opportunity employer in full compliance with all federal EEO laws
 - The **Office of the Inspector General** (OIG) is an independent office that conducts audits of programs and operations of the SEC and investigations into allegations of misconduct by staff or contractors. Its mission is to detect fraud, waste, and abuse and to promote integrity, economy, efficiency, and effectiveness in the SEC's programs and operations

The description of the SEC's divisions, offices and programs as outlined above is consistent with the the agency's 2010 Performance and Accountability Report.

Under the SEC's existing organizational structure, the directors of each of the five divisions and thirteen main offices,¹²⁶ the Chairman's Chief of Staff, and the Chief Information Officer all report directly to the Chairman. In addition, four of the new offices mandated under Dodd-Frank are statutorily required to report to the Chairman, increasing the Chairman's total span of control to 24.¹²⁷

This large number of direct reports generally creates a management challenge for the Chairman, which historically has been addressed in different ways. Under the previous Chairman, all direct reports had management access through regular staff meetings that also included Commissioner counsel; however, the large number of participants made meaningful interaction and decision-making challenging. In contrast, the current Chairman holds weekly staff meetings—in addition to periodic one-on-one meetings with all division and office heads—with a smaller group of key decision makers from the agency's main program and support units. Meanwhile, many of the administrative offices are connected to the Chairman through regular interactions with the Chief of Staff or Deputy Chief of Staff. While the quality of interaction has reportedly increased, the trade-off is that smaller offices have fewer opportunities to engage directly with the Chairman. In addition, limited leadership capacity necessitates a prioritization of issues based on key areas of focus.

Sections 7.1.4 and 7.1.5 identify duplicate structures within the SEC's current organization design. These overlaps represent potential opportunities to decrease the agency's organizational complexity.

¹²⁶ OCIE, OGC, OCA, OIEA, OS, OED, OIA, OLIA, OPA, OCOO, OEEO, OALJ, OIG.

¹²⁷ United States. Cong. Senate. *Dodd-Frank Wall Street Reform and Consumer Protection Act*. 111st Cong., 2nd sess. S 932(a)(8), 979, 915, and 342. Washington: GPO, 2010.

7.1.3 Structure: Operating divisions and exam program

7.1.3.1 Key questions explored

- *How are the SEC's operating divisions organized and what are the guiding design principles?*
- *Is the SEC's divisional structure adequate? What are its limitations?*

7.1.3.2 Findings

Description of design principles guiding divisional structure

This section discusses the SEC's divisional structure. While OCIE technically does not have division status, we have included it here due to the size and importance of the exam program.

Today's operating divisions are organized under a hybrid model. The Divisions of Investment Management, Trading and Markets, and Corporation Finance are largely organized based on the primary body of law they oversee and the respective entities they regulate:

- Investment Management oversees investment advisers and investment companies and administers the Investment Company Act and the Investment Advisers Act of 1940
- Trading and Markets regulates broker-dealers, oversees SROs, and is largely in charge of the Securities Exchange Act of 1934 as it applies to market practices
- Corporation Finance is responsible for the Securities Act of 1933 as well as the Securities Exchange Act of 1934 as far as it relates to ongoing disclosure requirements. In that function, Corporation Finance oversees public companies

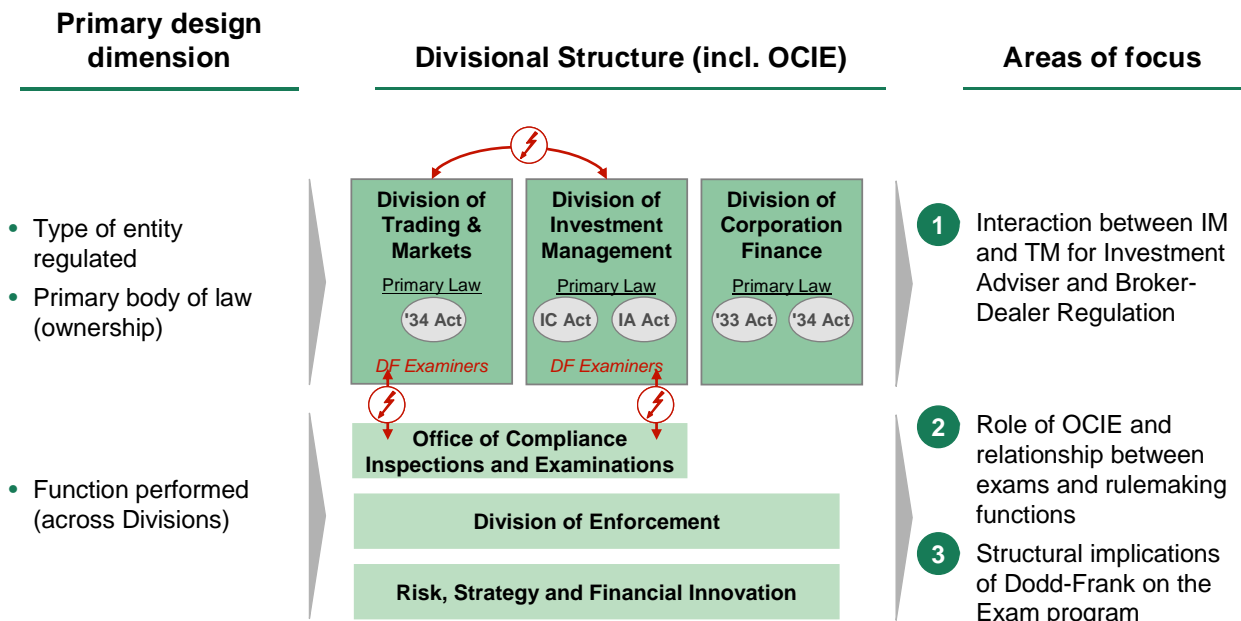
Enforcement, OCIE and RSFI are characterized by their main functional expertise and span across the spectrum of applicable laws and registrants.

The SEC's divisional structure has evolved to meet particular needs. Three important milestones have shaped the divisional structure over the past 40 years: 1) the establishment of the Division of Enforcement in 1972, previously decentralized within the SEC's operating divisions and regional offices¹²⁸; 2) the creation of the Office of Compliance Inspections and Examinations in 1995, previously housed in the Divisions of Trading and Markets (then Market Regulation) and Investment Management; and 3) the creation of the Division of Risk, Strategy, and Financial Innovation in 2009.

¹²⁸ Hawke, Daniel. SEC Historical Society. *A Brief History of the SEC's Enforcement Program 1934–1981*. 25 Sept. 2002. Print.

As the securities markets continue to become more complex and interrelated, the SEC must reconcile the fact that its divisional structure follows a rigid set of laws and regulations and basically has not changed in fifteen years, while the markets it regulates are fluid and ever-changing. Today, this structure—including the structural changes mandated by Dodd-Frank—poses challenges in three key areas.

Exhibit 7.1.3.2-1: Three areas of focus regarding the SEC’s divisional structure



Source: SEC Organizational Chart, BCG analysis

Structural separation of broker-dealer and investment adviser regulation

The legal distinctions that define investment advisers and broker-dealers date back to the 1930s and 1940s. The SEC’s organizational structure has historically reflected these distinctions, with IM primarily responsible for the regulation of investment advisers and TM (and its predecessors) primarily responsible for the regulation of broker-dealers. However, this line is becoming increasingly blurry, as substantive functional differences between the two entities continue to diminish. Acknowledging this change, the SEC commissioned a 2008 study on the investment adviser and broker-dealer industries and their respective relationships with customers. Throughout the study, industry experts noted that “the current regulatory scheme treats broker-dealers and investment advisers differently, when in practice, their role is essentially the same, especially from the viewpoint of the individual investor.” Furthermore, the study questioned the

wisdom of traditional definitions and regulatory and legal distinctions between the two service providers.¹²⁹

This very topic was also the focus of the “Study on Investment Advisers and Broker-Dealers” as required by Section 913 of Dodd-Frank.¹³⁰ The study evaluated the effectiveness of current legal or regulatory standards of care and assessed whether gaps or shortcomings exist in the protection of retail customers that should be addressed by rules or statutes. Based on the findings of the study, SEC staff recommended the consideration of uniform fiduciary standards and related disclosure requirements that apply expressly and uniformly to both broker-dealers and investment advisers. In addition, the staff recommended a harmonization of regulation where it adds meaningful investor protection. Several areas where investment adviser and broker-dealer regulation differs today were identified, such as advertising and other communications, supervision, and books and records.

The current divisional structure does not align with a market reality that requires a largely harmonized approach to broker-dealer and investment adviser regulation. Thus, IM and TM will either have to reorganize, with all of the associated costs, or find ways to develop strong collaboration mechanisms to overcome this separation and implement the recommendations put forth by the Section 913 study. While the rulemaking functions for broker-dealers and investment advisers are clearly separated as discussed above, OCIE has taken steps to enhance the coordination between the exam functions across broker-dealer and investment adviser exams.

Structural distance between exam and rulemaking functions

Prior to OCIE’s creation in 1995, the exam function was contained in TM (then Market Regulation) and IM. The rationale for centralizing examiners in OCIE included the need to streamline the exam process, reduce duplication, increase the quality of training, improve resource allocation, increase objectivity, and enhance coordination with regional exam staff, Enforcement, and other regulatory agencies.¹³¹

Over the past year, OCIE—under new leadership—has undergone a comprehensive self-assessment and, as a result, has restructured and strengthened the exam program nationwide. Given the importance of a consistent, efficient, and proactive nationwide exam program, the coordination and policy-setting function of the OCIE home office is increasingly relevant. A unified exam program under OCIE also allows for a more flexible exam force that combines broker-dealer and investment adviser specialists in its exam teams as needed. However, leading up to the passage of Dodd-Frank, there was discussion around the merits of re-deploying examiners back into their respective divisions

¹²⁹ *Investor and Industry Perspectives on Investment Advisers and Broker-Dealers.*

¹³⁰ *Study on Investment Advisers and Broker-Dealers.*

¹³¹ *1995 Annual Report.*

(i.e., TM and IM). Were the SEC to do this, it would achieve a deeper integration of the exam and rulemaking functions. On the other hand, it would also lead to very specialized exam groups for broker-dealers and investment advisers, which is in contrast to today's market reality of increasingly blurry lines between the two, as evidenced by the "Study on Investment Advisers and Broker-Dealers" conducted under Section 913 of Dodd-Frank.¹³²

As it stands, there is an implicit trade-off by centralizing the exam function in OCIE. The agency gains some consistency and coordination as well as enhanced independence of the exam function but—by segregating the exam function from the policymaking functions of TM and IM—it distances rulemaking from exams, which can weaken the critically important information and knowledge flow between the two. Exams can provide information about the actual workings of markets and the impact of rulemaking on regulated entities and, as such, they can help inform the development of policy. At the same time, effective exams require in-depth knowledge of the rules. There is recognition of the need for close collaboration between these two functions, and OCIE has appointed dedicated staff to increase communication with rulemaking functions. Beyond information flow, the centralization of the exam function also weakens a historical career path for examiners who would over time advance into rulemaking roles within the same division. Recognizing this, OCIE and policy divisions have implemented several new coordination mechanisms (e.g., "One SEC" supervision strategies for large firms).

Impact of Dodd-Frank mandates on the exam program

Section 965 of Dodd-Frank requires IM and TM to establish a staff of examiners.¹³³ The distribution of exam resources between OCIE and the two divisions is not yet fully specified. However, as a result, exam staff at the agency could end up spread across the OCIE home office, regional offices, and operating divisions and would reside in all of the following units:

- Division of Investment Management (as per Dodd-Frank Section 965)
- Division of Trading and Markets (as per Dodd-Frank Section 965)
- Office of Credit Rating Agencies (as per Dodd-Frank Section 932)
- Office of Compliance Inspections and Examinations
- Eleven regional offices

To ensure consistency, efficiency, and alignment across the SEC's exam program, OCIE should play a vital coordination role to ensure continued and frequent collaboration across all aspects of the exam program. Coordination between the home and regional offices currently happens through OCIE's newly implemented committee structure, which connects regional and home office

¹³² *Study on Investment Advisers and Broker-Dealers.*

¹³³ Dodd Frank Act Section 965 states that IM and TM must have a staff of examiners that "perform compliance inspections and examinations of entities under the jurisdiction of that Division and report to the Director of that Division."

staff. As examiners spread across the SEC, however, OCIE and the operating divisions will need to continue working together to jointly answer questions to identify the roles, responsibilities, coordination requirements, and collaboration mechanisms needed for the various exam teams.

Summary

Reflecting on the SEC's divisional structure, this section has outlined three potential areas where structural boundaries create challenges, either because traditional divisional lines don't reflect changes in securities markets or because they create a structural distance between thematically linked units. It is important to note, however, that every organizational structure will have inherent weaknesses, which need to be overcome by strong collaboration mechanisms. The SEC can address these structural challenges by either redrawing organizational units or implementing strong collaborative processes.

7.1.4 Structure: Operations management and support offices

7.1.4.1 Key questions explored

- *How are the SEC's administrative support offices structured?*
- *Are there any duplicative or overlapping structures and functions?*

7.1.4.2 Findings

Operations management and support offices

Historically, the agency's operational responsibilities were split between the Office of the Executive Director (ED) and the division directors. In fact, the Code of Federal Regulations gives significant operational responsibility to the ED.¹³⁴ Given the necessary focus on the annual congressional appropriation cycle, budgeting process, and administrative duties, however, the ED has traditionally been left with limited time for the operational management of support offices. As a consequence, the support capabilities and offices (e.g., HR and IT) have not received the requisite attention and investment. In addition, the typical division director's focus on policy and rulemaking tended to result in day-to-day operations within divisions moving further down the agenda.

The SEC's senior management has recognized the importance of making the agency more efficient and effective. One critical step towards achieving this goal was the recent creation of a Chief Operating Officer (COO) position for the SEC, with the explicit objective of enhancing the agency's effort to refocus its

¹³⁴ United States. U.S. Securities and Exchange Commission. *Organization; Conduct and Ethics; and Information and Requests*. 17 CFR 200.13. 1995. Print.

resources and make the agency more efficient and effective.¹³⁵ Operational efficiency has also moved to the top of the agenda for most of the division directors, who created, or are in the process of creating, COO-like positions called “managing executives” within the major operating units (e.g., Enforcement and OCIE).

However, with the creation of a COO, responsibility for “maximizing the use of SEC resources by overseeing the strategic planning, IT program, financial management, records management, human resources and administrative functions of the agency”¹³⁶ is currently split between the Office of the Executive Director (ED) and the Office of the Chief Operating Officer. The ED manages the Offices of Human Resources (OHR) and Administrative Services (OAS) while the COO oversees OIT and the Office of FOIA & Records Management Services. Together, the COO and ED oversee the Office of Financial Management. The current separation of responsibilities between the two has, at times, led to a lack of clarity in roles for the COO and ED. This situation weakens the authority of both roles and limits them from providing relevant guidance to the operating divisions and adopting a broader approach to improving efficiency across the agency’s support functions.

External facing offices

The SEC has three offices that, in one form or another, perform external relations functions: the Office of Investor Education and Advocacy (OIEA), Office of Public Affairs (OPA), and Office of Legislative and Intergovernmental Affairs (OLIA). OIEA interacts with the public through its role as an investor advocate and educator. It responds to questions, complaints, and suggestions from members of the public; produces and distributes educational materials; participates in seminars and investor-oriented events; and partners with federal agencies, state regulators, and others on investor literacy initiatives.¹³⁷ Meanwhile, OPA coordinates the agency’s relations with the media and the general public, in the United States and around the world.¹³⁸ Finally, OLIA acts as a liaison with House and Senate members and staff, communicating legislators’ goals to the SEC and the agency’s own regulatory and management initiatives to Congress.¹³⁹ The office also responds to congressional requests for testimony of SEC officials, as well as requests for documents, technical assistance, and other information.¹⁴⁰ In addition, the Office of the Secretary (OS) is responsible for the SEC’s official website beyond its main responsibility for the procedural administration of Commission meetings, rulemaking, practice, and procedure. Elsewhere, various divisions and offices formally and informally

¹³⁵ United States. U.S. Securities and Exchange Commission. “Jeff Heslop named SEC Chief Operating Officer.” 27 May 2010. Web. 1 Feb 2011.

¹³⁶ 2010 Performance and Accountability Report.

¹³⁷ *The Investor’s Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation*. U.S. Securities and Exchange Commission. Web. 1 Feb 2011.

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Ibid.

communicate externally with different stakeholders as needed. Given the fragmentation of communication responsibilities across a number of offices, ensuring the consistency of messages and communication priorities can be difficult.

In light of the disconnect between public expectations and the agency's actual regulatory role and legal authorization, it is critical that the SEC develop a clear and consistent communications strategy. An effective communications strategy should include: 1) core principles and key messages; 2) communications media and formats; 3) stakeholder mapping; and 4) detailed sequencing and execution. In addition to formulating a strong and consistent message, the SEC also has an opportunity to strengthen OPA's role; for example, the Office of Public Affairs does not have authority over the SEC's website, which currently falls under the purview of the Office of the Secretary, even though it is one of the agency's primary methods of communicating with the public.

Summary

Due to the strong emphasis on mission-related activities and the agency's relatively small size, a focus on operational efficiency and effectiveness have inevitably been deprioritized on the management agenda and led to compromises in the agency's support functions. While the establishment of an agency-wide COO underscores the commitment to addressing operational issues, further steps are necessary to strengthen, clarify, and empower the role of the COO to take broader accountability for the agency's support functions. Additionally, opportunities to enhance the SEC's communications strategy also exist.

7.1.5 Structure: Dodd-Frank mandated offices

7.1.5.1 Key questions explored

- *What is the organizational impact and adequacy of the Dodd-Frank mandated offices?*

7.1.5.2 Findings

As previously discussed, Dodd-Frank mandates the creation of five new SEC offices. With the exception of the whistleblower program, all of these offices are required to report directly to the Chairman. The following section will delve into the details of each of the four new offices to determine whether there is any functional overlap with existing SEC units. In particular, each of the new offices will be evaluated along the following dimensions: 1) responsibilities of the new office under Dodd-Frank; 2) whether the SEC currently performs these activities; and 3) benefits and risks of the structure mandated by Dodd-Frank.

The Office of Municipal Securities

The SEC currently has an Office of Municipal Securities (OMS) that resides within TM's Office of Market Supervision. It was created in 1995 as a separate office that reported directly to the Chairman and officially moved under TM in 2001. The goals of OMS include the following:

- Anticipate potential issues in the municipal securities market
- Provide expertise to the SEC on municipal securities, particularly with regard to investigations and enforcement proceedings
- Work toward improved disclosure and behavior of market participants in the municipal securities industry

Under Dodd-Frank, OMS moves from its current position under TM to become, once again, a direct report of the Chairman. OMS will continue to administer SEC rules for municipal securities broker-dealers, advisors, investors, and issuers. OMS will also coordinate with the Municipal Securities Rulemaking Board for rulemaking and enforcement actions. This legislation is in part a response to the recent financial crisis, during which the municipal securities industry experienced failure and illiquidity in the auction rate securities market.¹⁴¹

The primary benefits of returning OMS to its former position are threefold. First, it heightens the agency's focus on the municipal securities industry. Second, providing OMS with an independent voice in the budget process could enhance the resources dedicated to monitoring the municipal securities market. Given its current position in TM's Office of Market Supervision, OMS competes for resources with six other offices. In 2002, OMS was reduced to two professional staff and remained at this level until 2010, when OMS hired two additional short-term Attorney Fellows. Third, as OMS takes on a greater role in regulating the Municipal Securities Rulemaking Board (MSRB), elevating the office could provide it with greater clout to influence the MSRB's rulemaking process.

However, there are drawbacks to elevating OMS. It requires additional overhead to operate as an independent office—it currently relies on TM for financial management staff and administrative resources. In addition, it represents yet another direct report to the Chairman, thus increasing organizational complexity. Finally, OMS will be the only standalone office that focuses on a single asset class and reports directly to the Chairman, further fragmenting the agency and impeding collaboration across offices that perform similar regulatory functions.

¹⁴¹ Anderson and Bajaj.

The Office of Credit Rating Agencies

Dodd-Frank mandates the creation of the Office of Credit Rating Agencies (OCRA) to administer SEC rules for nationally recognized statistical rating organizations (NRSROs), conduct examinations of each NRSRO at least once a year, and publish an annual report of exam results. This office arose from the controversy surrounding the rating agencies' assessment of mortgage-backed securities and other complex financial instruments leading up to the financial crisis.¹⁴² OCRA's responsibilities are currently split between two SEC offices. In TM, the Office of Financial Responsibility writes and administers rules related to credit rating agencies. Meanwhile, OCIE inspects rating agencies for compliance with said rules (without the annual exam requirement or issuance of reports to Congress).

Under the Dodd-Frank structure, OCRA exists as a separate unit reporting directly to the Chairman. Rulemaking and examinations would be housed together, which may lead to synergies between the two functions. However, the structure required by Dodd-Frank involves trade-offs. First, examiners housed in OCRA may be too far removed from the National Examination Program, and a dual reporting line to OCIE may cause confusion over accountability. Although NRSRO examinations are relatively distinct from examinations of other regulated entities, creating a separate office will nonetheless make it difficult to maintain consistency among the SEC's various types of examinations. In addition, staff in OCRA will gain expertise in only one area—credit rating agencies—thus constraining their career paths at the SEC. This could impair the agency's ability to attract and retain top talent. The creation of OCRA also carries the same risks as discussed above with regard to organizational complexity and the need for additional funding to support overhead. The resource question is particularly important for OCRA because it is one of the main Dodd-Frank offices charged with significant rule-writing. Due to a lack of funding, the office's creation has been postponed until Congress approves a FY 2011 budget for the SEC; however, the agency is required by Dodd-Frank to complete a number of rulemaking projects related to credit rating agencies by the end of 2011. This means that the staff eventually hired for OCRA will be interpreting and assessing compliance with rules they did not write.

The Office of the Investor Advocate

The Office of the Investor Advocate (OIAD) is charged with assisting retail investors in their interactions with the SEC or SROs, identifying problems that investors have with financial service providers and investment products, and analyzing the impact of proposed SEC and SRO rules on retail investors. OIAD is envisioned as an independent office that reports directly to the Chairman and to Congress, with primary responsibilities that include the following:

¹⁴² Gillen.

- Provide a central point of contact for investor complaints about the SEC or SROs
- Maintain an Ombudsman who will liaise with the public
- Identify recurring problems that investors have with financial service providers or investment products
- Advocate for investors in the rulemaking process

Currently, these functions are assigned to the Office of Investor Education and Advocacy (OIEA), TM's Office of Sales Practices (OSP), and the Office of the Inspector General (OIG). OIEA is responsible for managing investor education programs and responding to investor questions and complaints. Meanwhile, OSP oversees rules regarding sales to retail investors and increasingly works with OIEA, which advocates for retail investors in the rulemaking process. Lastly, OIG is an independent office within the SEC, responsible for auditing the agency's programs and operations as well as investigating misconduct. OIG maintains a hotline to receive information from SEC employees and the general public regarding agency misconduct.

By creating an independent office focused solely on investors, Dodd-Frank provides a clear point of contact for investor complaints via the Ombudsman position. But the new office will require additional resources, and with OIAD's budget process less directly under the Chairman's control, this could divert necessary funding away from other divisions and offices. Moreover, the new office will duplicate functions that the agency already performs. While some of the duplication may be eliminated by consolidating activities in OIAD, other functions will continue to be the responsibility of multiple offices. For example, OIG will still maintain a complaint hotline, so investor complaints may not be completely centralized. Furthermore, the structure mandated by Dodd-Frank requires a high degree of coordination across OIAD, OIEA, OSP, and OIG. Lastly, the new office represents another direct report to the Chairman.

The Office of Minority and Women Inclusion

The creation of the Office of Minority and Women Inclusion (OMWI) was primarily motivated by a desire to increase diversity in the federal contracting process and on Wall Street.¹⁴³ OMWI is responsible for all matters relating to diversity in management, employment, and business activities at the SEC, including contracting processes. In particular, its responsibilities include the following:

- Develop workforce standards and policies related to diversity
- Increase the participation of minority- or women-owned businesses in SEC contracts
- Assess the diversity policies and practices of regulated entities

¹⁴³ Roose.

The majority of activities designated to OMWI are already performed by existing SEC offices. Currently, the Office of Equal Employment Opportunity (OEEO) examines workforce diversity, develops diversity standards and strategies, plans and implements diversity retention programs, and participates in diversity recruiting. The Office of Human Resources (OHR) works with OEEO to develop and implement the agency's diversity recruitment strategy. Finally, the Office of Acquisitions under the Office of Administrative Services (OAS) tracks Small and Disadvantaged Business Utilization (SADBU) goals including the use of, among other criteria, women- and minority-owned businesses. One new responsibility currently not performed by the SEC, however, is the assessment of regulated entities' diversity practices.

The creation of OMWI adds another management voice advocating diversity, and it may well increase the SEC's focus on diversity issues. Additionally, it provides a home for the assessment of diversity efforts by registrants and may increase consistency among the agency's policies regarding diversity planning and strategy. There are, however, drawbacks to establishing the new office. The creation of OMWI duplicates functions already being performed elsewhere in the SEC, requires additional resources, and adds yet another direct report for the Chairman. In addition, separating diversity policymaking from OEEO and OHR diminishes any synergies stemming from OEEO's close familiarity with complaint data and OHR's expertise in implementing recruitment programs. Furthermore, since OEEO and OHR will retain responsibilities related to workplace discrimination and diversity recruiting, respectively, the new structure requires significant coordination across the three offices. Finally, OMWI will need access to OEEO's knowledge of equal employment law to avoid illegal diversity practices (e.g., quota-setting).

Summary

The offices mandated under Dodd-Frank were created to address specific areas of concern to Congress. Many of the activities to be performed in the new offices are already performed by existing units within the SEC. Placing those functions in new offices may increase their visibility, but it also creates organizational complexity. Moreover, the new structures could put greater distances between related functions, making it more challenging for the SEC to leverage the full value of shared expertise and support infrastructure. The requirement to create the new offices also puts more stress on the agency's resources, which are already constrained by enhanced activity and other new mandates.

7.1.6 Balance between regional offices and headquarters

7.1.6.1 Key questions explored

- *What is the SEC's regional structure?*
- *How does this structure affect the agency's exam and enforcement programs?*

7.1.6.2 Findings

About 1,600 of the SEC's 3,900 employees—or approximately 40 percent of its total workforce—are located in the agency's eleven regional offices.¹⁴⁴

- New York Regional Office (Staff: 391)
- Boston Regional Office (Staff: 125)
- Philadelphia Regional Office (Staff: 111)
- Miami Regional Office (Staff: 106)
- Atlanta Regional Office (Staff: 96)
- Chicago Regional Office (Staff: 240)
- Denver Regional Office (Staff: 96)
- Fort Worth Regional Office (Staff: 105)
- Salt Lake City Regional Office (Staff: 25)
- Los Angeles Regional Office (Staff: 167)
- San Francisco Regional Office (Staff: 109)

The regional offices house SEC staff for the agency's enforcement and exam programs. Each regional office is headed by a regional director, who reports to the Director of the Division of Enforcement and to the Director of OCIE. The regional director is also responsible for regional operations and support functions. Associate directors oversee the enforcement or exam programs in their region and report directly to the regional director.

The regional model places SEC staff closer to the markets and entities regulated by the SEC, and facilitates alignment with local co-regulators. But this model also makes it more challenging to ensure the consistency and efficiency of the agency's nationwide enforcement and exam programs.

Brief historic overview of the SEC's regional offices

When the SEC was founded, the agency vested its regional offices with the primary responsibility of conducting investigations and bringing forth enforcement actions. Over the next 40 years, regional offices became the first line of enforcement.¹⁴⁵ After a period of low, limited enforcement activity and tightened budgets in the 1950s, an uptick of scandals and fraud in the 1960s “convinced Chairman Cary that the SEC needed a home office pre-emptive strike capability.”¹⁴⁶ Realizing the enforcement program had not focused on misconduct of national significance but rather on smaller, local frauds, the SEC began to build enforcement capabilities within the home office, leading to the establishment of the Division of Enforcement in 1972.

¹⁴⁴ Staff levels for regional offices as of October 2010.

¹⁴⁵ Hawke.

¹⁴⁶ Ibid.

The regional offices have seen a variety of reporting structures with varying degrees of autonomy. Historically, regional directors have either reported directly to the Chairman, to the Executive Director's office, or to Enforcement. The relationship between the regional and home offices has been described as strained, leaving regions "disenfranchised" with the SEC. Anecdotally, the regional model has had the following shortcomings:

- Regional offices have not communicated sufficiently with each other (e.g., several offices were examining the same entity but were not aware of the overlap)
- Regional offices have followed different procedures (e.g., processing tips, complaints, and referrals, conducting exams)
- Regional enforcement and exam staff have not collaborated sufficiently within their programs or with other divisions at headquarters (e.g., they did not reach out to experts in TM and OIA)

Over the past two years, the Division of Enforcement and OCIE have embarked on critical self-assessments that resulted in significant changes and addressed, among other issues, the shortcomings mentioned above.

Changes in the enforcement and exam programs have also improved collaboration between regions and headquarters

Restructuring the Division of Enforcement: In 2009-2010, Enforcement implemented a significant and broad restructuring of its operations. The overarching goal of the effort was to increase the efficiency and expertise with which the Division investigates and brings its cases, so that time and resources can be devoted to matters with greater urgency and impact. Key initiatives of the restructuring included the creation of five national units dedicated to highly-specialized and complex areas of the securities industry, the streamlining of management and internal processes, the establishment of an Office of Market Intelligence responsible for collecting, risk-weighting, triaging, and referring TCRs, improvements to the Division's metrics, the creation of a Managing Executive position, the devolvement of certain decision-making from Division senior leadership to senior officers, and the delegation of authority of certain matters from the Commission to the Division Director.¹⁴⁷ A subset of these initiatives is described below:

The creation of specialized units: The Division created five national units dedicated to highly specialized and complex areas of the securities industry and securities law, with a view toward concentrating expertise and making it easier to connect the dots. Each unit is headed by a "unit chief" and staffed from offices around the country. While the number and nature of the specialized units may change over time, depending on market trends and demands, the current units are as follows:

¹⁴⁷ Khuzami, Robert. "My First 100 Days as Director of Enforcement." *New York City Bar*. New York, NY. 5 Aug. 2009. Speech.

- The Asset Management Unit is focused on investment advisers, investment companies, hedge funds and private equity funds. This unit addresses a range of issues, including disclosure, valuation, portfolio performance, due diligence and diversification, transactions with affiliates, misappropriation and conflicts of interest
- The Market Abuse Unit is focused on large-scale market abuses and complex manipulation schemes by institutional traders, market professionals and others. As part of the restructuring plan, the unit is expected to build technological tools and screening programs to analyze trading across equities, debt securities, and derivatives markets
- The Structured and New Products Unit is focused on complex derivatives and financial products, including credit default swaps, credit default obligations and other securitized products
- The Foreign Corrupt Practices Act Unit is focused on new approaches to identifying violations of the Foreign Corrupt Practices Act (FCPA). As part of its mandate, the group is working closely with foreign counterparts and is expected to take a more global approach to these violations
- The Municipal Securities and Public Pensions Unit is focused on several areas, including offering and disclosure issues, tax and arbitrage-driven activity, unfunded or underfunded liabilities, and "pay-to-play" schemes

In addition to fostering expertise in critical areas, the creation of specialized units serves to increase communication and collaboration across the regions. Although only 25 percent of enforcement staff is assigned to a specialized unit, these units draw from all of the regional offices. The move towards specialized units has created a flexible network of experts and has also appears to have brought the enforcement program closer together.

Streamlining internal management and processes: As part of the restructuring, Enforcement has eliminated a layer of management by deploying branch chiefs from supervisory positions to the front line where they serve as experienced investigators. The idea was that “this flattening of our management structure will increase the resources dedicated to our investigative efforts, and will operate as a check on the extra process, duplication, unnecessary internal review and the inevitable drag on decision-making that happens in any overly-managed organization. This flattening will also encourage autonomy and accountability throughout the organization by pushing more decision-making to the front-line staff.”¹⁴⁸ As a result, the front line staff to manager ratio has doubled. Moreover, in conjunction with the elimination of the branch chief layer, Enforcement is planning to increase the support for its lawyers by roughly tripling the pre-reorganization number of fulltime paralegals and support personnel. The rationale is to free up investigators for critical front-line work by relieving them of the burdens of routine administrative tasks. Finally, internal processes were streamlined to make action memoranda shorter and less time consuming to draft, review, approve, and calendar for Commission consideration.

¹⁴⁸ “My First 100 Days as Director of Enforcement.”

Delegation of authority: Concurrent with the streamlining efforts within Enforcement, the SEC delegated to the Division Director the authority to issue formal orders of investigation, with their accompanying subpoena power. In turn, the Division Director delegated that authority to senior officers throughout the Division, such as to the associate directors for the enforcement program in the regional offices. The Commission also delegated to the Division Director the authority to submit immunity requests to the Department of Justice.

Impact on regional offices: Regional directors and enforcement staff have largely welcomed the creation of the specialized units while acknowledging the challenges that come with every matrix organization, such as dual reporting lines for specialized unit staff to both the regional director and the unit chief. In addition, the current leadership team has implemented several measures to increase transparency and consistency across the agency's national enforcement program. These initiatives include weekly senior staff meetings between all regional and associate directors by videoconference, periodic meetings between all home and regional office assistant directors and division senior leadership, quarterly case reviews between front line staff and supervisors and between supervisors and senior officers, creation of a Cooperation Committee comprised of home and regional office staff that provides guidance and decision-making on matters concerning the division's recent cooperation initiative, and enhanced training offered by the specialized units to all staff throughout the division.

Reorganizing OCIE and establishing a National Examination Program: Over the past year, OCIE's new leadership team has undertaken a comprehensive self-assessment of its strategy, structure, people, processes, and technology to strengthen the exam program.¹⁴⁹ As part of its strategy going forward, OCIE is establishing an integrated National Exam Program to increase consistency, effectiveness, and efficiency across the regions:

Strategy: OCIE continues to refine its risk-based approach to the examination process. Examination candidates are now analyzed along a spectrum of risk criteria, which are cross-referenced with tips, complaints, and referrals (TCRs) to identify registrants with the highest risk profiles. From there, examinations are prioritized based on a further risk assessment of the registrants' business operations, among other factors. OCIE expects to more efficiently allocate its resources and focus attention on critical, high risk functions. Additionally, OCIE seeks to strengthen the connection to the rulemaking process through structured involvement from start to finish, and with dedicated policy support teams on key regulatory reform rules, studies, and initiatives. Finally, OCIE is working on joint initiatives with RSFI to monitor new and emerging risks to investor protection and market integrity.

Structure: To improve communication, collaboration, and oversight across the exam program, OCIE created a new national governance model. The

¹⁴⁹ "Remarks at the CCO Outreach National Seminar."

governance structure, which includes senior leaders from the regional offices, comprises an Executive Committee and four Steering Committees on the following topics: 1) Compliance, Ethics, and Internal Controls; 2) People; 3) Technology; and 4) Risk and Exam Process. The Executive Committee is chaired by the Director of OCIE and includes members from regional offices and the home office. The four Steering Committees are composed of a mix of OCIE home and regional office staff and serve as advisory boards to the Executive Committee. Each Steering Committee is headed by an associate director who is also a member of the Executive Committee, thus linking the two groups together. The goal of this new governance structure is to promote the general inclusion of all examiners and, through that, the propagation of the NEP. Additionally, OCIE established a new Risk Analysis and Surveillance Unit to inform risk-based decision-making, launched new Specialization Working Groups dedicated to new and complex industry developments, and are working to break down internal silos in order to address specific risks in an exam profile (e.g., joint investment adviser and broker-dealer exam teams).

Process: To streamline the exam program, OCIE introduced new mechanisms to drive standardization, consistency, and accountability across the NEP. In particular, OCIE improved the National Exam Operations Manual and launched an automated National Exam Workbook. Furthermore, OCIE appointed its first Chief Compliance Officer to enhance and monitor compliance with the office's own policies and procedures.

People: Similar to Enforcement, OCIE created a Managing Executive position to improve the effectiveness and efficiency of operations, and hired senior specialized examiners with diverse skill sets to strengthen its knowledge base. Furthermore, the exam program is strengthening expertise through focused recruiting and enhanced training. OCIE also intends to establish "open architecture" staffing, which allows management to draw staff from a pool of examiners to match examiners' skill sets and areas of expertise to the entity examined.

Technology: OCIE has focused on automating the exam process. In particular, OCIE set up a Technology Committee to oversee its technology resources and strategy, and developed new risk assessment technologies in conjunction with RSFI.

Impact on regional offices: The establishment of the new committee structure has improved communication and collaboration across the regional offices and with the home office. For the first time, senior exam staff in the regions have a "seat at the table" and is actively involved in setting strategy and standards for the SEC's exam program. One staffer described the change as "the best thing that has happened to the exam program in 40 years." The introduction of an updated exam manual and automated workbook harmonize exam standards across regions. In addition, senior exam staff is working to develop an examiner training program that establishes a consistent baseline for technical training and certification standards across the country.

Potential opportunities for improvement

The improvements outlined above are largely the result of necessary steps taken by the SEC to streamline its enforcement and exam programs. The changes are intended to build a truly national, interconnected, and consistent program across the regional offices. As part of the next phase, the SEC will need to critically assess whether today's regional structure best supports this new direction. The development of a regional strategy should include three topics: 1) a clearly defined location strategy; 2) clarification of roles of regional vs. headquarter staff; and 3) implementation of the optimal regional structure and reporting relationships.

- **Location strategy:** The SEC does not currently have a clearly articulated agency-wide strategy for its regional office presence. This is partly driven by the fact that the regional offices are historically grown, with the majority dating back to the inception of the agency in 1934. This lack of a long-term strategy makes it difficult for regional directors and offices to plan and adequately support regional staff. Going forward, the SEC should assess whether the current regional approach best supports its national programs given the changes in its external environment, the likely continued funding constraints, and the agency's focus on national programs, specialization, and flexibility. A critical assessment should also consider the efficiency of the current regional set-up given the offices' different sizes and territories assigned
- **Role clarity:** While both OCIE and Enforcement have taken steps to clarify the specific roles assigned to its regional and home office staff, specific areas of tension remain. In Enforcement, for example, the assignment of cases between regional and home office staff has historically been a topic of ambiguity and contention. This is largely driven by two reasons: 1) the agency's Washington DC headquarters is the largest office, but it has no predetermined geographic jurisdiction; and 2) headquarters is geographically close to several other offices. Since cases are usually assigned based on the geographic nexus of the activity underlying the case, home office staff—by default—work on cases that are technically in the jurisdiction of regional offices. In the past, this has led to concerns by regional staff that the home office acts as a separate, “duplicative” enforcement program that is able to target cases selectively, although whether this is more perception than reality is an open question. As a result of these and other considerations, Enforcement has undertaken an initiative to revise and make transparent the criteria by which cases based on tips, complaints, and referrals are assigned throughout the Division. This and other initiatives reflect that both Enforcement and OCIE have started to clarify the respective roles of regional and home office staff, although more needs to be done. This includes areas where regional responsibilities overlap between Enforcement and OCIE, such as support

needs that serve both programs or discretionary budget allocated to both programs

- ***Regional structure and reporting lines:*** Currently, each regional office is headed by a regional director, who reports both to the Director of the Division of Enforcement and to the Director of OCIE. The regional director is responsible for regional operations and support functions. Associate directors in the regions oversee the local enforcement and exam programs in their respective regions and report directly to the regional director. Until recently, the link between OCIE and the regional exam program has been weaker compared to that of Enforcement. This is due to the historic context under which the regional offices and the Division of Enforcement evolved and to the fact that regional directors traditionally have more of an enforcement background. This makes it more difficult for OCIE to ensure sufficient knowledge and expertise flow between the home and regional offices¹⁵⁰

Summary

The SEC's regional model has historically sought closeness to the markets and entities regulated, and facilitated alignment with local co-regulators. Having had a high degree of autonomy for many years, however, each regional office grew accustomed to setting and following its own processes and procedures. This resulted in inconsistencies and insufficient communication both within the exam and enforcement programs as well as with other divisions at headquarters.

The SEC embarked on a critical assessment of its enforcement and exam programs, and implemented significant changes to restructure and strengthen both. The institution of a National Exam Program and the implementation of a new governance structure have improved the consistency across, and collaboration among, the entire exam program. Similarly, the creation of specialized units in the enforcement program has created a flexible network of experts, which connects staff across regional offices.

As a next step, the SEC should assess the adequacy of the current regional model along three areas: 1) location strategy; 2) roles of regional vs. headquarter staff; and 3) regional structure and reporting relationships. By relying on dual reporting, this structure potentially weakens the supervisory abilities of—and accountabilities to—the central exam and enforcement functions.

¹⁵⁰ The new national governance model that OCIE implemented this past year has begun to significantly improve oversight, coordination, and accountability (including the participation of regional exam staff on national governance committees). These efforts should be continued and monitored.

7.1.7 Shape of the organizational pyramid

7.1.7.1 Key questions explored

- *What is the shape of the SEC's organizational pyramid?*

7.1.7.2 Findings

The following section evaluates the SEC's organizational structure vertically, in terms of spans of control and reporting layers, using a proprietary BCG layer-level methodology. In conducting this analysis, BCG partnered with both the Office of Human Resources and management personnel from the five operating divisions and OCIE to map every employee's reporting relationship and assess the median span of control (SoC)¹⁵¹ and fully-loaded cost¹⁵² at each layer and level.

Under this approach, employees are first classified by layer based on the number of intervening reporting relationships between the employee and the head of the organization. For example, the Chairman is layer 1 and a division director is layer 2. Employees are then plotted on the basis of their level (i.e. grade designation in the SK or SO system). The resulting layer-level analysis enables an assessment of the shape of the organization and allows for benchmarking against comparable entities.

The layer-level analysis of the five divisions and OCIE, presented in Exhibit 7.1.7.2-1, identified four key themes that, if addressed, could result in a faster and lighter organization that is better able to meet new challenges:

1. The SEC is a deep organization for its size, extending into eight layers. An overly deep organization typically faces challenges in communication and engagement, as it is more difficult for information to travel up and down the organization
2. While they vary by office, spans of control (SoC) are relatively low at the SEC, which contributes to the high number of layers described above. Many organizations face this issue as structures change over time, new responsibilities are absorbed, and high performers are promoted. The SEC's median SoC is four across most layers. Although a narrow SoC may appear to lessen the burden on supervisors, it also introduces the potential for unnecessarily high levels of oversight. Especially with relatively small team sizes, managers continue to maintain a high degree of involvement with the content, potentially at the expense of developing people management, leadership, and operations skills

¹⁵¹ The number of employees directly managed by a supervisor.

¹⁵² Base salary and benefits, modified if necessary by an employee's part-time status.

- More than 80 percent of often long-tenured SK-14 lawyers, accountants, and economists sit in the lower layers (layers six through eight) of the organization. With significant portions of senior staff quite deep in the organization, the SEC could potentially be under-leveraging this experienced talent, who are compensated at a relatively high pay-grade
- Over 40 percent of employees in layers three and four are non-managerial staff (individual contributors [ICs]). Having these ICs high in the organization contributes to lower SoC throughout the top and middle of the organization. Low spans of control perpetuate gaps in management capabilities and empowerment, inciting managers to engage in detailed content instead of providing direction and developing employees

Exhibit 7.1.7.2-1: Layer-level analysis for divisions & OCIE

Headcount by layer and level – Divisions incl. OCIE (ex. regional staff & office automation)											Median SoC	Managers	ICs	Total	
Layer 1	1											N/A	1	0	1
Layer 2		6										9	6	0	6
Layer 3			18	11	4	1	11	1	2			4	30	18	48
Layer 4			12	7		58	34	6	6	5	3	4	74	57	131
Layer 5			2			69	51	50	128	13	23	5	113	223	336
Layer 6						25	52	30	303	63	77	5	46	504	550
Layer 7						1	14	44	125	46	41	4	45	226	271
Layer 8							2		166	18	5		0	191	191
Level	EX 3	SO 3	SO 2	SO 1	AD 0	SK 17	SK 16	SK 15	SK 14	SK 13	SK 1-12	4	315	1219	1534
Median SoC	N/A	9	4	5	3	5	1	4	6	5	5	SoC: Span of control Manager: has one direct report IC: Individual contributor			
Managers	1	6	27	16	2	144	1	111	4	1	2				
ICs	0	0	5	2	2	10	163	20	726	144	147				
Total	1	6	32	18	4	154	164	131	730	145	149				

Source: HR database as of Oct 2010; BCG analysis

2 Overall median span of control: 4

Summary

The analysis discussed above forms the starting point for further inquiry into whether the agency optimally deploys its scarce resources. The SEC should de-average this analysis by division and office to critically address the four areas highlighted above.

7.1.8 Communication and collaboration

7.1.8.1 Key questions explored

- What is the ability of the existing organizational structure to promote efficient and effective communication and collaboration between offices and divisions?

7.1.8.2 Findings

Collaboration is critical at the SEC and enables the agency to connect the dots across its divisions and offices. In addition, collaboration is needed to ensure consistency in the regulation of similar entities, enable communication between home and regional offices, increase the effectiveness of special projects, and enhance alignment between the business divisions and support offices. There is recognition of the need for heightened collaboration, and the agency's senior management has promoted a culture of collaboration—stressing the importance of sharing information and sharing ideas. One notable example is the cross-divisional tips, complaints, and referral (TCR) project. The objective of the project was to revamp the SEC's technology and cross-divisional processes for handling the approximately 30,000 substantive tips and complaints it receives each year. Over the past year, the project team—which included senior members of key divisions, offices and regions—developed a process to ensure consistent TCR processing and the sharing of critical information across units. As with TCR, the SEC has also established cross-divisional task forces in other key areas of focus, such as the Consolidated Audit Trail and Life Settlements. In addition, a series of newly established meetings also help facilitate collaboration:

- The monthly “Trends Meeting” is a forum for individuals across divisions and offices to meet and discuss topical trends or events in the market. The meeting is intentionally unstructured; attendees are encouraged to discuss whatever concerns or market observations that are on their minds
- The General Counsel has instituted regular meetings of all rulemaking functions to align and ensure consistency of the rulemaking efforts resulting from Dodd-Frank provisions
- The Office of International Affairs has established an agency-wide “Task Force on International Implementation” that meets regularly to discuss international issues arising from Dodd-Frank rulemaking to facilitate awareness and consistency, where appropriate, across the rulemaking process
- OCIE and Enforcement have introduced regular coordination meetings to discuss the status of examinations and enforcement referrals

The SEC's divisions have also focused on breaking down silos across, and within, their divisions. For example, the exam program has begun integrating broker-dealer and investment adviser exams. For Enforcement, the creation of specialized units has made it easier for other divisions to find the right points of contact (e.g. IM now liaises closely with Enforcement's Asset Management unit). Aside from structural changes, Enforcement has also undertaken small yet effective changes to foster a more collaborative culture. For example, it allows staff to send questions to all enforcement staff via email—a practice that was formerly frowned upon—and holds a series of town hall meetings to discuss progress and milestones of the enforcement program's restructuring effort.

Despite these advances, the existing structure, agency culture, lack of supporting technology infrastructure, and processes continue to impact communication and collaboration. The SEC's segmentation into units, together with the divisions' own internal structures, has created barriers to collaboration. For example, in order to work towards a harmonized regulatory approach for investment advisers and broker-dealers or to ensure the flow of information between exam insights and rulemaking as outlined in Section 7.1.3.2, the SEC needs to overcome divisional lines. In addition, each division's internal structure is tailored to division-specific needs, and there are few formalized cross-divisional collaboration mechanisms. As a result, communication tends to be informal, ad hoc, and based on personal relationships. The communication with Enforcement is probably the most formalized, with a clear referral process and "dedicated liaison offices" in some divisions. It is important to note, however, that no organizational structure is perfect—at the SEC or any other organization. While changes to the organization design can offer solutions, structural weaknesses can also be overcome by implementing strong collaboration mechanisms.

The SEC's traditionally siloed nature is also driven by several cultural factors such as the agency's informal incentive structure and its hierarchical culture. For example, enforcement success was informally measured by statistics (i.e. number of cases) and high profile cases, resulting in internal competition for "hot" cases and limited information sharing across teams. Enforcement has since taken steps to address this issue by including collaboration across regions and units in its processes and measuring qualitative factors. Division management has developed: 1) metrics for measuring the disposition of aged cases so that old and stale matters can be identified and resolved; and 2) a national priority case report comprised of enforcement investigations and actions that meet programmatically significant case criteria. The SEC's hierarchical culture also contributes to the agency's traditionally siloed nature. This culture is more prevalent in some divisions than others and impairs collaboration. While good communication and collaboration exists at the most senior level, information does not always cascade through the chain-of-command as efficiently as it should.

Effective communication and cross-divisional collaboration are also affected by the SEC's technological infrastructure, which does not readily enable information sharing across the agency. Each division maintains its own independent database, and the agency still depends largely on written memos to keep track of, and communicate, staff actions or key decisions. This also makes it hard to clarify which activities other divisions are responsible for and working on.

Some unpredictability in its workload and resourcing has also prevented the SEC from fully utilizing mechanisms that usually foster collaboration across divisions, such as the strategic planning process. The SEC's latest strategic plan was developed collaboratively with an Executive Steering Committee and cross-divisional working groups. However, it was not fully communicated, largely because of uncertainty around Dodd-Frank and funding, to the divisions and staff. As a result, is not used to guide divisional strategies, goals, or metrics.

Summary

Historically, the SEC has been a fragmented agency. It operated in distinct divisional silos with limited emphasis on formal, cross-divisional collaboration between organizational units. As a result, communication tends to be informal, ad hoc, and built on personal relationships. The SEC has taken considerable steps towards overcoming these divisional silos and increasing collaboration. The continued commitment of the leadership team will be needed to ensure such collaboration cascades through the organization and becomes a part of the agency's culture.

7.1.9 Roles and accountabilities

7.1.9.1 Key questions explored

- *Does the SEC have clearly defined roles and accountabilities?*

7.1.9.2 Findings

BCG experience shows that clear role charters, which clarify mission-critical individual and shared accountabilities, significantly increase organizational efficiency and effectiveness by:

- Enhancing engagement, motivation and empowerment
- Improving and speeding up decision-making
- Reinforcing strategic imperatives throughout the organization

As a result of changes the SEC has undergone over the past two years, and considering the agenda ahead, the separation of responsibilities is far from static. While the SEC has developed clear role charters in some instances, such as OCIE, other areas require further clarification, as illustrated by the examples below:

- Dodd-Frank requires TM and IM to establish groups of examiners within their divisions. The agency needs to develop a clear definition of roles and accountabilities in these divisions to ensure an efficient alignment with OCIE's National Exam Program and to avoid duplication of effort
- Similarly, the "Study on Investment Advisers and Broker-Dealers," which was mandated by Section 913 of Dodd-Frank, recommends increased harmonization of broker-dealer and investment adviser regulation. Consequently, TM and IM will have to clearly define shared and individual accountabilities of their teams as the divisions further work on their recommendations
- The enforcement and exam programs have implemented efforts to strengthen the national programs. As a result, the roles and accountabilities of regional directors and division directors have shifted

- slightly, requiring further clarification of joint and individual responsibilities (e.g., budgetary authority)
- There are shared responsibilities and overlaps in the roles of the Executive Director and the Chief Operating Officer. There is also some uncertainty regarding the relationship between the agency's COO and divisional COOs

7.1.10 Commission and staff interaction processes and delegation

The role of the Commission has changed over time. Historically, Commissioners were closely involved in day-to-day decision-making. However, as part of the Reorganization Plan 10 of 1950, all executive functions were consolidated under the Chairman. In addition, a 1962 amendment to the Exchange Act allowed the Commission to delegate responsibilities other than rulemaking to SEC staff. The Commission has since delegated many decisions to the staff, such as the authority to approve certain types of exemptive orders, issue no-action letters, and approve SRO rule filings. In addition to rulemaking and novel exemptive relief, the Commission retains authority over decisions on enforcement actions. While the Commission has delegated to Enforcement the authority to 1) submit witness immunity orders to the Department of Justice and 2) issue formal order of investigation, including the accompanying subpoena power, it approves every enforcement action, from settlement to litigation.

As in every situation with delegated authority, the SEC faces two sets of challenges. Delegated authority helps increase the agency's efficiency of operations and speed of decision-making by empowering staff. However, where authority is delegated to staff, Commissioners may have limited visibility into decision-making without formal mechanisms to inform the Commission of ongoing issues. Conversely, where authority is retained by the Commission, it has substantial control over decision-making. However, the process of gaining input and approval can be cumbersome and time-consuming.

7.2 Personnel and resources

7.2.1 Approach

As part of the Section 967 Study mandated by the Dodd-Frank Act, BCG undertook an assessment of the personnel and resources at the SEC. The assessment focused on several key aspects of resourcing:

- Organizational capabilities and job-specific competencies
- Workload capacity
- People pipeline and supporting HR processes
- Workforce engagement

In the course of the assessment, BCG conducted interviews, reviewed documentation, analyzed data, and collected input from relevant stakeholders.

Specifically, we conducted a capability / competency assessment to collect feedback on staff skill sets and designed a workload model to detail agency capacity. BCG also analyzed the SEC's people pipeline by reviewing existing strategies, hiring authorities, recruiting processes, contracting processes, training resources and planning, performance management and talent management. In addition, BCG employed its proprietary *Engaging for Results* methodology to assess employee engagement, and compared SEC engagement levels against a database of over one million benchmarks. Wherever possible, we adopted a forward-looking perspective, evaluating the SEC's personnel and resources in the context of the increasing demands being placed on the organization.

7.2.2 Capabilities and competencies

7.2.2.1 Key questions explored

- *Are there key organizational capabilities that are underrepresented on the SEC workforce?*
- *Do employees have the job-specific competencies needed to fulfill the SEC's mission?*
- *How should capability and competency gaps be filled?*

7.2.2.2 Methodology

To assess broad organizational capabilities as well as job-specific skill sets, BCG conducted a skills assessment with division and office senior management. The SEC's senior management was asked to consider the roles, capabilities and specific skills their teams need in order to fulfill their missions. To assess broad critical capabilities, BCG collected information regarding the presence and depth of industry, risk management, analytic and sophisticated technology expertise. To assess existing and job-specific skill sets, we collected feedback on the competencies aligned against the various roles at the SEC. For each specific job competency, BCG collected information regarding the current level of mastery, desired level of mastery and the mastery levels needed in the future. Leadership was also asked to provide suggestions on how best to fill any capability or competency gaps.

7.2.2.3 Findings

Broad organizational capabilities

BCG evaluated organizational capabilities in four areas: industry expertise, risk management, analytics, and technology sophistication. While implementation of Dodd-Frank necessitates further development of these capabilities, BCG found that the agency is already evolving to both incorporate these new capabilities and increase resources for those currently represented. For example, the initiation of RSFI is a first step towards developing risk

management and analytic capabilities. Enforcement has created specialized units with expertise in structured and new products, as well as municipal securities. Similarly, OCIE has recruited senior specialized examiners to cover specific topic areas (e.g., structured products, trading practices, valuation). The agency has also begun hiring additional expertise in hedge funds and Value at Risk modeling.

- **Industry expertise:** While the SEC's staff has a deep knowledge base, Dodd-Frank requires new and specific expertise. OTC derivatives, asset-backed securities and corporate governance were all identified as areas where the agency should invest in additional capabilities. Some of the required expertise is completely new to the agency and is essential to fulfilling the agency's expanded scope. Private equity, NRSROs and municipal securities expertise are also content development areas, though this expertise already exists in some places at the agency. The desire for this expertise spans most of the SEC's divisions. Recruiting will be critical to developing these capabilities
- **Risk management:** Across the agency, SEC staff members are increasingly aware of the need to manage risk. Leadership noted that their employees almost always take mission-risk¹⁵³ into account, and generally incorporate operational, systemic, and reputational risk into daily operations. While this demonstrates an awareness of the need to manage risk and a readiness to try, few agency employees have specific risk management expertise. For example, in RSFI just four employees out of 59 have prior experience in risk management. Effective risk management capabilities across multiple divisions could enable the SEC to better manage all types of risk. In addition, with more appropriate risk management capabilities, the agency could more efficiently identify and evaluate high-risk entities and situations in a timely, comprehensive and anticipatory manner, as envisioned in Dodd-Frank. Both recruiting and training efforts could improve this area of expertise
- **Analytics:** As in risk management, there is a clear emphasis on developing analytic capabilities. Senior management believed that employees support decisions with analytics where possible, but that there is a shortage of specific expertise, training, resources and tools to provide top-quality analytics. Over half rated existing analytic capabilities as average or below. This suggests that employees have tried to bridge the analytics gap on their own, even though they may lack the necessary skills. This need for improvement was broad, with leadership indicating both employees and managers would benefit from improved analytic capabilities. In addition, greater analytic capabilities would be necessary if the SEC were to decide to perform a market surveillance function (see Sections 7.3.2.2 and 7.4.2.2). Boosting capabilities through recruiting and

¹⁵³ Mission-risk defined as risks to the fairness, orderliness, and efficiency of the capital markets and its investors.

training will allow the agency to better review market data, trends and risks and support the rule-writing process

- ***Technology sophistication:*** Senior management perceived this capability as new to the agency—existing capabilities were described as “basic” to “intermediate”—but developing rapidly. In all divisions, leadership noted a clear desire to invest in additional resources with high degrees of technology awareness and sophistication. Improving the agency’s skill level in sophisticated technologies is necessary to keep pace with the technology and tools used by market participants and SROs. For example, high-frequency trading is becoming a significant force in the marketplace and uses sophisticated and highly-technical trading algorithms; today, the SEC does not have sufficient in-house the expertise to thoroughly investigate the inner-workings of such algorithms should the need arise. Leadership advocated both training and recruiting to improve this capability

Job-specific competencies

To assess existing and job-specific skill sets, BCG collected feedback on the competencies aligned against the various roles at the SEC. These roles are grouped into “job families” with broadly similar skill sets. For each job family, leadership commented on existing and desired skill sets, as well as the best path for further developing focus areas (e.g., train, recruit, replace, utilize the Fellows Program, contract, outsource). In most cases, the optimal path forward for the agency is to implement a rigorous training program to improve a focus competency, while recruiting where necessary.

Exhibit 7.2.2.3-1: Job family descriptions

	Job families	Description
Manager	Executive	Provides strategic direction and oversight, determines division/office policies and priorities
	Manager	Directs and monitors day-to-day work effort and develops human resources
Professional	Attorney	Reviews and analyzes filings, drafts and interprets rules, investigates violations, and litigates cases
	Accountant	Examines financial statements, drafts rules related to accounting issues, participates in investigations
	Examiner	Inspects registered firms for indications of securities law violations
	Economist	Uses economic methods to inform rule-making and enforcement, and identifies market trends
	Industry expert	Provides specialized industry knowledge in critical areas, e.g., derivatives, clearing agencies
Support	Data analyst	Collects data and performs statistical, quantitative, and qualitative analysis
	Business operations	Coordinates and manages the internal operations of the division, e.g., budget, workforce planning
	Administration	Provides support, coordination and clerical assistance for division operations
	Communications	Liaises with the public or Congress on behalf of the SEC verbally and through publications

Management job families

- **Executive:** Within the executive job family, respondents noted that additional training would help enhance strategic planning and technology management skill sets
- **Manager:** Leadership identified a strong need to enhance people development, situation management, strategic planning, and technology management skill sets. They suggested training as the primary method to build these competencies, but also noted that targeted replacement would be an option to ensure skill set sufficiency

Professional job families

- **Attorney:** Leadership noted that competence in legal guidance, research and analysis is quite high, a testament to the quality of the SEC's professional staff. Applied competencies, including litigation, investigations, and disclosure examinations, were not as strong as the basic skill sets; respondents suggested training and use of the Fellows Program to develop these skill sets
- **Accountant:** Leadership generally viewed accountants as strong performers, with areas for development in litigation support and accounting disclosure examinations. As with attorneys, training and utilizing the Fellows Program were recommended as methods for improvement
- **Examiner:** Key areas of development for examiners include increasing risk mitigation, securities laws and compliance guidance skill sets, and industry

expertise to better meet the agency's needs in light of Dodd-Frank. Respondents suggested training existing staff in these areas

- **Economist:** While economists at the SEC are viewed as above average, leadership indicated a desire to have best-in-class economist talent across all competencies within five to seven years. Suggested methods to reach this goal include recruiting, utilizing the Fellows Program, and training existing personnel
- **Industry experts:** In general, industry experts were viewed as above average, but again leadership made clear their need for best-in-class industry expertise. Recruiting was the most widely suggested method to further improve industry expertise, though training and use of the Fellows Program were also suggested
- **Data Analyst:** Respondents sought significant improvements from data analysts over the next five to seven years to bring staff expertise in line with the high bar set by the requirements of Dodd-Frank. Training and recruiting were suggested to bridge the gap between current and desired competencies

Support staff

- **Business Operations:** Business operations staff are perceived to be strong performers, especially in procurement and risk mitigation. Respondents noted that workforce planning and budget administration support are key focus areas; training was the most commonly suggested method to improve these competencies
- **Communication:** Communication staff have some room for improvement in external awareness, proactive management, and communication flexibility. These competencies are essential to actively managing the SEC's profile in the marketplace. Training, recruiting, and utilizing contractors were all noted as methods to advance skills
- **Administration:** Respondents generally perceived performance as average to below average. Document management and control was noted as especially lacking. Training and targeted replacement were suggested to help improve skill sets

Summary

As the SEC works to operationalize the requirements of Dodd-Frank, it must continue to grow both its organizational capabilities and job-specific competencies. The agency has made progress in addressing these needs over the last several years. Although the creation of RSFI and the pilot leadership training program are testaments to the agency's progress, the process of reorienting the SEC to these new organizational capabilities is in the early stages. The SEC must continue to focus on training and recruiting to fully develop key capabilities. In some areas, particularly in management and administrative job families, respondents recommended training or replacement to improve job-specific competencies. By further developing its highly skilled staff and building the

required organizational capabilities, the SEC will be in a stronger position and will build credibility among market participants and regulating partners.

7.2.3 Workload capacity

7.2.3.1 Key questions explored

- *What is the workload at the SEC, given the new requirements of Dodd-Frank and going forward?*

7.2.3.2 Methodology

The question of adequate capacity is increasingly relevant given the expanded mandate conferred on the SEC by Dodd-Frank. It is not surprising, then, that the need for additional human resources was a consistent theme throughout BCG's interviews at the SEC. To test this, BCG used a workload modeling approach to estimate capacity needs by organizational unit. This section will first address aspects of BCG's methodology that applied across the organization, and then discuss specific methods for each organizational unit that was analyzed.

It is necessary to note that this analysis, while rigorous, provides high-level guidance regarding the SEC's capacity. The inputs to the model are based primarily on interviews, document reviews, and external benchmarks. BCG did not perform deeper analyses, such as activity-based costing or time studies to identify the SEC's resource need at a more granular level. In addition, this approach focuses on the SEC's activities and business processes as they exist today. It does not include new initiatives that would expand the agency's activities beyond what is required by Dodd-Frank. The model also does not account for process improvements or technology enhancements that would increase productivity, thus reducing the time and human resources required to complete a task. Overall, BCG's analysis is intended to provide a directional understanding of the SEC's capacity needs, rather than detailed estimates.

To construct its capacity model, BCG examined workload drivers for the professional job families (described in Section 7.2.3) by organizational unit, focusing on the SEC's largest programmatic areas: Enforcement, OCIE, CF, IM, TM, and RSFI. These six areas comprise approximately 75 percent of the SEC's personnel and the bulk of its mission-related operations. BCG conducted over 60 interviews with SEC managers to understand current activities in these units, key workload drivers, and the impact of Dodd-Frank.

BCG modeled management and support staff based on internal and external benchmarks. The analysis assumed that administrative tasks currently performed by professionals would be taken on by support staff, thus increasing the amount of time spent by professionals on core, mission-related activities.

BCG applied a ratio of one support FTE per 15 professional staff; this recognizes the trend towards higher numbers of professionals to support staff across the industry.¹⁵⁴ In addition, functions that provide internal expertise for each unit (e.g., accounting) were scaled with the division or office's professional staff. Lastly, BCG quantified the budget implications of each capacity surplus or shortfall based on average fully loaded salaries for current staff in each high-level job family group. Job family groups included managers (executive and manager job families), professionals (attorneys, accountants, examiners, economists, industry experts and analysts), and support staff (business operations and administration). IT staff was not included in this analysis, given the additional modeling effort discussed in Section 7.3.3.2. Communications staff were not included, based on their rarity among the units analyzed. Lastly, headquarters capacity is combined with staff in the regional offices. Key workload drivers and relevant trends are detailed below for each organizational unit.

Division of Enforcement

Enforcement's activities can be viewed as a set of sequential steps beginning with tips, complaints and referrals (TCRs) and ending, in some cases, with a settlement or court decision. The division receives TCRs each year from a variety of sources, including the public, SROs, and other parts of the SEC. Enforcement's ability to triage this information flow has increased in recent years as the division underwent efforts to streamline the TCR system and reduce the volume of duplicative, less valuable or inapplicable TCRs. Thus, TCRs have declined from approximately 1.6 million in 2007 to approximately 382,000 in 2010. BCG assumed that the number of TCRs would increase minimally in 2011 and 2012, though it may rise more due to the SEC's new whistleblower program. This program, which was mandated by the Dodd-Frank Act, provides monetary incentives to whistleblowers.

Approximately three to five percent of TCRs are significant enough to merit opening a Matter Under Investigation (MUI). Enforcement staff may open MUIs on their own or at the direction of division or SEC leadership. BCG assumed that the conversion rate of TCRs into MUIs would remain constant at five percent. Overall, the TCR and MUI process results in about 900 to 950 investigations opened each year. These investigations range in priority and complexity, depending on the violations and parties involved. Enforcement may recommend, and the Commission may approve, a formal action against the parties under investigation. Historically, 65-75 percent of formal investigations result in an enforcement action. BCG assumed that formal investigations would convert to enforcement actions at a rate of approximately 70 percent going forward.

Once an enforcement action is authorized, the Commission will decide whether to bring a case through administrative proceedings or in civil court.

¹⁵⁴ International Association of Administrative Professionals, Results from IAAP February 2009 Benchmarking Survey. Print.

Often, the Commission will settle with the party charged before a formal proceeding occurs. If no settlement is reached, a decision regarding culpability and potential sanctions will be issued by either an administrative law judge (ALJ) independent of the SEC, or by the court. If the sanctions include monetary fines, Enforcement's Office of Collections and Distributions is responsible for tracking the funds collected and disbursing them to appropriate parties.

To assess Enforcement's workload and the division's capacity needs, BCG estimated the effort and staff required at each step of the process described above. FTEs and weeks of effort were assigned to each activity; an estimated number activities per employee was also estimated. Furthermore, investigations were divided into routine and high-priority segments, with different levels of effort for each. Similarly, settlements, administrative proceedings, and civil actions were treated separately. BCG also included a premium to account for the time that Enforcement's investigative staff will continue to spend on a case once it is in litigation.

Office of Compliance Inspections and Examinations

OCIE administers the SEC's nationwide examination program. Currently, OCIE conducts inspections of all registered entities, including: broker-dealers, transfer agents, investment advisers, investment companies, exchanges, clearing agencies, nationally recognized statistical rating organizations (NRSROs), and self-regulatory organizations (SROs). OCIE's primary workload drivers are the number of examinations performed and the intensity of those exams. BCG segmented these examinations by the type of registered entity. Based on historical estimates and current practice, BCG assumed that the SEC inspects about 10 percent of broker-dealers, transfer agents, investment advisers, and investment companies each year. Municipal securities advisors and private fund advisors were included, beginning in 2011. BCG assumed that OCIE would continue to inspect the same percentage of registered entities, even as these new entities increase the overall number of examination candidates. This increases the capacity required by OCIE significantly; the alternative would be to maintain the number of inspections conducted, but decrease the percentage of registered entities examined.

For broker-dealers, this percentage includes examinations that the SEC conducts to audit SRO inspections, as well as independent examinations. In the investment adviser exam program, OCIE is able to inspect approximately nine percent of regulated entities each year, which are chosen using a risk-based approach to identify registrants and areas of particular concern. This does not include any inspection of newly-registered entities, unless they fall within that group. For each entity, inspections were further divided by type of exam. In order of effort required, these include full, risk-based exams; exams resulting from TCRs; and limited correspondence reviews. BCG also incorporated OCIE's plans for SRO and NRSRO inspections going forward, segmenting the most systemically important SROs and NRSROs for more intensive review. This also includes inspections of new SROs and the Dodd-Frank Act's requirement for

annual inspections of all NRSROs. BCG added time premiums to allow for sweep exams, which investigate a specific issue across an entire class of registered entities, based on the amount of time currently dedicated to these exams by OCIE professional staff. The required work effort was allocated to attorneys, accountants, and examiners based on OCIE's current breakdown among these professional staff job families.

It is important to note that the activities included in BCG's analysis of OCIE reflect only the agency's current level of activity (driven by resource availability) and its Dodd-Frank requirements. For example, as noted above, BCG assumed that OCIE inspects only nine percent of investment advisers annually, and that this percentage would apply to newly-registered entities under Dodd-Frank as well. This is down from 18 percent per year in 2004 and significantly lower than the 45 to 60 percent of broker-dealers inspected by FINRA each year. Likewise, OCIE did not have sufficient resources to examine any newly registered investment advisers in 2010 unless they were also targeted as one of the riskiest. In contrast, FINRA and some foreign regulators are able to examine new registrants to preemptively identify potentially damaging market participants.

To increase the SEC's efforts in the areas described above, OCIE would need a significantly expanded staff. For example, to examine an additional 10 percent of investment advisers would require approximately 550 to 600 FTEs. Likewise, to inspect 10 percent of new registrants within the first year of market entry—in even a cursory manner—would demand 100 to 150 additional staff. The SEC's capacity gap would increase significantly if it were to attempt a level of examination for investment advisers comparable to FINRA's oversight of broker-dealers. Furthermore, Dodd-Frank expands the number of regulated entities under OCIE's purview. The agency is now required to examine all NRSROs on an annual basis, as well as those clearing agencies deemed "systemically important" by FSOC. In addition, as the SEC begins registering municipal securities advisors and a variety of participants in the security-based swaps market, these entities may also require examination. As noted above, BCG assumed that the SEC would inspect these newly-registered entities at the same rate as it currently examines investment advisers,. Even at this rate, however, OCIE's current capacity would be strained by these new oversight obligations.

Division of Corporation Finance

The primary activities performed in CF include: disclosure review, rule-writing, processing exemptive applications, and responding to requests for interpretive guidance and no-action letters. The primary driver of CF's workload is disclosure review. The division is responsible for administering rules stemming from the Securities Act of 1933 and the Securities Exchange Act of 1934 that regulate the offering and sale of securities and reporting by public companies. BCG segmented this activity by type of filing, intensity of review, and type of staff involved. The number of filings was estimated using historical data and then projected based on an average growth rate. In addition, issuers of asset-backed

securities are now required to file each year, and BCG included these additional disclosures in the estimate. CF also has a second reviewer examine each filing; BCG added an effort premium to account for this.

CF's rulemaking workload is primarily a function of the number of rule-writing projects and the complexity of those rules. BCG used rulemaking proposals as a proxy for overall rulemaking activity in a division, recognizing that some projects never reach the proposing stage and that others require further iteration prior to adoption. In addition, BCG weighted rulemaking proposals by relative complexity. Complexity is driven by a number of factors, including the scope of a rule, the amount of iteration with market participants, and the level of pre-existing knowledge on a topic. Lastly, requests for interpretive guidance are largely driven by rulemaking activity in preceding years as companies address new requirements; these are likely to increase following the adoption of new rules mandated by Dodd-Frank. BCG's estimate incorporated the Dodd-Frank rulemaking requirements applicable to CF, namely those related to corporate governance, asset-backed securities, and specialized corporate disclosure. In addition to these rulemaking projects, it includes the capacity required during a normal year's rulemaking agenda.

Division of Investment Management

The bulk of IM's staff are attorneys, which reflects the division's primary activities: disclosure review, rule-writing, processing exemptive applications, and providing interpretive guidance. To estimate its workload, BCG examined drivers for each of these activities, segmenting them where tasks within the same activity would require different levels of effort. To assess IM's rulemaking capacity, BCG used the same approach described above for CF. Historically, IM's rulemaking workload has remained fairly consistent, with the exception of an increase in 2008. This spike presaged what the division is experiencing now as a result of the Dodd-Frank Act, which is equivalent to completing two typical years' work in 18 months. Additionally, the work undertaken in 2010 thus far indicates that these projects are more complex than IM's typical rules.

IM is responsible for reviewing disclosures made by investment companies and those related to insurance products. BCG segmented these disclosures both by type of filing and by level of review. The types of filing include registration statements, post-effective amendments, proxy statements (including merger proxies), and financial statements. The level of review is categorized as a full-scope, comprehensive review or a more limited, targeted review. BCG also assumed that IM would review all new registrations, any post-effective amendment that contains significant changes from the prior year's operations, all proxy statements, and approximately one-third of financial statements filed. IM is also responsible for the registration system for investment advisers, which is operated under contract to FINRA. BCG included staff dedicated to managing this relationship, as well as for the new system required for private fund advisor registration.

In addition to disclosure and rulemaking, IM also processes exemptive applications and provides interpretive guidance. While exemptive applications are not projected to increase overall, it is likely that interpretive requests will rise following the adoption of new rules under Dodd-Frank.

Division of Trading and Markets

TM provides oversight of major securities market participants, including exchanges, clearing agencies, transfer agents, securities firms, SROs, and NRSROs. As such, the division's activities are particularly varied. TM holds similar responsibilities as CF and IM with respect to specific rules: rulemaking, processing exemptive applications, and providing interpretive guidance. The division also reviews and approves proposed rules and rule changes from SROs. Lastly, TM administers the Risk Assessment and Alternative Net Capital (ANC) programs for broker-dealers, and inspects the technology systems of large exchanges and clearing agencies. A significant portion of the requirements of Dodd-Frank fall under the division's purview. In particular, TM is responsible for writing and interpreting new rules related to clearing and settlement, OTC derivatives, municipal securities, and NRSROs. It will be responsible for registering and monitoring new clearing agencies, security-based swap data repositories, exchanges and execution facilities for security-based swaps, security-based swap dealers, additional major security-based swap participants, and municipal securities advisors. The division is also likely to see an increase in rule filings from SROs and security-based swap execution facilities as they respond to Dodd-Frank.

BCG used the same approach described in previous sections to assess TM's rulemaking and interpretive guidance capacity. From 2006 to 2009, TM's rulemaking load was relatively consistent, with 2007 and 2009 bearing a slightly heavier agenda. The requirements of Dodd-Frank dramatically increase the division's rulemaking workload. Whereas previously TM would release between six and 10 rule proposals in a given year, Dodd-Frank required 10 rulemakings in 2010. It requires 18 in 2011. These rules are also more complex than TM's typical projects, which is unsurprising given TM's responsibility for establishing the regulatory framework for new classes of entities and for the security-based swap market. BCG also anticipated that interpretive requests would increase as a result of new rules.

In addition to its own rules, TM is also responsible for registering SROs and approving the rule filings they submit. The division typically sees two to three new exchange SROs register in a given year, often "sister exchanges" that are very similar to existing SROs. In 2011 and 2012, however, they anticipate approximately 10 new swap exchanges and execution facilities to register as a result of Dodd-Frank. Not only will this increase the number of registrations for review, these swap facilities are relatively novel and will require more intensive review. Historically, the number of SRO rule filings has stayed relatively

consistent, between 1,000 and 1,300 per year.¹⁵⁵ BCG assumed that the number of filings per SRO would remain constant going forward, so that growth in the number of rules would be based on the addition of new SROs. Rule filings were segmented based on the level of review required, including those that require Commission engagement.

TM's clearing agency oversight involves registering clearing agencies and transfer agents. For clearing agencies, TM also reviews proposed rule changes, monitors risk, and performs inspections. TM expects at least four additional clearing agencies to register in 2011 and 2012 as a result of Dodd-Frank's requirement for mandatory clearing of certain security-based swaps. Both existing and new clearing agencies must file rule changes with TM. TM also expects to register three security-based swap data repositories, a new class of entities under Dodd-Frank. Security-based swap clearing agencies will be required to submit information on new security-based swaps that the clearing agencies intend to clear. TM will be required to review these submissions to determine whether the security-based swaps should be subject to mandatory clearing. BCG estimated a consistent number of rule filings each year and segmented them by systemic importance of the clearing agency and complexity of the rule. Lastly, BCG assumed that TM's clearing risk monitoring program would expand to cover these new security-based swap clearing agencies.

While the majority of broker-dealer oversight is delegated to SROs, the SEC retains that responsibility in several areas. First, the agency requires additional disclosure from broker-dealers that are part of a holding company, particularly with respect to organizational structure and governance. TM expects this program to expand as the agency identifies broker-dealers who should be monitored but are not currently part of the program. Second, the SEC maintains close oversight of broker-dealers, making use of the ANC exemption to regulatory net capital requirements. TM strictly monitors those broker-dealers' internal risk and audit controls. If the ANC exemption is extended to swap dealers, TM expects at least 20 additional firms to apply, potentially requiring a significant level of additional oversight. In addition to attorneys, the program also requires significant quantitative expertise to assess companies' risk practices.

TM also maintains a group of examiners that regularly inspect the technology and systems of exchanges and clearing agencies to ensure that they are sufficiently robust to maintain market continuity. These exams are conducted with varying frequency depending on the entities' systemic importance to the financial markets. BCG estimated the work effort required for each examination after dividing the entities into three tiers of importance, with the most systemically critical receiving more frequent and intense examination. Going forward, TM will need to extend its market continuity examinations to include clearing agencies and exchanges for security-based swaps.

¹⁵⁵ *In Brief FY 2006 – 2011 Congressional Justification.*

Lastly, TM is responsible for co-chairing or participating in several international collaborations. While this workload was not modeled, it provides important context. These activities are, at times, sacrificed in order to accomplish other work or often get completed in addition to workload already assigned. For example, as a founding member of the International Organization of Securities Commission (IOSCO), the SEC travels internationally and provides direct support on six subcommittees, ensuring IOSCO and SEC standards are consistent. As it relates to OTC derivatives, the SEC participates in the OTC Derivatives Supervisors Group, charged with improving market infrastructure, central clearing, trade repositories, collateral management and electronic processing and confirmations; the SEC also participates in the broader OTC Derivatives Regulators' Forum (ODRF), exchanging views and sharing information and developments regarding CCPs and trade repositories. TM is a key participant in the Financial Action Task Force (FATF), an international standards-setting organization. The SEC was also a founding member of the Joint Forum, established in 1996 to bring together international representatives from bank, insurance and securities supervisors. Finally, division staff also serve on the Financial Stability Board (FSB). Again, these activities require additional time commitment from staff, in addition to the workload modeled herein.

Division of Risk, Strategy, and Financial Innovation

RSFI's responsibilities include partnering with the SEC's rule writers to conduct economic analyses of proposed rules, supporting Enforcement in investigations and actions, and quantitative and qualitative risk identification. RSFI houses the great majority of the SEC's economists and quantitative analysts. While the Dodd-Frank Act does not make specific requirements of RSFI, the increasing focus at the SEC and in Congress on risk, systemic issues, and a proactive approach requires greater capacity in this division. RSFI's current activities primarily involve litigation support and economic analysis in conjunction with rulemaking projects. The division also constructs some quantitative models to examine market trends and identify high-risk entities, participates in SEC studies, and publishes methodological research. RSFI's current workload depends in large part on the rest of the agency's work and the extent to which RSFI provides support.

The primary drivers of RSFI's litigation support efforts are the number of enforcement investigations, actions, and monetary sanctions, as well as the percentage of enforcement cases that involve RSFI. The work effort required for enforcement actions varies by type of action, including settlements, administrative proceedings, and civil court proceedings. In addition, RSFI often assesses the harm caused by a violation to particular investors and reviews or creates distribution plans for funds collected through monetary sanctions.

The release for each rule proposed by the SEC contains a cost-benefit analysis, typically structured by RSFI and performed in partnership by RSFI and the rulemaking division. The division will assess the economic effects of a proposed rule including: effects on competition, economic efficiency, capital

formation, and where applicable, any unintended consequences. In addition to specific rulemaking projects, RSFI conducts economic studies on the SEC's impact on financial markets and relevant market trends, as well as provides economic analyses for studies led by other divisions. RSFI currently has four offices dedicated to providing these analyses, each focused on a different set of market participants.

To estimate RSFI's capacity need in the area of rulemaking and economic studies, BCG used historical data regarding the number of SEC rulemaking projects and studies released to the public. Rulemaking projects were weighted by complexity and studies were segmented based on those which were primarily economic in nature and those where economic analysis was less central. BCG also assumed that the 20 studies required by the Dodd-Frank Act would be equally divided between 2011 and 2012, and that they would augment, not replace, the SEC's usual research agenda.

Beyond the activities currently performed and those triggered by Dodd-Frank, there are additional analyses or methodological initiatives that RSFI could undertake to benefit the agency's mission. For example, with increased capacity, RSFI could develop a more mature risk management function that would establish robust processes and sophisticated analytics and models to ensure that key risks are identified, measured, mitigated and monitored. The division could also undertake initiatives to improve horizontal and vertical information flow and data sharing. In addition, it could develop mechanisms to provide a comprehensive, up-to-date view of organizational risks. This kind of expansion is not included in BCG's capacity analysis, but the SEC could nonetheless benefit from such enhanced risk management capabilities.

7.2.3.3 Findings

Based on the approach described above, BCG estimated the capacity required in these organizational units to perform both the SEC's current activities and the requirements of Dodd-Frank. Again, this estimate did not include potential efficiencies resulting from business process improvement or technology enhancements. It does account for enhancements in productivity gained by shifting administrative work from the agency's professionals to new support staff. BCG's analysis resulted in four primary findings:

- The SEC has a net capacity gap of 375 to 425 FTEs for the five divisions and OCIE in 2010 and 2011; this shortage accounts for the SEC's current activities and the majority of the requirements of Dodd-Frank, but not for new mission-driven initiatives
- Part of this capacity gap is temporary, driven by the dramatic increase in rulemaking, but the shortage becomes permanent and continues to grow as the agency administers the new rules and as new entities come under the SEC's purview

- The SEC could benefit from shifting resources from management positions to professionals and support staff
- Budget and other constraints force the SEC to make trade-offs between different activities that are each valuable to the agency's mission

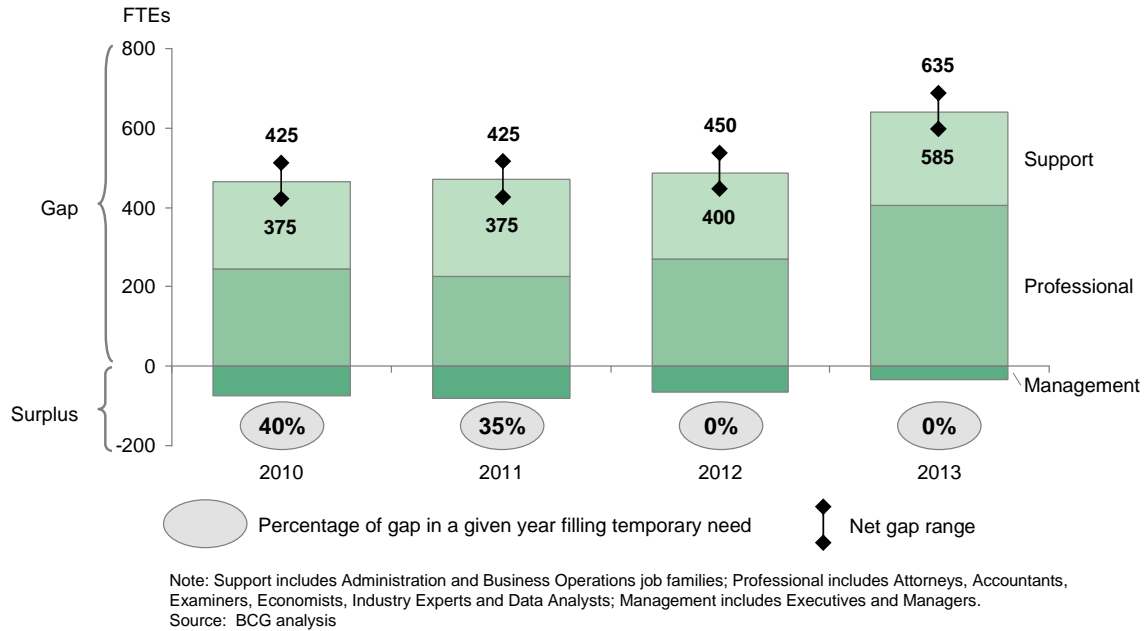
Net of any management surplus, the SEC faces a capacity shortage of approximately 375 to 425 FTEs for the five divisions and OCIE in 2010. As a percentage of current staff, the percent shortage is most pronounced in IM, TM and RSFI. Initially, the capacity gap can be traced primarily to an increase in rulemaking requirements resulting from Dodd-Frank. TM also faces an extra burden as it becomes responsible for processing additional SRO rule filings and monitoring new clearing and execution facilities related to security-based swaps. These new entities, along with NRSROs, private fund advisors and municipal securities advisors, also become candidates for examination and enforcement.¹⁵⁶ The addition of new registrants is not a temporary issue. Once registered, the firms become subject to SEC oversight, including examinations, going forward. Based on the assumptions described above regarding ongoing regulation and examination of new registered entities, the SEC's capacity shortage will continue to grow through 2013.

Approximately 40 percent of the SEC's gap in 2010 and 35 percent in 2011 could be filled with temporary staff (e.g., former SEC employees hired back on a temporary basis, contractors, Fellows Program), particularly for rulemaking. For the divisions most impacted by Dodd-Frank, the rulemaking requirements will lessen once the final rules are adopted. While the SEC already utilizes some contractors and its two-year Fellows program to meet temporary staffing needs, the recurring but short-term nature of these shortages emphasizes the need for effective surge capacity solutions.

However, while temporary workforce needs taper off in 2012, an increase in the number of regulated entities and the resulting additional work prompted by the new rules (e.g., interpretive requests, review of new filings) will require further permanent staff such that the agency's overall capacity gap continues to grow. Without sufficient human resources, the agency will be unable to complete the requirements of Dodd-Frank while maintaining its activities as currently performed. Although some gains in productivity may be possible, they are unlikely to fully substitute for an increase in workforce. Thus, the SEC will be forced to shift resources away from existing activities toward items required by Dodd-Frank. Activity trade-offs are discussed in Section 6.1.1. Exhibit 7.2.3.3-1 illustrates the SEC's capacity gap in 2010 and projected future gap for the agency's five divisions and OCIE.

¹⁵⁶ Apart from NRSROs the parameters of these new activities are not explicitly defined by the Dodd-Frank Act.

Exhibit 7.2.3.3-1: Capacity gap for SEC divisions and OCIE, 2010-2013



BCG found that the SEC’s organizational units could benefit from reallocating resources away from its excess management capacity and toward professional and support staff. In fact, it has already taken steps in this direction during the recent reorganization of Enforcement. Reallocating headcount to support staff would likely improve the productivity of the SEC’s professional staff. Furthermore, the finding of surplus of management staff accounts for an expansion of the professional and support staff to the projected levels. Absent this expansion, the excess number of managers would be even more pronounced given the lower number of staff requiring management oversight. BCG’s estimate of the SEC’s overall capacity shortage assumes that the agency can implement such a resource reallocation. In addition to the savings implications of surplus managers, there are other benefits to reducing management layers. With larger management spans of control, organizations typically achieve faster communication and decision-making, and enhance accountability. Managers and employees are given broader responsibilities and decision rights, resulting in empowerment and improved morale. Thus, by reallocating resources consistent with agency needs, the SEC has an opportunity to both optimize its use of scarce resources and develop a more empowered and productive workforce.

It is important to reiterate that BCG’s analysis incorporates only current activities performed at their existing level, as well as the requirements of Dodd-Frank. It does not include new activities authorized but not required by Dodd-Frank (e.g., review of disclosures relating to short sales). It also does not include the support the SEC provides to FSOC; the SEC currently has over 50 employees participating in FSOC committees part-time. Furthermore, in every organizational unit, a lack of resources, coupled with Congressionally-dictated

priorities, makes it difficult to undertake new activities that, while not explicitly mandated, could still contribute significantly to the agency's mission. For further discussion of example activities that each division would seek to strengthen or add, see Section 6.1.1.

Summary

BCG's analysis of the SEC's current activities and the requirements of Dodd-Frank clearly indicate that the agency faces an increase in workload not commensurate with its current human resources. Delivering upon this workload would require either an increase in capacity and/or realignment of required activities. A portion of the agency's near-term shortage is temporary, but as short-term activities abate, permanent requirements will likely replace them. This estimate assumes that the agency can fill some of its capacity gaps by shifting resources within the organization, primarily from management positions to professional and support staff. This will both optimize the agency's use of resources, as well as create a more empowered and productive workforce. However, this is unlikely to fully address the SEC's current shortage. An ongoing shortage places a burden on existing staff and requires the agency's leadership to shift its focus away from other mission-related activities. Overall, the lack of resources and abundance of required activities could impede the ability of the agency to realize the full potential of its mission.

7.2.4 People pipeline and supporting HR processes

7.2.4.1 Key questions explored

- *Does the compensation strategy effectively support the agency's strategy and mission?*
- *How has the agency applied its hiring authorities, and does its recruiting approach support its vision?*
- *Are there opportunities to streamline the process for hiring temporary or contract employees?*
- *Is the training program sufficient to strengthen staff skills and support the ongoing development of SEC personnel?*
- *Does the performance management system link personnel objectives to agency objectives, provide meaningful feedback, effectively reward performance and manage underperformance?*
- *How does the agency incorporate long-term talent management into its people strategy?*
- *Does the SEC have a well-functioning human resources function that can effectively support all steps in the people pipeline?*

7.2.4.2 Findings

The people pipeline denotes the set of processes by which Human Resources (HR) functions form strategies, recruit, train, develop and manage their talent. Having a well-functioning HR team is critical to supporting this pipeline. The following sections discuss each step in the people pipeline as well as the HR capabilities necessary to support them.

Compensation strategy

A compensation strategy is critical to attracting and retaining the agency's talent. The existing system at the SEC is the result of incremental adjustments to a legacy structure. The result is a system that has some merits but should be rethought to provide a coherent, comprehensive long-term strategy.

In the 1990s, the SEC experienced relatively high turnover rates. From 1996-2001, voluntary attrition at the SEC was, on average, 4.7 percent higher than that of the federal government. Moreover, turnover in certain critical positions, including attorneys, accountants and examiners, was above 10 percent per year, consistently exceeding the rate of attrition in similar positions in the rest of the federal government.¹⁵⁷ The agency found that employees were leaving for positions at other FIRREA agencies for pay premiums of 18 to 39 percent over their SEC positions.¹⁵⁸ While other FIRREA agencies had the ability to determine customized pay scales, the SEC was aligned to the "General Service" scale. As a result of the pay differential, qualified talent migrated from the SEC to these other government agencies.¹⁵⁹

At the same time, the SEC faced increasing responsibilities. The Gramm-Leach-Bliley Act of 1999 increased regulatory complexity by allowing the merger of commercial banking, investment banking, securities firms, and insurance providers.¹⁶⁰ Growth in IPO activity also demanded additional resources.¹⁶¹ The corresponding growth of the SEC's workload, coupled with the relatively high rate of attrition, hindered the agency's ability to fulfill its mission. To lower its attrition rate and compete for talent, the SEC sought similar pay freedoms provided to other FIRREA agencies.

On the heels of a GAO report supporting the SEC's position, Congress passed the Investor and Capital Markets Fee Relief Act (also called the Pay Parity Act), which gave the SEC the authority to adjust its compensation scale. This

¹⁵⁷ United States. U.S. Securities and Exchange Commission. *Special Study: Pay Parity Implementation Plan and Report*. Washington: GPO, 2002. Print.

¹⁵⁸ United States. U.S. General Accounting Office. *Securities and Exchange Commission – Human Capital Challenges Require Management Attention*. Washington: GPO, 2001. Print.

¹⁵⁹ Ibid.

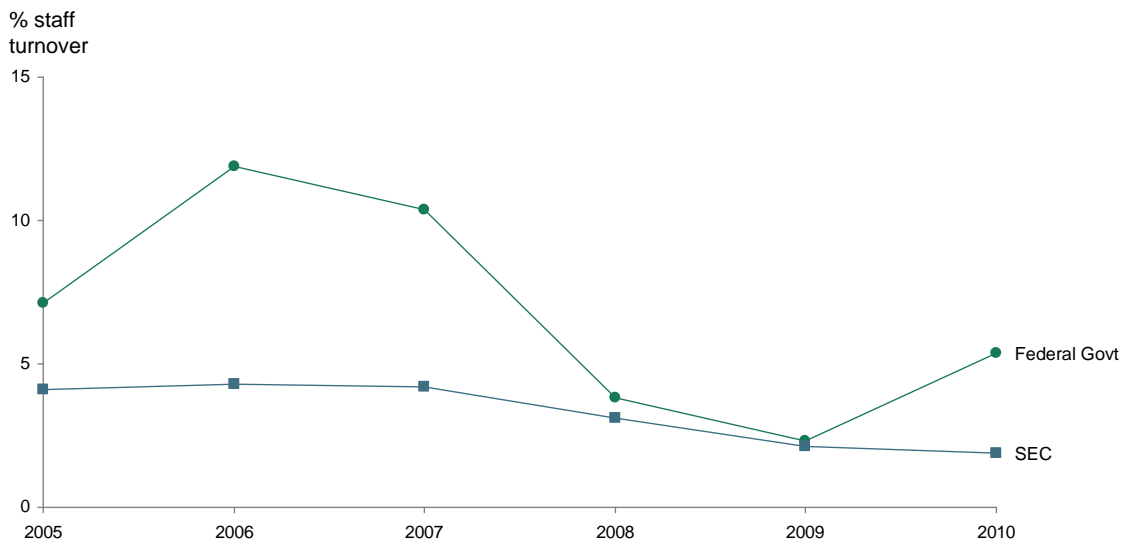
¹⁶⁰ United States. Cong. Senate. *Gramm-Leach-Bliley Act of 1999*. 106th Cong., 2nd sess. Washington: GPO, 1999. Print.

¹⁶¹ United States. U.S. General Accounting Office. *Increased Workload Creates Challenges*. GAO-02-302. Washington: GAO, 2002. Print.

authority allowed the SEC to develop a new compensation system, benchmarked against other FIRREA agency systems. In addition, the new act required the SEC to adopt merit-based principles for its compensation system.¹⁶² The agency used this authority to establish a new pay scale. This system, designated the SK pay scale, was calibrated against other federal financial regulators. Additionally, the agency employed a new merit system that played a direct role in determining pay raises; based on an employee’s performance, supervisors could award a pay raise between 0 and 4.5 percent.¹⁶³

Pay Parity was highly successful in curbing attrition. The SEC expanded by 33 percent following Pay Parity, and was able to absorb the workload increase associated with Sarbanes-Oxley. Attrition dropped from a rate of 8.5 percent in 2001 to 6 percent just after the new system’s implementation.¹⁶⁴ Agency data from 2005 to 2010 indicate that the SEC maintained a below-average rate of voluntary attrition through both the economic boom and the recession (see Exhibit 7.2.4.2-1). In some cases the SEC pays a premium for key professions critical to its mission. For example, attorneys at the SEC are paid a 10 percent premium to the average FIRREA agency attorney salary, ensuring that the SEC can staff these key roles and attract the sufficient talent.¹⁶⁵

Exhibit 7.2.4.2-1: Voluntary attrition in the federal government and the SEC



Note: 2010 attrition estimated based upon partial year 2010
Source: BLS JOLTS Quits data 2005-2010; SEC vacancy database 2010; SEC FY2009 Turnover; SEC Official Turnover 2005-2008; BCG analysis.

¹⁶² United States. Cong. Senate. *Investor and Capital Markets Fee Relief Act of 2002*. 107th Congress, 1st sess. Washington: GPO, 2002. Print.

¹⁶³ *Special Study: Pay Parity Implementation Plan and Report*.

¹⁶⁴ Ruiz, Diego. “Testimony Concerning the SEC’s Pay-For-Performance System.” *Subcommittee on Federal Workforce, Postal Service, and the District of Columbia, Committee on Oversight and Government Reform, U.S. House of Representatives*. Washington, DC. 12 Feb. 2008. Speech.

¹⁶⁵ BCG analysis based on *FIRREA Compensation Survey*. Towers Watson, 2010. Print.

Despite Pay Parity's success, the SEC's compensation system can still be improved. Following a union grievance and ruling by the Federal Services Impasse Panel early in the new system's implementation, the SEC made temporary alterations to its merit pay until a new performance management system was developed. Instead of providing variable increases in base pay to reward high performers, the SEC migrated to a standard percentage base pay increase for any employee rated "acceptable." This alteration makes it very difficult to measure, recognize or reward high performance. In addition, because the percentage of compensation allocated to the merit pay pool is just 1.5 percent, the SEC struggles to differentiate high performers through merit compensation. The SEC can also reward performance through one-time monetary awards, but these award budgets are minimal, at ~0.5 percent of the overall compensation budget for the agency. The median government award budget is approximately 6 percent and goes as high as 12 percent.¹⁶⁶

Despite its many benefits, the altered system also had some unintended consequences, especially related to manager compensation. The difference in pay for managers, despite taking on very new and challenging responsibilities, is minimal to nonexistent. There are cases where an SK-14 non-management professional earns more than an SK-15 manager, and of the nearly 300 SK-15s at the agency, 18 percent earn below the SK-14 *average* salary.¹⁶⁷ By maintaining a clear compensation differential between managers and senior line staff, the SEC can motivate high performers to take on managerial duties, create more desirable career paths within the agency, develop a pipeline of top talent to build succession plans to senior officer levels, and develop people management skills.

Finally, in the wake of Dodd-Frank, there is a growing emphasis on attracting and retaining industry expertise. However, in some areas this talent is very well-compensated in private sector firms. While the SEC has been able to attract some of this talent during the recession, it is possible that retaining or recruiting such talent will become difficult. In this case, the compensation allowances of Pay Parity may not be enough. The SEC cannot match private sector compensation for these roles, and attrition will likely be above that of other professional roles at the SEC. However, a moderate amount of attrition here can be helpful to the agency's mission. Turnover in expert roles ensures that the agency is always seeking new talent, with the latest understanding of the industry. The SEC will need to carefully monitor the recruitment and turnover of industry expertise carefully to determine the benefits of slightly higher attrition in this area, and the extent of possible pay reform required, if any.

While Pay Parity has been and still is undeniably successful, further improvements in the compensation strategy can increase its effectiveness in attracting and motivating staff. For example, a clear and significant award pay differential can foster a spirit of healthy competition and a drive to improve performance across the agency, boosting morale in the process. Creating clear

¹⁶⁶ *Guide to HR Benchmarks 2010*. IOMA. Web. 1 Feb. 2011.

¹⁶⁷ SEC HR database.

differences in manager and non-manager compensation also ensures that those taking on more responsibility feel recognized for their achievements and encourages them to continue their efforts.

Recruiting

The SEC's recruiting process is defined by three federal hiring authorities that vary depending on the type of position being sought:

- The Competitive Service hiring process applies to the hiring of typically administrative and support positions such as human resources, business operations, financial management, acquisitions and administrative support. In this process the SEC is required to provide public notice and post the job on a national website for those searching for government employment. In addition, the agency applies the OPM minimum qualifications to each job posting; minimum qualifications are used to filter applications for qualified applicants. An assessment tool is created to score the qualified applications. HR and the hiring manager define "categories", or ranges of scores, to group applications. Under the Competitive Service, veterans' preference applies and veteran applications rise to the top category. For postings that attract a lot of interest, this process can become quite lengthy and cumbersome, making it difficult to find the right talent
- The Excepted Service Hiring Authority (ESHA) is an SEC-specific authority intended to aid the agency in attracting qualified talent; ESHA applies to accountants, economists, examiners, IT positions, and industry experts. This authority waives the requirements of the Competitive Service hiring process and allows the agency great flexibility to fill these positions using excepted hiring procedures. Currently, the SEC exercises some of this flexibility in its targeted recruiting campaigns, but it also provides the standard public notice, which is not required. Under ESHA, hiring managers receive an unranked list of applicants who meet minimum qualifications. They may review all the applicants, but must consider them in preference order, with qualified veterans considered first
- The Excepted Service (ES) approach is a government-wide authority granted to agencies hiring attorneys and other positions set out in the code. The process to fill an ES position is similar to the process used to fill an ESHA position

Navigating these three separate processes is cumbersome to the HR team. The hiring managers are confused by the multiple and complex processes, overwhelmed by the number of applications that come in, and stymied by rules that limit their decisions. Managers also add workload to themselves and the HR team by posting positions many times—and at varying grade levels and job

types—to increase the applicant pool and their chances of finding top talent. This leads to a slow and inefficient recruiting process.

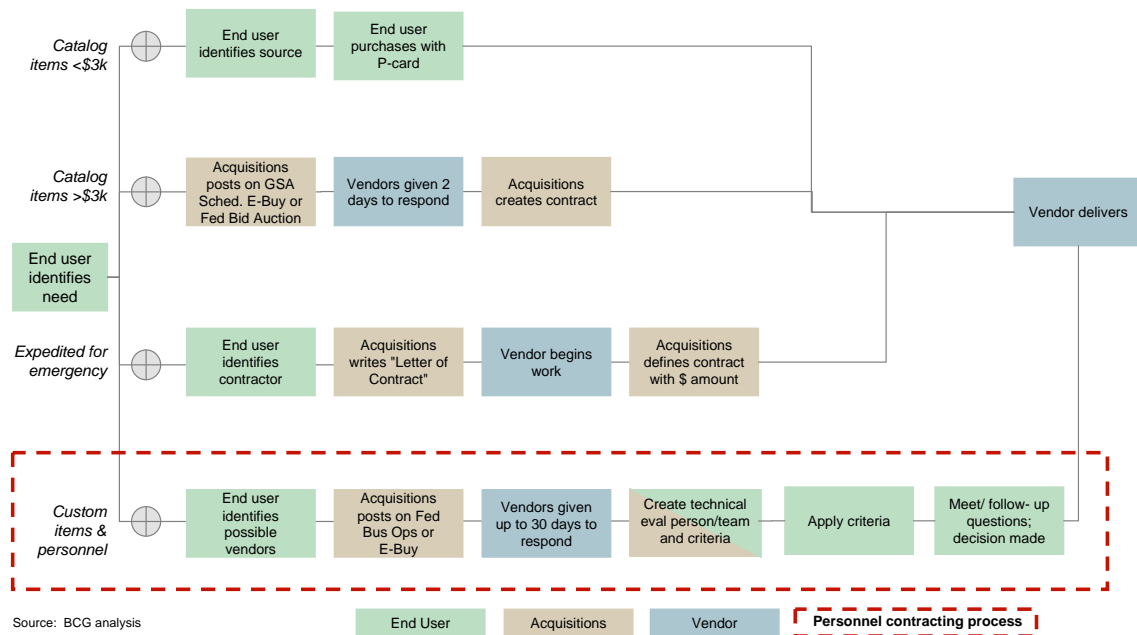
While these authorities can be viewed as constraints, much can be accomplished within them. Doing so will require the SEC to take more advantage of the flexibilities offered by ES and ESHA hiring. Though over 80 percent of the positions at the SEC fall into the ES or ESHA authorities with the most flexibilities, the agency defaults to the more cumbersome federal agency hiring process by posting all positions. Employees are familiar with the legacy process and its requirements. However, this process requires additional time to prepare the posting, wait the appropriate time for responses, and filter hundreds of resumes. The SEC has some ability to streamline this process, but this requires training, process redesign and alignment with OPM. It is also difficult, given the variable budget cycle year-to-year, for the agency to implement forward-looking recruitment and diversity strategies and maintain dialogue with top talent. This has been particularly difficult when the agency must respond quickly to increases in workload that require significant recruiting efforts. At a time when the SEC requires more experienced talent and specific skill sets (see Section 7.2.2.3), it should aim to fully utilize its hiring flexibilities. Within any new targeted recruiting approach, the agency should consider diversity as part of the strategy.

Contracting

In addition to recruiting for permanent positions, another method of finding the right talent is to contract with external providers, especially during surges in workload. There are four acquisition processes that vary by type of purchase:

- Products costing less than \$3,000,
- Products costing greater than \$3,000
- Expedited process with flexibility to respond to emergency situations
- Custom product or services (personnel)

Exhibit 7.2.4.2-2: Acquisition processes



The process for hiring contract personnel is the most complex of the procurement processes, and requires close coordination between acquisitions and the relevant office or division. There is a lack of clarity regarding specific accountabilities in each step of this process. For example, the responsibility for initiating a statement of work must be a collaborative effort, with divisions and offices providing content expertise, and acquisitions guiding the process. In the absence of a standard set of known accountabilities, the speed and smoothness of the process vary widely. Similarly there is no clear accountability for contract portfolio management; this could result in out of date or expired contracts and potential redundancy of work. It is possible that this process inhibits the effective use of contractors; other federal agencies employ temporary contracting support regularly to supplement resource needs in a timely fashion. Currently, the SEC utilizes its personnel contracting process mostly for IT contractors. If the SEC needs to ramp up its use of contractors in order to adapt to new circumstances and talent requirements, streamlining this process would be critical.

Training

The SEC has recently hired a new Chief Learning Officer with FIRREA agency training experience to guide the development of a curriculum and training program. The agency also on-boarded a new Dean for the College of Leadership Development who also has FIRREA agency training background. Many of the training program needs have already been identified, and plans have been developed to make the necessary improvements.

The SEC does not yet have an agency-wide training program or curriculum, but initial efforts are underway. The training team recently

catalogued the training programs run by the divisions and offices. Plans are in place to aggregate the programs and further develop several learning “colleges,” along with a full curriculum. As a first step, OCIE and the training team are working on a new Certified Examiner Training program to establish consistent standards nation-wide. The systems required to link training to the performance management system and Individual Development Plans are planned but not in place. In addition, the SEC recognizes the need to develop internal online communities and a knowledge management system in order to strengthen best practice sharing. An internal networking program is in pilot, and some early knowledge management efforts have been made. For example, training is teaming with OCIE to develop an online Risk Library. Further knowledge capture and knowledge management tools and procedures will be necessary, especially as more industry talent rotates through the agency. Recent purchases of a learning management system and mentoring and metrics tracking software will aid the training team as it grows its capabilities. In the coming weeks, they will complete the first round of their new 12-month, three-part leadership program. Further development of the training team and program is on hold pending release of the budget. (See the following section on the HR function for further detail on training resources.)

With a well-functioning training program, the SEC will be able to better address the competency and capability focus areas previously described. Training directly affects the ongoing development of top talent, which is critical—in their interactions with stakeholders, the SEC’s people leave a lasting impression of the agency’s strengths and capabilities.

Performance management

To further develop the talent at any organization, there must be a robust performance management system in place. In 2008, the SEC began implementing its new Evidence-Based Performance Management system, and has since rolled it out to much of the agency. The new system addresses both work outcomes as well as behaviors. It requires the development of a Performance Work Plan (PWP), with individual objectives aligned to agency-wide objectives. In addition, Individual Development Plans (IDP) are created and tailored to individual employees to track professional and technical development opportunities. Performance measurement is no longer an “acceptable” or “unacceptable” binary rating, as with the old system, but instead allows for further differentiation of high and low performance. Though the system is not currently linked to compensation, there are plans to do so once fully rolled out.

While the agency has made significant progress, the success of the new system very much depends on its full adoption, its linkage to *meaningful* compensation, and the active and visible support of leadership. The current implementation strategy is largely focused on educating people about processes, forms and compliance. Placing more emphasis on the purpose and benefits of the system would support meaningful adoption by managers. Otherwise, managers might hesitate to spend time utilizing it purely for employee

development benefits. Managers do not yet recognize the potential of the system, which underscores the need to further explain its benefits. A successfully implemented performance management system will enable leadership and managers to recognize and reward top talent while supporting all staff in their professional development. However, managerial ambivalence toward the new system will jeopardize its implementation. It is imperative that the SEC take advantage of the months immediately following the system's introduction to embed it in the organization and ensure its long-term success.

In addition, a performance management system that does not support necessary involuntary attrition will reduce the agency's overall effectiveness. When performance requires improvement, managers may put employees on a Performance Improvement Plan (PIP). The PIPs do not have clear metrics to mark improvement, making it quite difficult to defend or refute claims made either by managers or employees with regard to continued performance. The SEC must use its performance management system to fully document a failure to improve poor performance and support management decisions to dismiss poor performers in a timely manner. In contrast to Federal involuntary attrition rates of 4-8 percent per year,¹⁶⁸ the SEC's rate is less than 1 percent per year.¹⁶⁹ Currently, a number of concerns—including unclear processes and cultural norms—can discourage managers from addressing poor performance, with the expected outcome clearly evident in the SEC's attrition data. For example, managers are not equipped with a performance management system that enables them to document performance history. The related complexities increase risk-aversion among managers to consider dismissal as a real option for poor performance. Frequently, managers resolve this by either enduring poor performance or moving poor performers to new roles. The SEC's new performance management system, while already a great step forward for the agency, can help address this concern by codifying clear best practices for supporting and, if necessary, dismissing poor performers. Implementing such a system enables the SEC to proactively manage its talent pool.

Talent management

On an ongoing basis there must be clear accountability for talent management, including high potential planning, succession management, and career pathing. At the SEC this responsibility may be carried out in part, but in many places it is missing altogether. The HR team has begun taking steps to develop this practice. They have defined a new HR Manager role that will support managers in identifying and filling human resource needs. While the role has been defined, the tools for supporting them have yet to be developed (e.g., best practice manual, decision rights and accountabilities, expected reports and analyses, collaboration mechanisms). In addition, a robust change-management plan will support the integration of HR Managers into this new strategic role and help set expectations with other HR employees, hiring

¹⁶⁸ BLS JOLTS Layoffs and Discharges data 2001-2009.

¹⁶⁹ SEC vacancy database 2010; SEC FY2009 Turnover; SEC Official Turnover 2005-2008.

managers and division and office leadership. Staff for these new roles was approved, but hiring is on hold pending release of the budget. Here again, division and office leadership look to HR to continue building the agency's talent management capabilities, especially with regard to expertise in workforce planning, recruiting and succession planning. Investing in talent management will allow the agency to deploy the appropriate talent against operational needs in a timely fashion, providing the foundation necessary for the SEC to achieve its objectives.

Human resources function

If the SEC is to staff itself with the talent required to fulfill its mission, it must have an excellent HR function that can support this talent on an ongoing basis. A well-functioning HR team will be critical to the ongoing success of the people pipeline.

As mentioned above, the HR team has developed a new position to liaise with the divisions and offices, in a strategic partnership role designed to take on talent management and recruiting responsibilities not previously performed. In parallel, the HR team is taking steps to organize distinct front, middle, and back offices to better support the SEC. The distinct accountabilities and structure of these offices have not yet been communicated.

As part of this reorganization and redefinition of roles, the HR team should consider investing in other areas critical to supporting the people pipeline. For example, the training team currently has 10 people, which means they are supporting employees at a ratio of 390 FTE per learning staff member. Organizations tend to support 240 FTE per learning staff member, and best-in-class training organizations support 180 FTE per learning staff member.¹⁷⁰ Based on BCG experience, support levels provided by training at other regulators can be even higher. The SEC could benefit from an additional 6 to 12 learning staff to support training needs. Additionally, given the narrow recruiting approach used historically, the recruiting capacity is relatively low. With 2 FTEs assigned to recruiting responsibilities, just approximately 2.5 percent of the HR team is focused on recruiting. On average, about 20 percent of HR teams are dedicated to recruiting efforts.¹⁷¹ To reach a similar percentage and to employ a more rigorous, targeted recruiting strategy as described above, the SEC would need to redeploy approximately 10 to 14 staff members to the recruiting team. The recruiting team is also at layer six of the organization, with three layers between them and the Chief HR Officer, likely reducing the importance placed on recruiting. As recruiting becomes a more critical component of HR's function, care will be needed to ensure it is given the level of attention required. The size

¹⁷⁰ 2010 State of the Industry Report: Definitive Review of Workplace Learning and Development Trends.

¹⁷¹ BCG proprietary benchmarking.

of the overall HR team (not including training) is in line with industry and public sector benchmarks, at 1.9 percent of the overall SEC.¹⁷²

With its reorganization on hold, the HR team would benefit from developing tools to effectively communicate with its stakeholders. New roles have not yet been fully developed and communicated, customer service standards have been partially developed, and there remains a lack of clarity regarding accountabilities among HR personnel and division personnel. Especially in recruiting, disconnects between HR and the hiring manager can be damaging to the SEC brand among potential candidates. In addition, HR policies that should guide coordinated HR practices among team members and across the SEC sit in hard copy papers, old emails, and statutes. There is no practical policy or process “play book” to guide the various stakeholders through specific and, often times, confusing processes. By codifying these policies and procedures, HR will be better able to coordinate with division personnel and optimize its existing resources to streamline the recruiting process and improve the service it offers the rest of the agency.

Summary

The SEC has made progress in developing the people pipeline, especially in the areas of training and performance management, and has plans for further developments. These successes can be further built upon to improve performance management implementation and develop a centralized training program. In addition, there remains a need for a compensation strategy, a refined recruiting process, and strategic talent management. Going forward, the HR team’s development of a strategic HR Manager role to partner with the divisions and offices will be a critical component of improving the people pipeline. All of these processes will require the support and effective implementation by a well-functioning HR team. In combination, further improvements in the people pipeline and HR function can improve agency talent, capabilities, and performance.

7.2.5 Workforce engagement

7.2.5.1 Key questions explored

- *Is the SEC workforce engaged in the future of the agency and motivated to invest their effort in fulfilling the agency’s mission?*

7.2.5.2 Methodology

Engagement describes the degree to which employees feel a strong bond with their organization and are motivated to give their best.¹⁷³ It is distinct from

¹⁷² *Guide to HR Benchmarks 2010.*

satisfaction, which assesses happiness with a past experience.¹⁷⁴ Engaged employees care about the future of an organization and are willing to invest discretionary effort in its success.¹⁷⁵ At its core, engagement is achieved by a successful balance of organizational *disciplines* and *motivators*. Disciplines describe the systems and processes that ensure employees clearly understand their duties, how they contribute to organizational success, and how they will be evaluated. Motivators describe the degree to which employees feel proud, empowered and recognized by the organization.

Overall engagement is composed of four domains, each containing relevant disciplines and motivators. First, the organization must have defined **objectives and aspirations**. Senior management must articulate and be visibly committed to a clear vision that inspires employees. The vision must be advocated internally and it should have clearly defined goals and executive accountabilities. Next, **accountabilities and collaboration** require a system that clarifies management accountabilities and decision rights while identifying areas where collaboration is mission-critical. In addition, highly visible **performance management and recognition** systems provide employees with an understanding of how they will be held accountable and recognized for their achievements. Lastly, **people manager capabilities and interactions** are the foundation for the other building blocks of engagement. Strong leadership behaviors are required for managers to translate organizational objectives into actionable employee goals, hold employees accountable and foster collaboration, and implement performance management and recognition systems.

To assess engagement at the SEC, BCG drew on the Federal Employee Viewpoint Survey (FedView), which is administered every two years by the OPM across the federal government.¹⁷⁶ FedView results for the last six years were mapped to a proprietary BCG survey where each question was linked to one of the engagement domains described above. This survey has been statistically validated using a benchmark database containing over one million data points (as of October 2010). Responses to each question are compared to public and/or private sector organizations. Each domain, as well as the disciplines and motivators within it, was assigned a quartile ranking.

7.2.5.3 Findings

Given the challenges of the last three years, it is unsurprising that the SEC's level of engagement is low compared to other private and public sector organizations. The agency ranked in the bottom quartile in overall engagement

¹⁷³ Konrad, Alison M. "Engaging Employees through High-Involvement Work Practices." *Ivey Business Journal*. 2006. Print.

¹⁷⁴ Locke, 1976 as cited by Brief, Arthur and Howard Weiss. "Organizational Behavior: Affect in the Workplace." *Annual Review of Psychology*. 2001. Print.

¹⁷⁵ Seijts, Gerard and Dan Crim. "The Ten C's of Employee Engagement." *Ivey Business Journal*. 2006. Print.

¹⁷⁶ United States. U.S. Office of Personnel Management. *Results from the 2008 Federal Employee Viewpoint Survey: Securities and Exchange Commission*. Washington: GPO, 2010. Print.

and in the four domains, although some disciplines were ranked in the third quartile. Low engagement is a relatively common problem, often exacerbated by the management structure discussed in Section 7.1.7.2, which leaves middle managers feeling disempowered. It is also a symptom of the challenges related to performance management and training discussed in Section 7.2.4.2, as those are key components of engagement.

While there was little meaningful variation by division or office, the SEC's engagement differs significantly by grade level. The energy and commitment of newly-appointed senior leaders is evident in the high engagement scores among the SEC's Senior Officers (SOs). Among these executives, engagement ranked in the first or second quartile along all dimensions. The SEC's lowest level staff (SK-1 to SK-6) was also much more engaged, with scores in the second quartile on four of eight dimensions. These staff rated the agency's disciplines particularly high, while motivators were less engaging.

A historical analysis of FedView and its predecessor, the Federal Human Capital Survey, found that engagement has declined steadily since 2004. While the events of the financial crisis likely impacted engagement levels in the last few years, even in 2004 overall engagement still ranked only in the third quartile. Measures for each of the four domains continuously ranked in the bottom quartile year over year. The SEC has a clear opportunity to improve staff morale and engagement, which can have benefits for the agency's overall performance. Engaged employees are typically more productive and willing to apply discretionary effort for the benefit of their overall organization. This kind of commitment will significantly bolster the agency's ability to succeed in a rapidly changing and resource-constrained environment. In addition, engagement can improve retention of high performing employees, which will be paramount both as the economy begins to recover and as the SEC tries to attract talent with specialized expertise.

Summary

The persistently low levels of employee engagement at the SEC indicate the agency has an opportunity to re-energize its staff and middle managers, thereby increasing productivity and better equipping the agency to undertake new duties. The initiatives in Chapter 6 provide a roadmap to improve employee engagement. While many of these recommendations are intended to improve a specific aspect of organization or personnel management, initiatives such as role mandating, training, and performance management also contribute to employee engagement.

7.3 Technology and resources

7.3.1 Overview

As part of the Section 967 Study mandated by Dodd-Frank, BCG undertook an assessment of the SEC's technology infrastructure and capabilities, with a focus on evaluating the agency's ability to meet its mission in its changing context. The assessment focused on three key aspects of technology at the SEC:

- Technology systems
- OIT's ability to deliver IT services
- Technology expertise, which is primarily addressed in Section 7.3.3

Technology at the SEC has been hindered by a history of neglect and constrained funding. This has degraded OIT's ability to deliver the necessary IT services and consequently, has led to a reduction in leverage from IT in the form of advanced systems.

Despite this history, OIT's recent momentum is promising. The Chairman's office has recognized that technology is a critical path for the SEC and has taken steps to address the issues that have limited its implementation and use. In particular, the SEC recently made two key leadership hires, a COO and new CIO, and made the implementation of an agency-wide TCR system a top priority.

OIT's new leadership is working to address its current management inefficiencies. For example, it is: exploring new models for engaging with the business side of the SEC, with the intent of improving coordination and its understanding of internal client needs; conducting a thorough review of its capital investment process aimed at improving initiative prioritization and management; and putting in place the mechanisms necessary to better leverage key project management tools and drive accountability.

While this progress is notable, significant work remains. This assessment identifies meaningful shortfalls in the SEC's existing technology capabilities and OIT's ability to deliver the IT services the agency requires.

7.3.2 Technology systems

7.3.2.1 Key questions explored

- *What is the adequacy of the SEC's existing technology systems for meeting the SEC's current and emerging needs?*

7.3.2.2 Findings

In the context of growing complexity in the securities markets, technology systems have become increasingly critical enablers for the SEC. To fulfill its mission, the SEC must have a robust set of systems that are capable of supporting the organization's key functions, today and in the future.

While the SEC has made progress in developing its systems, gaps remain. In particular, the SEC has a need for new systems in the areas of data management, analytics, and knowledge management. The SEC also needs to modernize existing systems, such as EDGAR, to improve their operational efficiency, create additional functionality, and provide for the sharing of information across systems, divisions, and offices.

Overview of the SEC's current technology solutions

The SEC currently has 196 technology solutions in place. Of these, three business applications—EDGAR (public filing store), Hub (case management), and TCR (tips, complaints, and referrals)—are of particular note given their broad scope, wide deployment, and relative import to the core mission of the SEC.

Exhibit 7.3.2.2-1: Technology solutions

<i>Solution category</i>	<i># of Solutions</i>
<i>Data analytics</i>	<i>10</i>
<i>Data inputs</i>	<i>11</i>
<i>Case management</i>	<i>12</i>
<i>Filing</i>	<i>11</i>
<i>EDGAR</i>	<i>1</i>
<i>Tracking</i>	<i>56</i>
<i>Administrative</i>	<i>56</i>
<i>IT Support</i>	<i>38</i>
<i>Inactive</i>	<i>1</i>
<i>Total technology solutions</i>	<i>196</i>

Source: BCG analysis

Data analytics solutions

Given the demands placed on it, the SEC has a growing need for the ability to analyze large quantities of market data. By leveraging such a capability, the SEC can drive increased efficiency and effectiveness, particularly in the areas of:

- **Registrant risk analysis:** Perform risk analysis using data such as counterparty information, holdings, trading patterns, and short sale positions on the registrant pool, such as broker-dealers, investment advisers and investment companies, to identify individuals and groups of registrants on which to conduct targeted exams
- **Policy impacts:** Evaluate trading activity in the securities-based swaps market for how rule modifications may impact market structure
- **Enforcement:** analyze patterns of placing orders and trades to assess potential market manipulation
- **SRO oversight:** Replicate an SRO's own surveillance analyses to test the performance of its surveillance systems
- **Exam sweeps:** Analyze order and cancellation patterns over many participants to identify any that placed and cancelled a significantly high number of orders, which could be indicative of weaknesses in their trading systems

Dodd-Frank expands the purview of the SEC in several areas, as described in Section 3.3.1. The legislated responsibilities do not explicitly require the SEC to implement new surveillance or analytic tools; however, having a robust data analytic capability will better enable the SEC's regulatory activities. For example:

- **Credit rating agency regulation:** The SEC is required to register and examine each of the NRSROs annually. There is no requirement for surveillance or analytics solutions to support these registrations or examinations. However, the ability to review trends in ratings over time may provide the SEC better insight into the core drivers of ratings changes
- **Derivatives regulation:** The SEC is required to have securities-based derivatives cleared through central clearing organizations and traded through regulatory exchanges or swap execution facilities. The surveillance of participant and market activity will be conducted by the exchanges or swap execution facilities, as is done today for other securities. Thus, with regard to derivatives regulation in the context of Dodd-Frank, the SEC does not require additional surveillance capabilities. However, with additional analytical tools, the SEC will be better positioned to monitor the swap markets through data provided by swap data repositories (SDRs)
- **Private fund and municipal securities regulation:** The SEC is required to register an expanded set of private fund advisers and to register municipal securities advisers. Performing these registrations does not require market surveillance or analytic solutions. However, the ability to compare profiles

of new registrants to existing ones may help the SEC understand how the private adviser or the municipal advisor markets are evolving

Conducting these analyses requires systems capable of performing both rules-based analyses (e.g., using defined algorithms to identify and take action on targeted data) and ad hoc analyses (e.g., analyses without defined algorithms). Such analyses will also require access to a sufficient body of structured data (e.g., trade, order, and quote data) and unstructured data (e.g., information taken from business documents such as internal emails).

The SEC's current data analytics solutions are designed to provide much of the functionality that the SEC requires. They support the analysis and management of structured and unstructured data, including market data, filings, and documents captured or created during the examinations and enforcement processes. The primary tools in place, Business Objects and SAS, are robust. The SEC has also deployed a Fujitsu system to mine and conduct rules-based analyses on corporate XBRL filings data in EDGAR. The SEC also has several tools, e.g. Autonomy and Concordance, which are designed to search unstructured data generated during electronic discovery.

However, these solutions are not sufficiently implemented to support the SEC's emerging analytic needs. For example, the current suite of analytic tools was not fully utilized as part of the SEC's evaluation of the market events of May 6, 2010. The toolset was insufficient for the large volume of structured market data that was necessary for the analysis. Furthermore, the current set of analytical systems is not able to perform a number of analyses that would be beneficial for the SEC. For example, they do not enable the type of rules-based analyses necessary to support independent market surveillance or the robust oversight of SRO surveillance activities.

Data inputs

To more effectively leverage analytical tools, the SEC requires access to a sufficient body of data. Specifically, the agency needs three types of information:

- Market data: Trade, order, and quote data from the various markets and market participants
- Market participant data for investigations and exams: Individual market participant's internal transaction data as well as its business data
- Internal SEC business data: Case data, filing data, market participant profile data, tips, complaints, referrals, etc

Today, the SEC has the following primary sources of data. In some cases, the data are not easy to access or are not in a format conducive to performing analysis:

- Corporate filings
- Broker-dealer registrations and risk assessments
- Investment Adviser and Investment Company registrations
- Selected trade data as provided for exam purposes
- Evidentiary data from enforcement cases
- SEC business data (correspondence, case management information, etc)

The SEC does not currently have broad access to market data. Instead, it routinely receives only the small slices of data it specifically requests for exam or enforcement purposes. As a result of its limited access to market data, the SEC faces technical and logistical challenges in developing a comprehensive, consolidated view of market activity. When the SEC investigated the market events of May 6, 2010, for example, it had to acquire and consolidate market data from a significant number of trading venues, including all of the nationally-registered exchanges. This was a time-consuming undertaking that delayed the SEC's assessment. In response, the SEC has proposed the development of a Consolidated Audit Trail (CAT), which would create a single, comprehensive repository of market data that can be utilized by the SEC and its peer regulators.

Data warehousing

Market data is voluminous. It is estimated that a comprehensive catalog of trade, order and quote data for the products under the SEC's authority will amount to 20 terabytes of data per month. This dataset will grow in size and complexity as trade volume, the number of products and entities under regulation, and the universe of trading venues expand. As a result of this growth, it is important for the SEC to have a flexible capability to acquire, store, transform, and load a significant quantity of structured data.

The SEC currently stores a significant quantity of data for corporate filings in EDGAR. Financial statement data is structured in the XBRL format, but this makes up a small percentage of EDGAR filings; the rest is largely unstructured. In addition to EDGAR, the SEC also stores considerable evidentiary data in a Concordance system. This data is typically unstructured. Cross-referencing data between these and other SEC systems is challenging due to a lack of common data standards, identifiers, interfaces, and a clear link between data formats.

The SEC's current data repositories may serve as a foundation for a full data warehousing solution; however, they are insufficient for fully meeting the agency's emerging data needs. Several limitations exist in their current state. The SEC's store of corporate filing data is extensive, but it is stored in a solution designed for rapid data intake versus a solution targeted at data mining and supporting analytical needs. Concordance data is stored in the solution's

proprietary database which makes it difficult to access and use in other systems. Finally, the SEC does not have a system that is designed to manage both the quantity and type of trade, order, and quote data that will be available through CAT.

Case management

To support its exam, investigation, and enforcement activities, the SEC requires a robust case management solution. Such a solution needs to provide a dynamic and comprehensive repository for case-related materials, including evidentiary materials.

Currently, the SEC has two case management systems: Hub, which supports enforcement cases, and STARS, which manages the examination process for OCIE. Both systems define and track workflow for a case/examination and capture relevant information including status, findings, memorandums, and next steps.

Hub tracks investigations at their initial stages by allowing entry of relevant data and references to materials. As the case progresses, Hub tracks the case and stores key data at each stage including final court proceedings. Evidentiary data is currently stored separately and is not captured directly in the system. In future versions, evidentiary data will be more directly associated with tracking information for cases.

STARS supports the exam process by allowing users to document and report risks identified during exams. Data is entered for document references and exam tracking, and the system provides reports and basic analysis of this data.

Hub is a robust solution that largely meets the SEC's existing enforcement case management needs. STARS is obsolete and in the process of being replaced. The Oracle platform that supports Hub and the STARS replacement has a robust document management capability, and both Hub and STARS (until it is decommissioned) will leverage this capability in the future. However, evidentiary data for cases is currently stored separately and is not directly captured in the systems. The agency anticipates addressing these gaps in future versions of Hub, STARS, and Electronic Discovery 2.0 (replacement for Concordance).

Hub and the replacement for STARS also utilize a common platform—the same platform as the TCR solution—and are therefore able to share data, drive a seamless workflow, and enable different offices and divisions to utilize the same data in their respective activities. This shared use of a single architecture reduces support and maintenance costs and lays the groundwork for leveraging shared systems across divisions and offices. This architecture is a departure from the siloed, single-purpose solution approach that the SEC has historically employed.

Filing systems

Filing systems enable the input and storage of regulatory filings from market participants. They are, as a result, perhaps the most public-facing and critical of the SEC's systems. While EDGAR is a filing system, its prominence and size warrants a broader discussion; it will be addressed in the next section of this document.

In addition to EDGAR, the SEC has access to two categories of filing systems: those owned by FINRA and those owned by the SEC. The FINRA filing systems are used to gather and store filings for broker-dealers and investment advisers. These solutions are both owned and supported by FINRA; the SEC maintains access to these filings through a web portal. Direct filing data is also accessed via a data feed that FINRA defines and provides to the SEC. The SEC also has its own systems that store various filings for SROs related to investigations, referrals, and market surveillance. These systems perform the basic tasks of receiving a filing, validating the input, routing the filing to a searchable repository, and performing simple reporting such as a notification of late filings.

The filing systems at the SEC are primarily small solutions, customized for each filing or groups of filings. While the solutions use similar underlying technologies, they are not functionally and technically easy to scale or adapt to new user requirements. The presence of multiple filing systems creates additional maintenance requirements for OIT. In addition, filing information is not stored in a central database, which hinders efficient search and analysis of the data. The lack of common identifiers, a consistent format, and a well-defined mapping between systems also prevents efficient cross-referencing of data across filing systems. Furthermore, the SEC only has access to a limited set of the filing data FINRA gathers. Neither of these categories of filing systems easily enable the use of the underlying data in the SEC's other technology solutions, thus complicating analyses.

EDGAR

EDGAR is the SEC's filing management system for public company filings. It is designed to perform automated collection, validation, indexing, acceptance, and dissemination of submissions to the SEC. In many ways, EDGAR is the public face of the SEC. For most filers and investors, EDGAR is the only direct contact they will have with the SEC. Combined with the critical functionality that EDGAR provides investors, filers, and SEC staff, this argues that EDGAR should be a best-in-class filing system with a strong emphasis on the easy access and analysis of filing data.

EDGAR largely supports the SEC's operations today but is in need of modernization, particularly with regard to its business process workflow and system design. The last significant modernization took place in 1997; since then, all updates have focused on minor technology upgrades and small-scale

improvements to subsystems such as the EDGAR Workstation and the fee collecting service. The agency intended to undertake a large-scale modernization of EDGAR in 2006, but the initiative was delayed due to competing development priorities.

Due to the lack of modernization, EDGAR has several functional and architectural shortcomings. For example:

- **System design:** The system is complex and has duplicative components, interdependencies between components, and not enough standardization in business process logic. For example, duplicate code and validation methods are in place to support each source of filer input (i.e. professional filers, individual filers, and filers that employ software interfaces)
- **End-user experience:** A proliferation of filings, inconsistent processes, and different forms can create confusion for end-users which results in application support calls. Streamlining the filing process and creating online Q&A tools would improve filer efficiency and reduce EDGAR support costs
- **Data store and analytics:** EDGAR has its own data store that is replicated within the SEC. This store could be improved to better support retrieval and analyses. Frequently, analysis of EDGAR data is performed through single-purpose solutions within various offices and divisions
- **Data structure:** Most of the filing data in EDGAR resides in text or HTML files and is largely unstructured. For data that is structured, formats are not always consistent. For example, US GAAP corporate filings are beginning to use XBRL, while some other structured filings use XML. This inconsistent use of formats makes consolidation, cross-referencing, and efficient analysis of the data more difficult

The delay of EDGAR's modernization has resulted in a more limited use of EDGAR data in internal SEC analysis and workflow, increased support and development costs, and sub-optimal filer usability. The agency is aware of this and is planning for a future, long-overdue modernization effort.

Tracking systems

The SEC has systems that track the workflow and progress of activities such as rule-writing, filings reviews, and the flow of correspondence within the organization. These systems enable the basic capture of information to reflect progress against an activity.

The largest tracking system is the new TCR system, which provides a single, comprehensive view into the full lifecycle of individual tips, complaints, and referrals. In the intake stage, TCR consolidates these pieces of information from various sources into a central repository that is accessible throughout the organization. It then establishes triage and resolution stages in which risks can be classified, priorities assigned, and work items established. TCR also shares a

common architecture with key case management systems, allowing for a simple interface to efficiently share information across the systems. Given the critical role of tips, complaints, and referrals to the SEC's investigation and enforcement activities, the TCR system is seen as a particularly valuable enabler for the SEC.

The SEC's other tracking solutions are primarily small solutions customized for a specific task. Though these solutions may share some underlying technical components, they do not share business logic components that would enable extensibility. For example, there are no shared components to validate inputs according to a set of rules, and as a result the custom solutions cannot benefit from a reusable component that enables this function. Additionally, there is no uniformity in end-user access or presentation. The data from some systems is accessible via web interfaces, but other systems are primarily local Microsoft Access databases or customized applications that are not as easily accessible to a larger set of users.

Moreover, the agency's tracking solutions do not capture underlying data such as SEC comment letters, filing commentary, and the actual text of correspondence. For the data that is captured, there is no efficient means of cross-referencing tracking data across systems as a result of differing data formats and the lack of robust data mapping between systems.

Administrative systems

The SEC's administrative systems are a set of technology solutions required for organizational support such as web support for internet and intranet sites, financial management solutions, personnel management, and other administrative activities.

The agency recently decided to migrate its financial management solutions (not including procurement management and contracting systems) to a shared platform used by many other federal agencies. This platform is hosted at the Department of Transportation, and its adoption allows the SEC to use a comprehensive system for billing, invoice tracking, and budgeting that is well-supported.

These systems are adequate for the SEC's needs today.

IT support solutions

IT support solutions enable day-to-day activities and support IT infrastructure operations, the IT needs of the SEC staff, and OIT's needs for system development. Current solutions include communications solutions for mobile, desktop, and e-mail as well as remote access services and network management solutions. To meet OIT's needs, the SEC has several systems for project tracking, project change management, help desk management, disaster recovery, and data center management.

The SEC's IT infrastructure solutions for communications and network management are largely adequate. The SEC's IT tools for project management are further discussed in Section 7.3.3.2.

Agency-wide knowledge management solution

For information to be of value to the SEC, it must be captured, cataloged, and made accessible. By bringing together all source information—information formally and informally collected in the course of operations combined with the institutional knowledge and expertise of the SEC staff—the organization would be better positioned to make the fullest use of its resources. For example:

- **Connect the dots:** In the course of examinations, enforcement activities and other external interactions, SEC staff learns significant information. Capturing all of this information—regardless of whether it is relevant to the immediate work at hand—and making it available, searchable, and analyzable, can help the SEC to effectively “connect the dots”
- **Knowledge capture:** Agency staff has built up significant knowledge about the securities markets, the participants it regulates, and effective ways to conduct its work. Capturing those insights in the forms of training materials and best-practice guidelines can help build institutional knowledge across the SEC
- **Emerging topics education:** The pace of change in the securities markets is rapid. As the SEC develops knowledge regarding emerging topics (e.g., new technologies and new trading strategies), capturing it and making it available allows the entire agency staff to benefit from the knowledge that SEC's leading experts develop
- **Internal collaboration:** Enabling agency staff to network internally, collaborate on topics of interest, and easily share information and expertise allows for the more effective leveraging of SEC staff and information resources

Today, the SEC has a limited knowledge management capability—most notably, via a small deployment of Microsoft SharePoint. It is not enterprise-wide and does not provide the full range of functionality that the SEC requires. As a result, information is neither consistently captured nor easily accessible. The staff, meanwhile, is without an effective internal collaboration tool.

Summary

The SEC's two most important gaps in technology solutions are in the areas of 1) data management and analytics tools and, 2) knowledge management. The limits of the current data management and analytic capability hampers the SEC's risk management efforts. The lack of a knowledge management solution hinders awareness of operational issues and prevents sharing of market insights and best practices across the organization.

Additionally, the current architecture of many of the SEC's existing systems limits their functionality, efficiency, and use. For example, a significant number of the agency's systems are single-purpose; they cannot be leveraged by multiple offices or divisions, and thus drive inefficiencies in solution development. The current state of EDGAR is another example of system architecture creating operational inefficiencies and functional gaps, and leading to a sub-optimal end user experience.

There is awareness of these needs and the agency is taking some initial steps to address them. There is wide recognition that the agency should modernize key systems and leverage their architecture more broadly. In terms of data management and analytics, OIT is establishing a data governance board to map out existing and future data needs and explore new analytical tools that can strengthen its existing analytics capabilities.

7.3.3 OIT's ability to deliver IT services

7.3.3.1 Key questions explored

- *How effectively can the SEC's IT personnel and resources deliver and support technology solutions?*

7.3.3.2 Findings

The implementation and management of the SEC's technology systems requires a strong IT delivery capability.

At the SEC, the IT function is primarily carried out by OIT. This centralized group has agency-wide responsibility for the development, maintenance, and operation of IT systems. Currently, it comprises 121 staff members. This relatively small staff is supplemented by approximately 540 contractors who primarily focus on application development, operations, and infrastructure engineering.

OIT is complemented by IT resources embedded in the SEC's divisions and offices. These "shadow" IT groups, which primarily perform localized application and desktop support roles, report to their divisions or offices and do not have a reporting relationship with OIT. In total, the SEC has approximately 60 staff members fulfilling IT functions in this manner.

As previously noted, the SEC has taken some initial steps toward improving OIT's ability to deliver IT services. The hiring of a new CIO and the ongoing review of OIT's investment governance process are promising steps. OIT has also recently delivered key systems, in particular TCR and an improved case management system (Hub). The recently launched TCR system collects a rich set of information from multiple internal and external sources and catalogs them in

a single location, making it easily searchable. This single-system approach reduces duplication of effort and allows the SEC to establish agency-wide priorities for follow-on action. TCR's system design allows for sharing of data across systems, increased re-use of system components, and improved efficiencies in processing incoming tips, complaints, and referrals. The TCR data can be integrated with the SEC's case management systems to better enable examination and enforcement efforts and provide analysts with a more comprehensive view of information that may be relevant to an investigation or topic area.

Even with these initial steps, however, significant OIT capability gaps remain, particularly in the context of the additional demands that will be placed on OIT as the relative importance of technology at the SEC increases. These gaps exist along the following six dimensions:

- Technology vision and long-term strategy
- An understanding of business needs
- Investment governance
- Tools and methodologies
- Expertise to develop and manage complex IT systems
- Organization design

Technology vision and long-term strategy

Given the increasingly critical role of technology, the SEC must have a clearly articulated technology vision, coupled with a multi-year strategy that defines the path for realizing it. Such a vision and strategy would:

- Comprehensively outline the SEC's technology needs, including enterprise applications, enterprise infrastructure, and end-user technology
- Establish a clear set of priorities for delivering against those needs
- Align the organization with a long-term enterprise architecture
- Provide a framework for determining whether existing solutions should be retained, replaced, or enhanced
- Establish a broad set of metrics for measuring service delivery performance
- Drive a well-articulated operating and service delivery model

Today, OIT does not have the well-articulated and clearly communicated vision and strategy that it requires. Rather, OIT operates in a more reactive posture, responding ad hoc to the SEC's technology needs as they arise and are deemed critical. Strategic planning is typically short-term and lacks the broad organizational support necessary to be made effective. We note that the SEC's new CIO is taking steps towards correcting this deficiency, in part through workshops with the OIT leadership team to outline key technology priorities for the organization.

OIT's reactive posture is reinforced by the lack of engagement between OIT and the broader organization. The SEC's divisions and offices generally do not look to leverage OIT as a strategic partner. As a consequence, OIT is typically not engaged as part of the operations of the divisions and offices. For example, OIT is not involved in the early stages of rule-writing, when its guidance on a rule's technical feasibility and systems impact would be most valuable. As a result, OIT finds itself responding to short-fuse and complicated requests that impact the existing development schedule, further reducing engagement with its internal clients and contributing to its reactive stance.

OIT lacks a formal strategic planning function; other than the CIO, no OIT staff member is specifically responsible for developing or monitoring progress towards fulfilling a strategy. Meanwhile, the broader SEC's strategic planning functions lack the technical depth or mandate for fulfilling such a role. For example, the SEC's Strategic Plan 2010 – 2015 outlines a number of technology capabilities that the organization plans to develop. However, the initiatives it describes exist only as high-level concepts. The Strategic Plan is not designed to address questions of specific technology architecture and detailed implementation planning.

OIT's current performance metrics are narrow in scope; they do not comprehensively test the organization's performance across key functions. For example, in some systems, the performance metric for server up-time is whether the server has simple network connectivity, not whether the server is available and effectively fulfilling its designated function. OIT's new leadership team has recognized this deficiency and taken concrete steps to address it. For example, it has begun implementing industry-standard metrics (ITIL) throughout OIT; roll-out should be complete within the next two years.

The overall lack of strategic planning in OIT: 1) makes engagement with internal clients more difficult due to OIT's reactive posture; 2) leads to a fragmentation of resources as a result of a lack of explicit prioritization; 3) delays decisions relating to existing architecture, such as modernization or decommissions; and 4) and makes the task of assessing OIT's performance more difficult.

An understanding of business needs

Currently, OIT and the SEC's offices and divisions are not tightly aligned. As a consequence, OIT does not sufficiently understand the needs of its internal constituents. The problem stems from issues in: 1) relationship management; 2) demand generation; 3) project prioritization; and 4) project execution.

Relationship management

The interaction model between OIT and offices/divisions is not well-developed. There are currently no dedicated contacts within either the divisions/offices or OIT to coordinate priorities. Some groups have an unofficial

OIT champion who represents the division's or office's priorities within OIT. However, such an OIT champion is not consistently present in all divisions and offices. This leads to the use of informal channels of communication and discourages the coordination of IT requests. As a result, there is a lack of clear expectations for both solution delivery and project priorities between a division/office and OIT. To address these relationship challenges, the organization is in the process of examining new business models that would allow IT to interact and coordinate more effectively with offices and divisions.

Also, the coordination between OIT and "shadow" IT groups is insufficient, occasionally resulting in a duplication of effort and an inability to fully capture the benefits of scale. The absence of a formal and unified reporting structure makes it difficult to address this situation.

Demand generation

Only a few leaders within a division or office determine the IT needs that should be communicated to OIT. This is due to the absence of a centralized, formal checkpoint for business ideas within the division or office. The result can be a lack of input from stakeholders and a fragmented view of business demand.

Project prioritization

Typically, divisions and offices do not formally prioritize their demands for IT investment at the office or division level. Projects are prioritized in an ad hoc manner and most requests are ordered in a first-in-first-out (FIFO) fashion. Although most significant priorities are identified, there is no clear prioritization of secondary initiatives. This can lead to an inefficient deployment of resources.

Typically, there is limited coordination between divisions/offices and OIT when assigning priorities and project deliverable dates, and the coordination that does occur is often informal. This can lead to divergent views between divisions/offices and OIT on a range of important matters, including project priorities, delivery dates, and the quality of technology solutions.

Project execution

During project execution, divisions and offices typically do not engage in a formal sign-off with OIT at the end of each stage of the development lifecycle or at the close of development milestones. Formal verification of sign-offs is also not monitored in a project tracking system. This can lead to a lack of coordination and oversight, where gaps in alignment between OIT and project owners or other project-related "red flags" could go unnoticed.

Historically, divisions and offices have not had a view into the status of their ongoing projects due to the lack of a comprehensive project status dashboard. OIT recently began instituting project status dashboards to address this challenge.

Investment governance

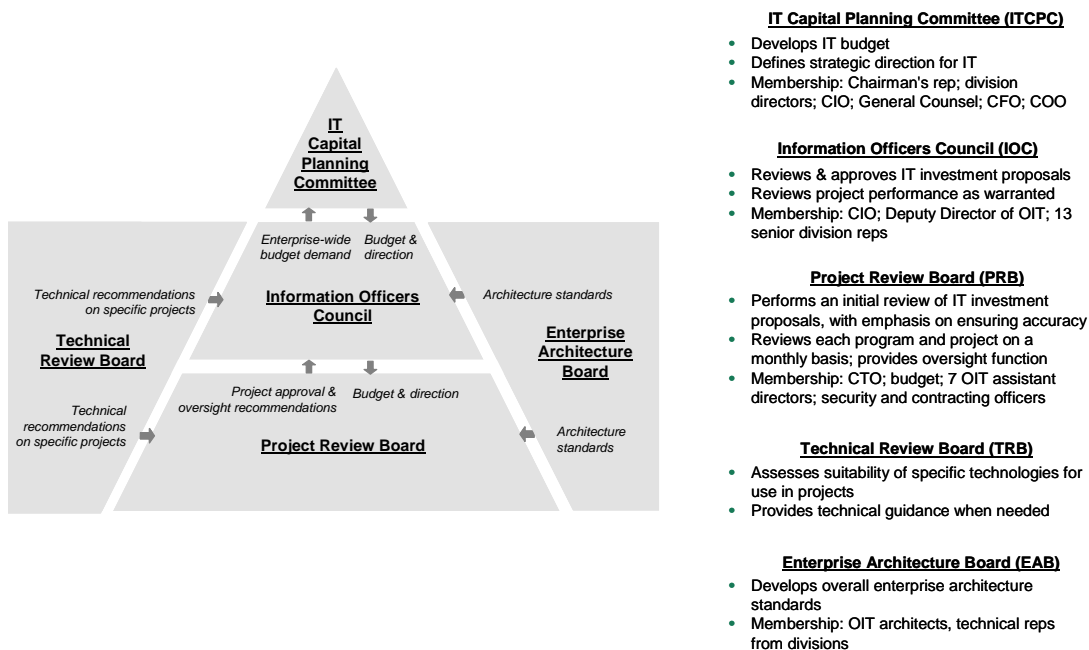
Investment governance describes how an organization plans, funds, and monitors IT service delivery. It is primarily a strategic function, as it defines the organization's IT investment priorities and determines which projects will be undertaken to meet them.

The SEC's IT governance structure is largely well-designed; its primary features largely mirror current private and public sector best practice. In particular, the structure as designed:

- Comprises multiple entities, each with a clear mandate and a membership well-suited in role and seniority to meet it
- Creates a forum for significant business involvement in strategic priority setting and investment decision-making
- Establishes appropriate technical bodies, designed to assess and advise on the technical merits of investments

As described in Exhibit 7.3.3.2-1, governance decision-making is divided between five entities with mutually-reinforcing mandates and decision rights.

Exhibit 7.3.3.2-1: Existing IT governance structure



Though the SEC's governance structure is well-designed, there are gaps in the governance process and the execution of that process. These gaps, which reduce the effectiveness of the SEC's investment governance function, are in the following areas: 1) up-front project planning; 2) consideration of project portfolio;

3) consideration of resource availability; and 4) evaluation of technical architecture.

Up-front project planning

The supporting materials for projects that are formally submitted for PRB and IOC consideration often lack the rigor required for a substantive evaluation of their merit. Business cases, when included, are typically limited in depth and rigor. Project scopes often lack specificity, and business requirements are not always fully developed. Additionally, projects are considered for approval without an explicit agreement from the sponsor that the proposed project—as submitted for approval—will meet the business need.

As a result of limited up-front planning, decision-makers often lack the information required to make informed investment decisions. The IOC and PRB are not always able to fully assess whether a proposed project will meet the business need or whether the solution has technical merit. Projects that lack sufficient up-front planning are more likely to face time and budget overruns or require mid-course adjustments.

Consideration of project portfolio

At the SEC, proposed projects are evaluated individually and in the approximate order they are submitted. Neither the IOC nor the PRB makes an explicit attempt to evaluate a project proposal in the context of the overall project portfolio across all divisions and offices, making it difficult to prioritize resources and weigh the trade-offs between projects. In the words of one staff member, “Projects are examined on a discrete basis; there is no attempt to prioritize or consider their impact on the SEC as a whole.”

The lack of a portfolio-wide view, together with the informal prioritization allowed by the governance process, may result in two situations: 1) projects may be prioritized sub-optimally, and 2) opportunities to implement enterprise-wide solutions in place of multiple systems with overlapping functionality may be missed.

Consideration of resource availability

When evaluating proposed projects, the IOC and PRB consider funding availability, but do not typically assess whether OIT has the available personnel and skill-sets required to effectively execute the project. According to one staff member, “Projects are approved depending on funding availability; no one is looking at whether we actually have the resources to carry them out.” This fact is inconsistent with the PRB’s charter, which states that the PRB must “identify adequate resources” prior to approving projects.

That specific resources are not identified prior to approval may be due in part to the fact that there is no formal, consolidated view into OIT’s available

capacity. Resourcing and capacity is tracked in an ad hoc way, and the outputs do not factor directly into investment decision-making. When project demand outstrips resource supply, or when projects are not properly scoped in the first place, adequate resources cannot be provided to all approved projects.

Evaluation of technical architecture

The IOC and PRB do not always take into account the technical design elements of a proposed project. On occasion, the PRB or IOC may request the input of the Technical Review Board, but this is atypical and usually only occurs when the project seeks to employ a new or unconventional technology.

The lack of technical evaluation of project proposals may result in two outcomes: 1) SEC architecture standards are not as closely adhered to as they otherwise would be, and 2) projects must occasionally be re-worked due to sub-optimal design, resulting in duplication of effort.

Tools and methodologies

Tools: Technology tools include tools that OIT uses to manage projects, track project-related documents, perform routine functions such as end-user support, and carry out non-critical administrative tasks.

In their current state, tools that support administrative tasks and end-user support tasks meet the needs of the organization and have widespread adoption. For example, the TeamTrack tool, which tracks change requests to the production environment, is widely seen as successful.

OIT's tools for project management, however, are limited. For instance, there is no comprehensive tool that allows for end-to-end management of business and technical requirements. Although documents at each stage of project execution may be tracked independently, there is no central tool to track such documents. Additionally, the version management tool in use lacks functionality to fully meet OIT's needs. These shortcomings can give rise to inefficiencies during project execution, such as ongoing scope changes and delays in fixing application defects.

Tool usage within OIT is also inconsistent. The SEC is keeping pace with other organizations by using Clarity, a leading project and portfolio management software system. However, OIT only uses a few of Clarity's capabilities, and those efforts are inconsistent across projects. Data such as scope changes and date adjustments are largely entered at the project managers' discretion. Additionally, there are several Clarity features that OIT does not use such as portfolio management, resource planning, and business process automation. The result of this partial usage of the project management system is reduced oversight visibility into projects.

Recently, OIT has sought to improve project tracking and its use of Clarity features. Such efforts can significantly improve OIT's ability to successfully manage projects.

Methodologies: Development methodologies are well-defined approaches to software development that lead to predictable stages of execution across projects, ultimately resulting in simpler and more thorough review processes.

Currently, OIT has a well-defined and documented software development lifecycle (SDLC), but less than half of all projects follow the SDLC as prescribed. Many project managers are unaware of the standard SDLC and its benefits, and instead use a variety of alternative development methodologies. When project managers are aware of the SDLC, they often lack incentives to adopt it. This underutilization of the SDLC leads to project oversight challenges during the quality assurance phases of system development.

The low rate of adherence to the SDLC is also driven by a lack of management vigilance. Although the Configuration Management and Quality Assurance (CMQA) branch is charged with this mandate, this branch has a significant staffing shortage. Another board, the Lifecycle Configuration Control Board (LCCB), could test for SDLC compliance during its technical review of projects, but its focus in practice is on system compatibility.

Expertise to develop and manage complex IT systems

Meeting the technology needs of the SEC requires that OIT be expert in developing and managing complex IT systems.

To develop the new systems required by the SEC, OIT must have significant skill in business systems analysis, technical architecture, and software development/integration. Maintaining these new and existing systems and implementing required day-to-day technology advancements dictates that OIT have infrastructure skills such as application support, operations support, networking and storage support, and end-user support. To support its staff, the SEC needs strong project leadership and comprehensive administrative functions such as budgeting and capital planning.

The SEC's current business systems analysis, project management, and technical architecture and development resources are insufficient to deliver in a timely and efficient manner the full breadth of systems that the agency requires. BCG analysis concluded that to meet the current level of demand, OIT faces a shortfall of approximately 125 FTEs in these roles. In interviews, senior staff indicated that these resource shortfalls were hindering OIT's ability to meet the demands of the SEC.

To date, OIT has relied heavily on outsourcing to close skill gaps in critical functions. Analysis of the existing resource mix between staff and contractors in OIT determined that over 80 percent of FTE resources are from external

contractors. While effective for many role types, outsourcing critical functions such as business analysis, project management, and technical architecture has reduced OIT's understanding of its customers' needs. OIT's senior leadership team recognizes this fact and has held preliminary discussions regarding potential strategies for adjusting the resourcing mix between staff and contractors.

OIT's staff and budget resources are primarily deployed in support of existing systems rather than the development of new systems. According to senior OIT staff, this phenomenon is largely driven by a lack of robustness in existing systems, a proliferation of single-purpose solutions, and a failure to capitalize on automation. By addressing these shortcomings, OIT could deliver significant internal efficiency gains. As an example, BCG estimates that OIT's infrastructure and support team will require approximately 65 fewer FTEs once a planned infrastructure improvement initiative is implemented (currently targeted for mid-2011, pending a planned investment of approximately \$1 million).

The current gap in system development skills and inefficiency in resource allocation leads to: 1) a reduced capability to deliver new technology systems to improve operations and keep pace with market technologies, 2) the loss of institutional knowledge as roles are filled with short-term staffing, and 3) a weakened relationship with the SEC's divisions and offices.

Organization design

An organization design that is optimized for business alignment and effective service delivery is an important component to a high-performing IT delivery organization. In the case of OIT, such a design would:

- Enable strong alignment between OIT and the SEC's offices and divisions
- Align central IT resources with those deployed within the divisions and offices
- Create synergies in activities across OIT, e.g. consolidating application development efforts in a single department
- Enable internal excellence in requirements gathering, project management and architecture design
- Support robust technology strategy and planning functions

OIT's current organizational structure, outlined in Exhibit 7.3.3.2-2, is hindered by three issues: 1) insufficient roles for addressing key functions; 2) a lack of internal alignment of roles with similar responsibilities; and 3) limited alignment with "shadow" IT staff deployed in divisions and offices.

First, the current OIT organization does not have formal roles for strategy development and data management, which exacerbates OIT's previously noted gap in technology vision and strategy. Though there are plans to emphasize the importance of data management and analytics in the organization, the lack of a

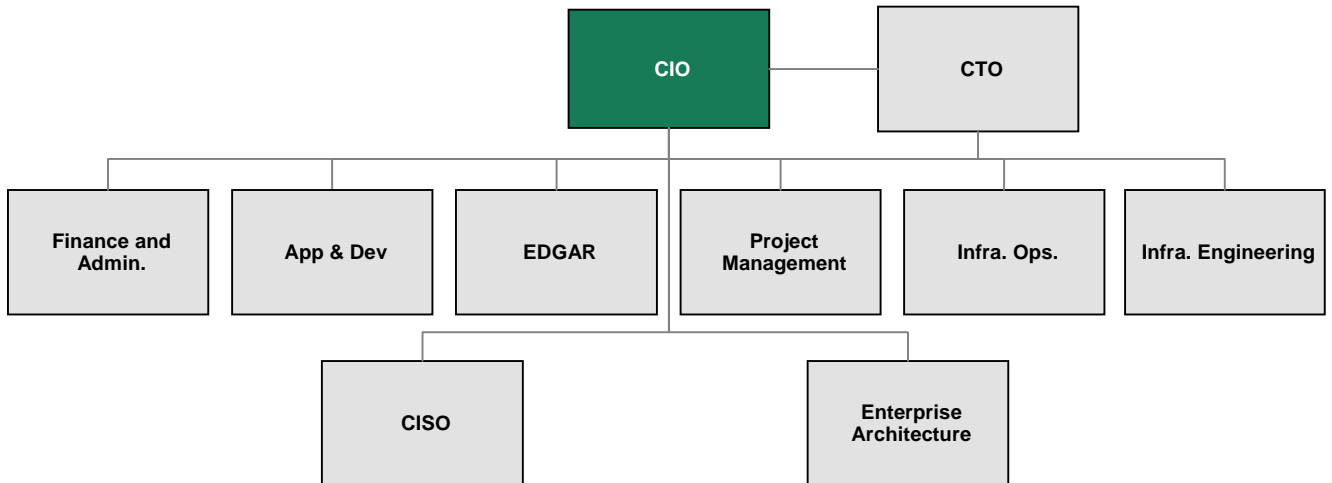
strategy development role may limit the attention these capabilities receive within OIT.

Second, the organization currently separates the application development efforts for EDGAR from the development efforts for other projects. This separation focuses necessary attention on EDGAR, but there may be a loss in synergies from separating such similar application development efforts. Key roles supporting application development (e.g., requirements gathering, project management, and architecture design) are split between different departments, limiting the opportunity to develop best practices and better utilize a central pool of resources.

Finally, several challenges arise from the limited coordination between OIT and the division or office-specific “shadow” IT organizations. This results in a duplication of activities (e.g., development of multiple division or office-specific single-purpose solutions for tracking and filing) and poor standardization for support and development activities. Additionally, there is a further opportunity for centralized automation of routine activities (e.g., password resets) that could result in increased efficiencies.

OIT’s leadership is considering plans to restructure the organization to better align OIT with “shadow” IT groups. Though no initiatives are under way, OIT’s leadership is aware of the alignment challenges and recognizes the need to develop a plan for better utilizing the SEC’s IT resources.

Exhibit 7.3.3.2-1: Current OIT organization design



Source: SEC Organizational Chart, BCG analysis

Summary

OIT faces important capability gaps that degrade its ability to proactively identify business needs and deliver technology solutions that meet them. These are: 1) the absence of a well-articulated technology vision and strategy; 2) an incomplete understanding of internal client needs; 3) an inconsistent investment governance process and execution of that process; 4) limited use of modern tools and methodologies; 5) a lack of skills and resources necessary to develop complex IT solutions; and 6) an organizational structure that is fully optimized to fulfill agency objectives.

Recently, OIT has made progress in addressing these gaps. The new leadership team has begun focusing attention on key items such as performance metrics, strategy definition, and greater consistency in the use of critical project management tools. However, while these steps are promising, much remains to be done to fully address OIT's capability gaps and position the organization to successfully deliver the complex IT solutions required by the SEC.

7.4 Relationship with SROs

7.4.1 Approach

As part of the study, BCG examined the SEC's relationship with SROs, focusing on two key aspects:

- The SEC's reliance on SROs as a co-regulator
- The SEC's oversight of SROs

This section discusses the SEC's dual role as a co-regulator to, and oversight body for, SROs. For both roles, BCG studied current activities, identified gaps, and noted any initiatives underway to mitigate those gaps. Observations and conclusions in this section are drawn from information collected through primary and secondary sources. Primary sources included interviews and reviews of internal and external documentation, and secondary sources consisted of publicly available information and official government, industry and academic reports.

BCG conducted interviews with SROs and staff members at the SEC, primarily in TM and OCIE. Additional interviews were held with other financial regulators.

Additionally, BCG leveraged studies, articles and memorandums drafted by the SEC, other regulatory agencies, regulated entities, and other market participants.¹⁷⁷

¹⁷⁷ Secondary sources in the private sector include, but are not limited to, law firm publications, financial newspapers, and academic journals and papers.

7.4.2 SEC acting as a co-regulator

7.4.2.1 Key questions explored

- *How does the SEC partner with SROs to regulate the securities markets?*
- *What are the key areas for improvement, if any, in the SEC's ability to partner with SROs?*
- *How is the SEC capitalizing on these opportunities for improvement?*

7.4.2.2 Findings

As discussed in Chapter 3, the SEC has historically relied on and worked with SROs to perform a range of regulatory activities across different regulated entities. Many of these regulatory activities require the SEC to coordinate and partner with the SROs. Consider the example of broker-dealers:

- Broker-dealers must register with the SEC and at least one SRO
- The exchanges, FINRA, and the MSRB write and interpret rules governing market structure and broker-dealer behavior
- The exchanges and FINRA conduct market surveillance, which covers broker-dealer trading activity
- Broker-dealers can be examined by the SEC through OCIE, FINRA, and/or another designated SRO at any given time. The SEC coordinates with the SROs to ensure all broker-dealers are examined regularly
- Broker-dealers can be investigated and sanctioned by the SEC through the Enforcement and by the relevant SRO(s)

Within the SEC, multiple divisions and offices work with the SROs as co-regulators. Such interactions include:

- TM works with SROs to write and interpret SEC and SRO rules governing markets and market participants
- Enforcement sends and receives referrals to and from SROs. Enforcement also leverages SRO capabilities, data, and resources to support investigations
- OCIE shares their broker-dealer examination workload with FINRA and relies on FINRA data and systems to support exams
- OCA collaborates with the PCAOB to write rules governing audit and accounting firms and evaluate trends and risks in the audit space, both in general and for specific firms

Across structure, competencies and processes for SEC/SRO interactions, BCG identified four areas for focus relating to the SEC's role as a co-regulator with SROs:

Structure

- *The SEC has an opportunity to organize and consolidate multiple points of contact with SROs and create a clear relationship owner*
- *There is potential for the SEC's divisions and offices to be more coordinated in how they partner with, and share information received from, SROs*

Competencies

- *The SEC can benefit from better visibility into the surveillance systems and activities conducted by the SROs*

Process

- *The SEC can more deeply engage with SROs and the other industry stakeholders to understand and respond to evolving market trends and risks*

Building strength in these four areas can improve the SEC's ability to promote more efficient and effective governance for the securities markets. The following describes these areas of focus in more detail and summarizes related initiatives currently underway at the SEC.

Structure

Opportunity to organize and consolidate multiple points of contact with SROs and create a clear relationship owner: SROs interact with multiple divisions and offices within the SEC—there is no centralized point of contact. When interviewed, many SROs were unable to articulate whom they viewed as their primary contact at the SEC—most responded by saying it was a mixture of OCIE, TM and Enforcement, with the primary contact varying based on the nature of the interaction. This lack of a central, coordinating body to manage SRO interactions can create inefficiencies and missed opportunities for staff at the SEC and at the SROs. SEC staff in TM and OCIE expressed mild frustration over the fact that sometimes information submitted by an SRO to one department was not automatically documented, readily accessible and shared with staff in other departments. Managers at several SROs also said that on occasion they had to spend time calling their personal contacts at the SEC to find the appropriate staff member for a given issue. Such interactions could be better documented and managed.

The lack of a central, coordinating body means that there is no authoritative person or persons at the SEC who monitors all aspects of an SRO relationship, including a history of past and ongoing interactions, data received and sent to the SRO, changes in the type of regulatory activities the SRO performs, and business model, governance, or leadership changes at the SRO. As a co-regulator, the SEC can do more to leverage an SRO's capabilities. For example, if an SRO provides data or a piece of analysis to OCIE as part of a

routine inspection, a central, coordinating body could quickly determine whether someone in TM or RSFI may also benefit from that data. Today, that opportunity would be lost unless someone within OCIE had the foresight and initiative to contact other divisions, or if someone at the SRO actively sought to share the data with other divisions in addition to providing it to OCIE.

Potential for divisions and offices within the SEC to be more coordinated in how they partner with, and share information received from, SROs: The various divisions and offices in the SEC, both at the home office and in the regions, coordinate only to a limited extent in the sharing of information received from the SROs or in collaboration with the SROs. For example, TM regularly interacts with the SROs to review proposed rules. These interactions may surface new data or capabilities that RSFI could leverage or incorporate. While TM already transmits some information to RSFI, such exchanges can be made more efficient by ensuring only relevant, actionable insights are shared. A regular series of meetings and assigned liaisons between the two divisions would help uncover such opportunities more quickly and frequently.

In the last few years, SEC senior management has increasingly advocated for a culture of cross-functional openness and sharing. This is a positive development and has led to an increase in inter- and intra-division/office collaboration. However, most interactions are still ad hoc and rely on personal networks built by agency staff over the years.

While the SEC has moved to clarify roles and responsibilities within each of the divisions and offices it has not yet taken steps to create a central point of contact or an internal “College of Regulators” to engage the SROs.

Competencies

The SEC can benefit from better visibility into the surveillance systems and activities conducted by the SROs: The SEC does not have any automated market surveillance systems. This aspect of the regulatory framework is mostly delegated to the SROs—most notably FINRA and the exchanges. Therefore, it is critical that the SEC better link its surveillance activities with those performed by SROs wherever possible. For example, the SEC could develop technology systems and resources to routinely check the surveillance systems and outputs that FINRA and the exchanges generate.

While these efforts would potentially require significant investments in technology (and therefore could be challenging given the agency’s constraints), they would enable the SEC to be a more effective partner to the SROs and give more robust feedback on how surveillance systems could be improved.

Process

Opportunity for the SEC to more deeply engage with SROs and other industry stakeholders to understand and respond to evolving market trends and risks: Currently, the SEC interacts with SROs most often when there is a specific issue at hand. For example, OCIE will visit an SRO to inspect a specific aspect of their operations, TM will hold meetings with an SRO's General Counsel to review a specific rule filing (sometimes with other divisions/ offices present), and Enforcement may solicit information regarding a specific referral received from an SRO. It is less common for the SEC to engage the SROs and discuss broader market trends and risks. More generally, there is an opportunity to better leverage the market proximity, expertise, capabilities, and resources that the SROs offer.

Many SROs interviewed expressed their desire to meet with the SEC on a more informal basis to discuss what they are observing in the market, hear what is on the SEC's agenda, and collectively work to mitigate emerging market risks. At the same time, staff members at the SEC said that it is not sustainable for the SEC to constantly react to market incidents as they occur, and that engaging the regulatory staff at SROs would help the SEC be more proactive and strategic in understanding and responding to market risks. One idea to consider is to hold a regular series of roundtable discussions with SROs, where representatives from the various SROs could meet with leaders in TM, OCIE, and other divisions and offices to share information and discuss emerging risks. The format of such a meeting could build upon, and be modeled after, the regional summits attended by the SEC's regional staff and various other industry participants and regulators.

Summary

The SEC's most important areas for development as a co-regulator to the SROs involve structure, competencies, and processes. Structurally, the SEC lacks a consolidated point of contact to the SROs, and divisions/offices would benefit from mechanisms to coordinate their interactions with SROs. From a competency standpoint, the agency can gain better visibility into the SROs' surveillance activities. Finally, there is an opportunity to work more closely with SROs and leverage their expertise and resources in dealing with market trends and risks.

7.4.3 SEC acting as an oversight body

7.4.3.1 Key questions explored

- *How does the SEC oversee SROs?*
- *Are there opportunities for the SEC to improve its oversight of SROs?*
- *What, if anything, is the SEC doing to capitalize on these opportunities today?*

7.4.3.2 Findings

Given the important role SROs play in the governance of securities markets today, it is critical that the SEC maintain a robust level of oversight over their regulatory operations.

Currently, oversight of SROs is primarily conducted by TM, OCIE, and OCA:

- TM reviews all rules submitted by the SROs. TM also conducts risk monitoring for the clearing agencies and assesses system security at the exchanges¹⁷⁸
- OCIE inspects all the exchange SROs, FINRA, and the MSRB. OCIE visits each SRO on a regular basis and conducts in-depth inspections of various aspects of their operations. For example, OCIE may visit an exchange and closely examine aspects of their surveillance systems, or it may visit FINRA and closely examine aspects of FINRA's broker-dealer registration process. During inspections, OCIE staff visit the SRO on-site, interview SRO staff, request and review data, and make recommendations for operational improvements
- OCA oversees the PCAOB and FASB. Under the PCAOB's charter, OCA reviews and approves the PCAOB's rules, standards and budget, and appoints the members of the PCAOB Board. OCA also partners with OCIE to conduct oversight inspections of the PCAOB. OCA also has the authority to change or disapprove accounting rules proposed by the FASB, although this authority is rarely executed

The SEC has undertaken several initiatives to strengthen its oversight of SROs. For example, OCIE is currently moving to a more continuous risk-based assessment of all SROs, which should improve the agency's oversight program by focusing SEC resources on critical components of an SRO's regulatory operations. Additionally, OCIE is conducting a baseline assessment of each SRO, which will help the SEC assess changes in SRO regulatory effectiveness over time. In light of Dodd-Frank, OCIE is also conducting a thorough review of FINRA's operations.¹⁷⁹ This is critical, given the depth and range of FINRA's regulatory activities. Further, TM is hiring more financial industry experts and redesigning some aspects of the organization. While such actions are primarily being taken to help TM meet various Dodd-Frank requirements, they will also improve TM's ability to review SRO rules and monitor market risks.

In the preceding section, this report identified four areas of focus where the SEC has opportunities to become a more effective co-regulator to SROs.

¹⁷⁸ TM administers the Automation Review Program, which reviews the exchange systems for adequate capacity and security.

¹⁷⁹ Section 964 of the Dodd-Frank Act directs the GAO to submit to Congress a report about the SEC's oversight of FINRA every three years

Those four areas also apply to the SEC as it seeks to be a more efficient and effective oversight body. Briefly:

- First, when there is not a central point of contact responsible for the SRO relationship, it is more difficult to centrally track changes in SRO policies, personnel, operations, and regulatory effectiveness. Centralizing activities can help the SEC be more thorough and organized in its oversight duties
- Second, coordination between TM and OCIE is currently informal and ad hoc. This makes it harder for the two departments to integrate their joint oversight responsibilities for any given SRO
- Third, bolstering the SEC's ability to oversee surveillance systems should improve the quality of audits and inspections conducted on SRO surveillance systems. This capability becomes even more important as markets continue to fragment and more equity trading moves off-exchange onto alternative trading systems, e.g., dark pools
- Fourth, if the SEC were to more deeply engage the SROs, it would be easier to maintain a continuous pulse on the SRO community and the markets they regulate

In addition, there are four other major areas where the SEC can enhance its SRO oversight capabilities:

- *The SEC could benefit from more tailored oversight of FINRA*
- *There is an opportunity to develop improved metrics and standards to measure SRO regulatory effectiveness*
- *The process for SRO rule review can be optimized*
- *Staff in TM can benefit from greater skill diversity and improved training in market structure and trading operations*

The SEC could benefit from more tailored oversight of FINRA

FINRA is the largest non-government regulator for all securities firms in the US and is the largest SRO under the SEC's authority. FINRA has approximately 3,000 employees and 20 regional offices around the country, and is roughly comparable in size to the SEC, which has approximately 4,000 employees and 12 US offices.¹⁸⁰ FINRA's operating expenses in 2009 totaled \$877 million, compared to the SEC's 2009 fiscal year operating cost of \$980 million.¹⁸¹

FINRA is responsible for conducting the vast majority of broker-dealer examinations, administering broker-dealer registration and disclosure, and

¹⁸⁰ *About the Financial Industry Regulation Authority*. Financial Industry Regulation Authority. Web. 1 Feb. 2011.

¹⁸¹ SEC figure represents Total Gross Program Cost from the SEC 2009 Annual Report (United States. U.S. Securities and Exchange Commission. *Annual Report for Fiscal Year 2009*. Washington: GPO, 2010. Print.); FINRA figure represents Total Expenses from the FINRA 2009 Annual Financial Report (Financial Industry Regulatory Authority. *2009 FINRA Annual Financial Report*. Web. 1 Feb. 2011.).

writing rules governing broker-dealer conduct. FINRA conducts surveillance for 80 percent of equity trading volume in the US and brings investigations and enforcement actions against broker-dealers who are suspected of violating its rules and the US securities laws.¹⁸² Moreover, FINRA has expressed an interest in expanding its regulatory scope to encompass all equity trade surveillance, options trade surveillance and examination authority over investment advisers.¹⁸³ In many of the regulatory areas where FINRA is active, it is increasingly becoming the sole active self-regulator.

The SEC currently oversees FINRA much the same way it oversees the other SROs licensed under the Exchange Act. Given the importance of FINRA, the SEC should consider whether a more tailored approach to oversight is warranted.

There is an opportunity to develop improved metrics and standards to measure SRO regulatory effectiveness

The SEC's oversight program does not contain a standard set of metrics for assessing the regulatory effectiveness of the SROs—either over time or relative to one another. Furthermore, the SEC has not yet established minimum standards for SROs in terms of how their regulatory operations should be structured and resourced. Current SRO evaluations primarily consist of ad-hoc inspections of individual programs or processes and one-time reviews of SRO rule filings. For example, TM will evaluate each SRO rule filing individually when it is submitted, and OCIE will evaluate individual and discrete components of an SRO's operations. In both cases, the SEC may suggest incremental ways to improve a specific rule or process, but has limited ability to measure the effectiveness of any changes implemented.

This observation becomes more relevant as markets continue to fragment and evolve. Many of the exchange SROs already appear to be diverging in their regulatory operations. Take, for example, the governance models and staffing at the national securities exchanges, which can vary markedly. Some blend the regulatory function and for-profit operations into one set of departments and managers, with one person wearing multiple hats as the General Counsel and the Chief Regulatory Officer. At the other end of the spectrum is a model that carves out an entirely separate subsidiary to handle regulatory activities. In light of the demutualization of exchanges, it is increasingly important that the SEC have

¹⁸² *Testimony to the Senate Subcommittee on Securities, Insurance, and Investment Committee on Banking, Housing, and Urban Affairs*, 111th Cong. (2010) (testimony of Stephen Luparello, Vice Chairman of FINRA).

¹⁸³ FINRA leaders have been widely cited in the media speaking in favor of consolidating equity market surveillance under one roof and expanding examinations for IA/ICs to SROs. (*Comments to the Commission*, U.S. Securities and Exchange Commission (2010) (testimony of Rick Ketchum, Chairman and CEO of FINRA). (*Testimony Before the Senate Subcommittee on Securities, Insurance, and Investment Committee on Banking, Housing, and Urban Affairs*, 111th Cong. (2010) (Rick Ketchum, Chairman and CEO of FINRA).

robust oversight mechanisms in place and a standard method for comparing the SROs.

As noted earlier, OCIE is in the process of creating a baseline assessment of all the SROs, which will be used to conduct risk-based inspections. This is a good first step, but more can be done to cover this gap and establish a robust framework of metrics and standards to evaluate SRO regulatory effectiveness.

The process for SRO rule review can be optimized

Together with the SEC, SROs are jointly responsible for writing rules to govern market structure and market participants. As mentioned above, SRO rules are often developed in collaboration with TM and are always reviewed by TM for consistency with the Exchange Act.

Historically, the SEC's process for reviewing and approving SRO rule proposals has functioned relatively well to handle a steady flow of filings submitted by SROs. However, in recent years this process has become strained. This is partly due to a shortage of staff, an increase in the volume and complexity of SRO rule filings and additional rulemaking responsibilities placed on the division. At the same time, there is the desire to ensure that every rule is written in a consistent manner and no potentially negative market consequences are overlooked. Additionally, the SEC needs to ensure every filing is thoroughly described and analyzed in order to be capable of eliciting meaningful public comment.

Several observations highlight the complex set of factors influencing the current rule review and approval processes. First, given the intense scrutiny of the SEC in the past few years, the staff may have adopted a cautious, risk-averse approach to evaluating complex rule filings, which contributes to the long lead times required to approve new rules that need approval. Second, rules are difficult to review for relevance once approved—the agency lacks a robust process to “refresh” rules. Third, there are different types of rule filings—some are simpler and more routine and thus can be reviewed more quickly, while others are more complex and require input from staff supervisors or the Commission. Finally, when considering the substance of a rule, the SEC staff could seek to give more weight to empirical data and evolving market structures in addition to the context and precedents established by historical rules; achieving this may require additional investments in analytical tools and research capabilities.

A sub-optimal rule review process potentially exposes investors to conflicting rules and trading conventions across markets. It may be useful for TM to review rules to ensure regulatory consistency across markets, although such authority will require Congressional action. Under current statutory constraints, the Exchange Act limits the SEC's rule review to assessing the proposed rule's consistency with the Exchange Act; as such, two SRO rules may conflict, but still be consistent with the Exchange Act.

Different ways to improve the rule creation and review process are under consideration, although options are limited to those within the framework established by Section 19 of the Exchange Act. For example, TM has already revised the rule review process flow to adhere to the Dodd-Frank statutory deadline for SEC action. The SEC could also seek to legislative changes to the rule review process in ways that go beyond the current statutory framework. For example, Congress could amend the Exchange Act to give the SEC authority to allow non-profit SROs (e.g., FINRA, MSRB) to self-certify rules that they write, or allow certain types of rules to be eligible for self-certification. TM already utilizes such an approach for swap execution facilities. Such changes would reduce the volume of filings submitted and allow staff to focus on the most complex and consequential rules.

Staff in TM can benefit from more skill diversity and improved training in market structure and trading operations

Staff members at the SEC are often lawyers by training, many of whom have limited direct experience in capital market structure and operations. In TM, over 50 percent of staff members are lawyers, while nearly all of the staff members who write rules and review SRO rule filings are attorneys.¹⁸⁴ While some of the staff attorneys who review SRO rules and set policies have industry experience, others could benefit from a deeper understanding of how the markets and market participants operate. Given the lack of direct market experience and expertise on the part of some staff, and in an effort to avoid sub-optimal rulemaking decisions, many of the more complex SRO rule filings require senior management attention. This can then lead to longer lead times for rule reviews to be completed. There is also an opportunity to support all staff attorneys with enhanced training and access to an organized pool of experts who can provide advice on various topics. TM already occasionally leverages expertise from other divisions and offices, such as OCIE and RSFI; more can be done to create a larger and more formalized expert network.

TM has plans to hire non-lawyer staff, including ex-traders with Wall Street experience and staff with finance or economic training, which will help diversify the division's skill set. Finally, while the SEC has taken some steps to improve general staff training, more specific training opportunities could be created for staff attorneys in TM to learn about the market.

Summary

To improve its oversight of SROs, the SEC should focus on developing a consistent set of metrics and standards to ensure a high degree of regulatory effectiveness at all SROs. It should also enhance its oversight of FINRA, the largest and most important SRO in terms of number of registrants and regulatory

¹⁸⁴ Data as of October 26, 2010, from the Office of Human Resources at the U.S. Securities and Exchange Commission.

activities performed. Finally, enhancing skill diversity and optimizing the current process for reviewing SRO rules will result to more consistency across SRO rules.

7.5 Additional analyses requested in Statement of Work

7.5.1 Exam program comparison

7.5.1.1 Key questions explored

- *How is the SEC's exam program structured and administered?*
- *How are examiners hired, trained and equipped?*
- *How frequently are exams conducted for various registrants?*
- *How does the SEC's exam program compare to exam programs at SROs and other federal financial regulators in terms of staff levels, expertise, resources available, and examiner workload?*

7.5.1.2 Methodology

This section evaluates many components of the SEC's examination program, including, but not limited to, staffing levels, expertise, resources, and workload.

As part of this study, the SEC's examination program was compared to the following examination programs at SROs and other federal financial regulators (comparable benchmark programs):

- The FINRA examination program for broker-dealers
- The PCAOB examination program for registered public accounting firms
- The CFTC audit program for registered intermediaries¹⁸⁵
- The Federal Reserve (Fed) bank supervision program
- The Federal Deposit Insurance Corporation (FDIC) bank supervision program
- The Office of the Comptroller of the Currency (OCC) bank examination process
- The National Credit Union Administration (NCUA) credit union examination program
- The Hong Kong Securities & Futures Commission (SFC) intermediary supervision program

We selected these benchmark programs in three ways. First, we selected SROs overseen by the SEC with extensive examination responsibilities. This

¹⁸⁵ The CFTC's audit program is primarily administered by two SROs overseen by the CFTC - the National Futures Association (NFA) and the CME Group. The CFTC regularly reviews the SROs' audit program results and operations. This study primarily focused on audits of Futures Commission Merchants (FCMs) done by these SROs under the oversight of the CFTC.

comprised FINRA, which examines the majority of broker-dealers in the US, and the PCAOB, which has authority to examine public accounting firms¹⁸⁶ in the US.

Second, we selected examination programs administered by applicable regulatory agencies with a voting member on the Financial Stability Oversight Council (FSOC). Currently, the FSOC has nine voting members, representing nine different regulatory agencies.¹⁸⁷ Of these nine, we excluded the Treasury Department, the FHFA, and the CFPB. The Treasury Department does not conduct any bank examinations itself; rather, that work is completed through the OCC, which is included in our evaluation. The FHFA's examination program is narrowly focused on inspecting Fannie Mae, Freddie Mac, and 12 regional FHL Banks, whose member financial institutions provide mortgage loans. Finally, the CFPB was excluded as it is a very new agency and is still in the process of recruiting and organizing its examination, supervision and enforcement staff.¹⁸⁸

Third, we sought an international benchmark for the examination program and selected the Hong Kong SFC.

BCG collected information on the SEC's and other regulator's exam programs through interviews and publicly available data sources. Over a dozen interviews were conducted with senior staff in charge of examination programs at various regulators.¹⁸⁹ Additionally, details on exam program procedures and statistics were gathered through the public websites of several regulators.¹⁹⁰

With information gathered through interviews and public documents, BCG evaluated the examination programs relative to each other along the following dimensions:

- Exam program mission and statutory mandate
- Exam selection, scoping, and staffing
- Standard exam process and objectives
- Exam program frequency and workload

¹⁸⁶ PCAOB inspects registered public accounting firms to assess compliance with the Sarbanes-Oxley Act, PCAOB rules, the rules of the SEC, and professional standards, in connection with the firm's performance of audits, issuance of audit reports, and related matters involving U.S. companies, broker-dealers and other issuers.

¹⁸⁷ The nine regulatory agencies include: Treasury Department, Federal Reserve (Fed), the Office of the Comptroller of the Currency (OCC), the Bureau of Consumer Financial Protection (CFPB), the Commission, the Federal Deposit Insurance Corporation (FDIC), the CFTC, the Federal Housing Finance Agency (FHFA), and the National Credit Union Administration (NCUA).

¹⁸⁸ The CFPB was created by the Dodd-Frank legislation and is scheduled to officially launch on July 21, 2011.

¹⁸⁹ Regulators interviewed regarding their examination program include: the SEC's OCIE, FINRA, the PCAOB, the CFTC, the FDIC, the Federal Reserve, the OCC, the Hong Kong Securities & Futures Commission (SFC).

¹⁹⁰ Example documents collected via public websites include: FDIC annual reports, the OCC's Bank Supervision Process / Comptroller's Handbook, "The Federal Reserve System: Purposes & Functions" (Board of Governors of the Federal Reserve System. *The Federal Reserve System: Purposes & Functions*. July 2005. Web. 1 Feb. 2011).

- Examiner background
- Examiner training opportunities
- Examiner access to data and tools
- Examiner focus¹⁹¹
- Availability of experts to assist examiners

An assessment of these dimensions enabled us to determine whether the SEC's examination program is appropriately structured and resourced and how effectively the program is accomplishing its goals of preventing fraud, mitigating risk, improving compliance and shaping regulatory policy.

7.5.1.3 Findings

The SEC's examination program covers broker-dealers, investment advisers, investment companies, transfer agents, NRSROs, clearing agencies, and the SROs. The exams are primarily administered by OCIE, with support from other divisions as needed. The goal of the examination program is to detect and prevent fraud, monitor and mitigate emerging areas of compliance risk, improve compliance, and inform regulatory policy setting.¹⁹²

Four key findings emerged from an analysis and comparison of the SEC's and other regulators' examination programs:

- Exam programs differ in terms of mandate and mission, driving differences in how exams are selected, scoped, and staffed
- The SEC's examination programs are similar to those of other agencies with respect to process and examiner profile
- The SEC's examination program has comparatively lower examiner to registrant ratios
- There are opportunities for the SEC to optimize its exam program

Exam programs differ in terms of statutory mandate and mission, driving differences in how exams are selected, scoped, and staffed: The SEC's exam program has a different statutory mandate and mission than that of the other federal financial regulators. This drives differences in how the exam programs select, scope and staff examinations.

¹⁹¹ Examiner focus refers to what, if any, non-exam related tasks and responsibilities are assigned to examiner staff.

¹⁹² United States. U.S. Securities and Exchange Commission. *Examinations by the Securities and Exchange Commission – Office of Compliance Inspections and Examinations*. Feb. 2010. Web. 1 Feb. 2011.

Mandate

The SEC's statutory authority to administer an examination program is drawn from the Securities Exchange Act of 1934, the Investment Company Act of 1940, and the Investment Advisers Act of 1940. The exam program's objective is to support the overall SEC mission to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation. Moreover, the SEC exam program emphasizes four key activities: detecting fraud, improving compliance, identifying risk, and informing policy decisions.

In contrast, examination programs at the Fed, FDIC, OCC, and NCUA (collectively the "bank regulators") primarily focus on supervising banking institutions to ensure the safety and soundness of the nation's banks and financial system, and to mitigate systemic risk.¹⁹³

FINRA and other SROs exercise their authority to examine broker-dealers as registered national securities associations and exchanges under the oversight of the SEC.¹⁹⁴ FINRA's mission is to protect investors and promote market integrity, consistent with the SEC's mission. Similarly, as a regulatory organization overseen by the SEC, the PCAOB's mission is to protect the interests of investors by ensuring the preparation of informative, accurate and independent audit reports.¹⁹⁵

The CFTC designates SROs to oversee their registered intermediaries.¹⁹⁶ Each SRO is responsible for conducting audits of, and ongoing financial surveillance over, their designated intermediary, under the oversight of the CFTC. Today, the two primary SROs conducting such audits are the National Futures Association and the CME Group. The SROs carry out their duties with a regulatory mission that is consistent with the CFTC's mission, which is to protect market users and the public from fraud, manipulation, and abusive practices related to the sale of commodity and financial futures and options, and to foster open, competitive, and financially sound futures and option markets.

¹⁹³ The Federal Reserve's exam program authority is drawn from the 1913 Federal Reserve Act. The FDIC and its bank examination scope and authority were created in the 1933 Glass-Steagall Act. The OCC was established by the National Currency Act of 1863 and serves to charter, regulate, and supervise all national banks and the federal branches and agencies of foreign banks in the US. The NCUA is an independent federal agency that supervises and charters federal credit unions per the Federal Credit Union Act of 1934.

¹⁹⁴ SROs examine broker-dealers for compliance with federal securities laws and their own rules by their members and associated persons of their members.

¹⁹⁵ The PCAOB was created by the Sarbanes-Oxley Act of 2002 and has authority to inspect all registered public account firms for compliance with the Sarbanes-Oxley Act and rules created by the PCAOB and the SEC.

¹⁹⁶ The CFTC was created in 1974 through the enactment of the Commodity Futures Trading Commission Act, which gave the CFTC the authority to audit its registrants for compliance with CFTC rules. The Commodity Futures Modernization Act of 2000 expanded the CFTC's mandate and also gave them authority to outsource the audit function to the CFTC's SROs.

How exams are selected, scoped and staffed

The SEC's National Exam Program includes different sub-programs customized to various regulated entities. The investment adviser/investment company (IA/IC) exam program utilizes a risk-based approach to select and scope registrants for examination. Risk is determined based on information contained in IA/IC disclosure filings, past examination reports, and other available information.¹⁹⁷ Currently, registered IA/ICs are not regularly examined on a cyclical basis. Typically, all IA/IC exams are risk-based and originate from a variety of sources, including the tips, complaints and referrals, sweeps, or other risk-based factors.¹⁹⁸

The SEC's broker-dealer examination program is markedly different from the IA/IC exam program. Currently, FINRA is the designated examining authority for all securities firms doing business with the public, and has primary responsibility for regulatory oversight of a broker-dealer's activity. As such, the SEC's broker-dealer exams complement and reinforce FINRA's efforts. The majority of the SEC's broker-dealer exams are cause exams (typically based on tips and referrals). The balance consists of other risk-based exams where the exam scope is determined by the areas of risk identified for the selected firm during exam preparation.

On an annual basis, OCIE creates and validates an exam plan through a robust governance process. Following that, OCIE selects exam candidates based on a variety of data. For example, OCIE evaluates broker-dealer disclosures, past examination results and broader market trends to identify broker-dealers that pose a higher risk in the market. Once a firm is selected for examination, OCIE then carefully scopes and staffs the examination based on the key risk factors identified. This risk-based approach is similar to methodologies employed at other federal financial regulators.

Typical SEC IA/IC and broker-dealer exam teams have two to four examiners but scale to the size and complexity of the exam scope and registrant. SEC examiners typically work on multiple cases at once, though the caseload is generally balanced so that an examiner is not starting two cases at the same time. Examiners may also specialize in specific areas as they rise in seniority. Exam staffing decisions are typically delegated to the regional offices.

In contrast to the SEC, the bank regulators are required by law to conduct safety and soundness exams for their member banks on a 12-18 month cycle. In practice, many of the regulators will examine higher risk banks on a much more frequent basis. For example, large banks undergo a continuous exam process where an on-site examination team from the Fed, FDIC, or OCC will stay at the bank year-round. Bank regulators staff each exam based on the size and

¹⁹⁷ Other information could include tips, referrals, and complaints, news/media coverage, etc.

¹⁹⁸ Sweep exams are a collection of narrowly focused exams on multiple registrants with a goal of understanding a particular type of industry activity or violation.

complexity of the bank and the specific skills needed to perform the exam. The FDIC assigns an Examiner-in-Charge (EIC) for every exam and lets the regional offices determine how many additional staff to put on each case, while the OCC centrally coordinates exam staffing, prioritizing resources to the highest risk firms and activities.

FINRA conducts sales practice exams and financial operations exams for broker-dealers registered with them.¹⁹⁹ Both types of exams are typically conducted on a one to four year cycle depending on FINRA's annual risk assessment of the member firm.²⁰⁰ This risk-based approach enables FINRA to concentrate its resources on firms and activities that may pose the greatest risk to investors. FINRA also conducts cause exams when FINRA receives tips and referrals. FINRA staffs the exams based on the size and complexity of the exam. Typical teams range from two to five examiners, with one lead examiner. Examiners usually work on multiple cases.

The CFTC, working through its SROs, requires exams (or audits) of its intermediaries every 12-15 months.²⁰¹ The NFA and CME Group both use a risk-based method to select and scope examinations, based on information collected from previous exams and registrant disclosures. The size of the exam team varies based on the complexity of the exam, with a minimum of two examiners per case.

The SEC's examination programs are similar to those of other agencies with respect to process and examiner profile

Process

The SEC employs a thorough process for selecting firms for examination. Once an exam has been selected, scoped, and staffed, the process for administering the exam is fairly standard across all the various financial regulators reviewed in this study. The standard SEC exam process for a cycle or cause exam is as follows:

- Exam selection: Select the registrant to be examined
- Exam prep: Finalize the exam team, conduct background research on the firm (e.g., through historical exam results and publicly available information)
- Determine scope: Summarize firm background information, key risks and areas for focus during the exam
- Document request: Send the examinee a list of initial data requests and a deadline for providing the documents to the SEC

¹⁹⁹ All broker-dealers must register with the SEC and at least one SRO. Approximately 90 percent of all broker-dealers are registered with FINRA.

²⁰⁰ This risk assessment is based on numerous factors, including types of products offered, financial condition, compliance profile, and other business activities conducted by the firm.

²⁰¹ This is a CFTC rule.

- Onsite inspection: Interview staff, assess the physical offices and layout, request and review additional documentation. Adjust scope if needed. This stage is highly iterative and can last from a few days to several weeks or even months
- Close-out process: Provide informal feedback at an exit interview. Issue a deficiency letter or no-action letter and review examinee's response
- Enforcement referral: If warranted, refer fraud or other violations to Enforcement for further action

FINRA, the NFA and CME Group all follow a similar exam process. Two observations should be noted, however. First, while the scope of NFA and CME Group exams are customized by the SRO audits teams, the CFTC mandates certain elements to be part of every exam and requires all intermediary audits to be opened and completed within five months. The CFTC inspects the SROs for compliance with these rules. Second, when FINRA begins an exam process that consists of a Sales Practice component and a Risk Oversight and Operational Regulation (ROOR), they will coordinate the two separate exam tracks and assign one lead examiner to oversee the consolidated exam process.

Bank regulators follow a similar exam process as well, although the focus is weighted towards financial stability versus customer or investor protection. Bank examiners seek to identify emerging risks and assess the bank management's ability to control those risks. Exams focus on those business activities that pose the greatest risk to the banks. The Fed, FDIC, OCC and NCUA are also members of the Federal Financial Institutions Examination Council (FFIEC)²⁰² and utilize the FFIEC's CAMELS bank rating system.²⁰³ The FFIEC also prescribes uniform principles, standards and reporting tools for bank exams.

Examiner profile

The SEC's hiring profile and mix of employee tenure appears in-line with other financial regulators. In general at the SEC, broker-dealer examiners typically have finance and accounting degrees. Some are right out of college, while many have work experience at securities or accounting firms. Similarly, examiners in the IA/IC examination group typically come from accounting and finance backgrounds, and many have work experience in the investment advisory industry prior to joining the SEC. Recently, OCIE has also begun hiring and designating Senior Specialist Examiners with specialized backgrounds in areas such as trading, valuation, portfolio management, and forensic accounting.

²⁰² The FFIEC is composed of the Fed, FDIC, OTC, OCC, NCUA, and State Liaison Committee. Its goal is to promote coordination of bank supervision among federal agencies, encourage better coordination of federal and state regulatory activities, and create uniform financial reports for federally supervised banks to file with their federal regulator.

²⁰³ The CAMELS rating system, also known as the Uniform Financial Institutions Rating System (UFIRS), is a bank rating system based on bank financial statements examinations used to determine the overall health and areas of risk at a bank. It was adopted by the FFIEC and its members in 1979.

The SEC examination program has comparatively lower examiner to registrant ratios

The SEC's examination program has relatively fewer examiners per registrant, resulting in a relatively heavier workload and less frequent examinations of regulated entities.²⁰⁴

The SEC is currently the only examining authority for investment advisers and investment companies (IA/ICs) (smaller IAs are registered with the states).²⁰⁵ From 2006 to 2010,²⁰⁶ the total number of OCIE staff dedicated to IA/IC exams declined from 475 to 460. Over the same time period, the number of exams declined from 1,346 to 1,083, while the total number of registrants increased from 10,665 to 11,888.²⁰⁷ As a result, the number of IA/IC registrants per exam FTE rose from 22.5 to 25.8. Additionally, the proportion of registered IA/IC registrants examined every year from 2006-2010 dropped from 13 to 9 percent. At that rate, the average registrant would only be inspected once every approximately 11 years, compared to once every approximately 7.5 years in 2006. There is no statutory mandate for how frequently any given IA/IC registrant must be examined.²⁰⁸ Changes stemming from Dodd-Frank will lead to a substantial drop in the number of IA/IC registrants.²⁰⁹ However, new types of registrants (e.g., private fund advisers, municipal securities advisors) will come under the purview of the IA/IC exam program.

FINRA has primary responsibility for examining broker-dealers, while the SEC staff will examine broker-dealers if specific risks have been identified or potential fraud and rule violations have occurred.²¹⁰ Indeed, the majority of broker-dealer exams conducted by the SEC are cause exams. In contrast, FINRA devotes the majority of its examination resources to completing cycle exams and ensuring all broker-dealers are reviewed regularly.

²⁰⁴ This analysis is focused on workload and exam frequency for broker-dealer and IA/IC examinations. These two registrant groups comprise the vast majority of exams conducted by the SEC. Workload is measured in terms of number of registrants per examiner. Frequency is measured in terms of percent of registrants examined per year, or alternately stated the average number of years between exams at any given registrant.

²⁰⁵ IA/IC exams are administered by OCIE through the Office of IA/IC Examinations. Staff examiners are located at Commission headquarters and throughout the 11 regional offices.

²⁰⁶ 2010 figures are estimates

²⁰⁷ *Study on Investment Advisers and Broker-Dealers*; U.S. Securities and Exchange Commission. *Study on Enhancing Investment Adviser Examinations*. Washington: GPO, 2011. Print.

²⁰⁸ The Investment Adviser Act and Investment Company Act states that exams can be performed "at any time and from time to time."

²⁰⁹ Dodd-Frank Act raises the threshold for IA/IC entities required to register with the SEC from \$25M assets under management (AUM) to \$100M AUM.

²¹⁰ Broker-dealer exams are administered by OCIE through the Office of Broker-Dealer Examinations. Examiners are distributed throughout the SEC's 11 regional offices and headquarters in Washington, DC. FINRA examines broker-dealers through their Member Regulation department, where examiners operate out of 15 district offices around the US.

Using data received from OCIE,²¹¹ the number of exam staff dedicated to broker-dealer exams declined from 405 in 2006 to 380 in 2010. Over the same time period, the number of exams conducted also declined from 764 to 490, and the number of registered broker-dealers declined from 6,037 to 5,357.²¹² As a result, from 2006 to 2010, the percentage of broker-dealers examined each year by the SEC declined from 13 to 9 percent, while the number of registrants per exam staff member fell slightly from 14.9 to 14.1. It should be noted that the broker-dealer examiners are also responsible for conducting over 100 exams per year for other entities registered with the SEC, such as transfer agents and clearing agencies. The SEC currently does not have a dedicated exam staff for these other registrant groups.

From 2006 to 2010, the number of FINRA examiners dedicated to broker-dealer exams increased from 634 to 843.²¹³ During this time, the number of member firms (broker-dealers) registered with FINRA and subject to exams fell from 5,029 to 4,578. Over this period, the number of cycle exams conducted rose from 2,310 to 2,666. In addition, FINRA conducted approximately 7,000 cause exams every year during this period. From this data, one can see that FINRA examined 46 percent of all registered firms in 2006 and 58 percent of all registered firms in 2010.²¹⁴ This is equivalent to every registered firm being examined every approximately 2 years, which is much more frequent than OCIE's IA/IC exam program. Additionally, FINRA's examiners have a less burdensome workload, as the ratio of registered firms to examiners declined from 7.9 to 5.4 from 2006 to 2010.

Banking regulators also appear to have more resources dedicated to their exam programs and in turn are able to examine their registrants more frequently. Exhibit 7.5.1.3-1 displays the number of exam staff, number of exams, and number of registrants for the exam programs mentioned in this section, along with comparative statistics. Note: for some exam programs, some data were not available for all years.

²¹¹ 2010 figures are estimates.

²¹² *Study on Investment Advisers and Broker-Dealers*.

²¹³ Only considering cycle exams in the calculation. FINRA data from 2007 forward reflects integrated NASD and NYSE Member Regulation programs. Data from 2006 and prior reflect NASD operations only.

²¹⁴ This assumes that no firms receive more than 1 cycle exam in any given year.

Exhibit 7.5.1.3-1: Comparative statistics across exam programs

SEC:

Exam program	Metric	2006	2007	2008	2009	2010	Unit	Notes / Assumptions
OCIE: Investment adviser exam program	# examiners	475	425	425	447	460	#	Includes all exam staff in IA/IC Office
	# registrants	10,665	10,820	11,294	11,452	11,888	#	Registrants are IA/ICs
	# exams conducted	1,346	1,379	1,521	1,244	1,083	#	All exams are risk-based
	# registrants per examiner	22.5	25.5	26.6	25.6	25.8	#	
	# exams per examiner	2.8	3.2	3.6	2.8	2.4	#	
	Pct. of registrants examined	13%	13%	13%	11%	9%	%	
	Frequency of exam (every x years)	7.9	7.8	7.4	9.2	11.0	years	Assumes no registrant is examined twice in one year
OCIE: Broker-dealer exam program	# examiners	405	392	365	376	380	#	
	# registrants	6,037	5,095	5,748	5,559	5,357	#	Registrants are broker-dealers
	# exams conducted	764	675	772	662	490	#	All exams are risk-based
	# registrants per examiner	14.9	13.0	15.7	14.8	14.1	#	
	# exams per examiner	1.9	1.7	2.1	1.8	1.3	#	
	Pct. of registrants examined	13%	13%	13%	12%	9%	%	
	Frequency of exam (every x years)	7.9	7.5	7.4	8.4	10.9	years	Assumes no registrant is examined twice in one year

SEC note: all raw data provided by the SEC staff and/or sourced from publicly available reports and studies published by the SEC staff

SROs:

Exam program	Metric	2006	2007	2008	2009	2010	Unit	Notes / Assumptions
FINRA: Broker-dealer exam program ¹	# examiners	634	837	829	803	843	#	
	# registrants	5,029	5,005	4,895	4,720	4,578	#	Registrants are broker-dealers
	# exams conducted (cycle)	2,310	2,653	2,459	2,483	2,666	#	
	# exams conducted (cause)	6,527	7,148	7,039	7,758	7,321	#	
	# exams conducted (total)	8,837	9,801	9,498	10,241	9,987	#	Equal to cycle exams + cause exams
	# registrants per examiner	7.9	6.0	5.9	5.9	5.4	#	
	# exams per examiner (cycle-only)	3.6	3.2	3.0	3.1	3.2	#	
	# exams per examiner (all exams)	13.9	11.7	11.5	12.8	11.8	#	
	Pct. of registrants examined	46%	53%	50%	53%	58%	%	Calculated as # cycle exams / # registrants in every year
Frequency of exam (every x years)	2.2	1.9	2.0	1.9	1.7	years	Assumes no registrant is examined twice in one year	
National Futures Association (NFA) ²	# examiners		117	115	128	108	#	Total number of auditors on staff at year end
	# registrants		3,768	3,806	3,816	3,722	#	In each year, NFA is the designated SRO for all registrants except for ~50
	# exams conducted		737	704	733	586	#	
	# registrants per examiner		32.2	33.1	29.8	34.5	#	
	# exams per examiner		6.3	6.1	5.7	5.4	#	
	Pct. of registrants examined		20%	18%	19%	16%	%	
Frequency of exam (every x years)			5.1	5.4	5.2	6.4	years	Assumes no registrant is examined twice in one year

¹ All raw data provided by FINRA staff. Data from 2006 reflect NASD operations, while data from 2007-2010 reflect consolidated operations of NASD and NYSE Regulation

² While the CFTC does not examine its intermediaries directly, it does perform annual assessments of the designated SROs who perform those examinations. Internal CFTC memos received from the Division of Clearing and Intermediary Oversight (DCIO) indicate that both the NFA and CME Group have adequate number of staff with the right level of experience and knowledge to execute the examination program in adherence to the guidelines established by the CFTC.

Banking regulators:

Exam program	Metric	2006	2007	2008	2009	2010	Unit	Notes / Assumptions
FDIC	# examiners	1,674	1,681	1,797	2,082		#	Estimated as a pct. of total employees in the Division of Supervision & Consumer Protection using 2009 data as a benchmark
	# registrants	5,237	5,257	5,116	4,943		#	Registrants are state-chartered institutions not members of the Federal Reserve System
	# exams conducted (safety & soundness)	2,388	2,258	2,416	2,604		#	Only includes safety & soundness exams
	# exams conducted (total)	7,399	6,972	7,270	7,858			
	# registrants per examiner	3.1	3.1	2.8	2.4		#	
	# exams per examiner (safety & soundness only)	1.4	1.3	1.3	1.3		#	
	# exams per examiner (all exams)	4.4	4.1	4.0	3.8		#	
	Pct. of registrants examined	46%	43%	47%	53%		%	Only includes safety & soundness exams
	Frequency of exam (every x years)	2.2	2.3	2.1	1.9		years	Assumes no registrant is examined twice in one year
Federal Reserve: State member banks	# examiners		624	678	737	804	#	Examiner FTEs estimated as a percentage of all field examiner resources
	# registrants		878	861	845	826	#	State member banks only
	# exams conducted		530	507	613	650	#	Only includes safety & soundness exams
	# registrants per examiner		1.4	1.3	1.1	1.0	#	
	# exams per examiner		0.8	0.7	0.8	0.8	#	
	Pct. of registrants examined		60%	59%	73%	79%	%	Only includes safety & soundness exams
	Frequency of exam (every x years)		1.7	1.7	1.4	1.3	years	Assumes no registrant is examined twice in one year
Federal Reserve: Bank holding companies	# examiners		485	527	573	626	#	Examiner FTEs estimated as a percentage of all field examiner resources. Majority of examiner resources dedicated to examining ~24 banks with over \$100Bn in assets
	# registrants		5,070	5,030	4,976	4,891	#	
	# exams conducted		3,803	3,885	4,151	4,248	#	Only includes safety & soundness exams
	# registrants per examiner		10.4	9.5	8.7	7.8	#	
	# exams per examiner		7.8	7.4	7.2	6.8	#	
	Pct. of registrants examined		75%	77%	83%	87%	%	Only includes safety & soundness exams
	Frequency of exam (every x years)		1.3	1.3	1.2	1.2	years	Assumes no registrant is examined twice in one year

Blue text indicates a number obtained from data sources; black text indicates a calculated number.

Banking regulator notes: Banking regulators are required to perform safety and soundness exams on a 12 or 18 month cycle for banks where they are primary supervisory authority. This is the primary focus for the bank examiners. For large banks and bank holding companies, bank regulators will perform a continuous, onsite, risk-focused supervision process, including multiple targeted reviews. Banking regulators also perform specialty and Community Reinvestment Act (CRA) compliance exams. While the number of these exams can be substantial, they generally require significantly less time and effort relative to the safety and soundness exams.

Raw data obtained in two ways: 1) provided by staff from relevant agency; and 2) obtained from agencies' publicly available annual reports.

Federal Reserve data note: exam counts reflect safety & soundness exams only. Exam counts reflect full, target, and limited scope exams that were led by the Federal Reserve. The Federal Reserve may have participated substantially in exams led by other agencies, such as state banking authorities; however, such exams are not reflected in the counts.

Federal Reserve data note: the level of examiner resources (# of examiners) allocated to each registrant type (state member banks and bank holding companies) is approximate and based on a historical three year average at the Fed from 2007 to 2009. The allocations reflect examiner time and some support time allocated to examinations.

Banking regulators (continued):

Exam program	Metric	2006	2007	2008	2009	2010	Unit	Notes / Assumptions
Office of the Comptroller of the Currency	# examiners		2,061	2,079	2,080	2,078	#	2009 and 2010 figures estimated as pct. of total employees using known ratios from 2007/8
	# registrants		1,677	1,678	1,565	1,487	#	Registrants are national banks
	# exams conducted		1,287	1,266	1,265	1,272	#	Only includes safety & soundness exams
	# registrants per examiner		0.8	0.8	0.8	0.7	#	
	# exams per examiner		0.6	0.6	0.6	0.6	#	
	Pct. of registrants examined		77%	75%	81%	86%	%	Assumes no registrant is examined twice in one year
	Frequency of exam (every x years)			1.3	1.3	1.2	1.2	years

Compared to other exam programs, all else being equal, the SEC faces a higher number of registrants per examiner and registrants are examined less frequently (in terms of the percentage of registrants examined each year and average number of years between exams for any given registrant). These trends have persisted for at least the last five years.

There are opportunities for the SEC to optimize its exam program

We identified seven potential opportunities to improve the SEC's exam process.

First, exams have historically frequently exceeded the SEC stipulated timeline. Per the SEC's guidelines, exams should be closed within 120 days of the completion of field work.²¹⁵ However, in practice, many exams have extended beyond this time frame; some exams take over a year to close. Such protracted exams deliver stale results and recommendations, making the process less effective and efficient for the examiners and the examined registrant. OCIE acknowledges this issue and has already taken steps to remedy it, for example by having supervisors monitor the age of open examinations and assist with exams that are taking longer than expected to complete.

Second, the SEC's examiners tend to focus on areas where there is a clear rule violation or instance of fraud. Relatively less attention is paid to the soundness of the overall business model and non-enforceable risks at the firm. Most examiners in the field work closely with their Enforcement counterparts and report to a regional director who has responsibility for examination and enforcement, thus tying the two functions together. While detecting fraud and rule violations is important and protects investors, encouraging examiners to pay more attention to business model risk will enhance the balance and well-roundedness of the exam program. OCIE recognizes this issue and is in the process of adjusting how examiners are trained and what guidelines they follow to give more attention to the broader strategic risks at examined entities.

²¹⁵ An exam is considered closed when a deficiency letter or no action letter is sent to the examined entity.

Third, while examiners should spend most of their time in examinations, many examiners in the field currently spend a material portion of their time focused on non-exam activities—either by design or out of necessity. For instance, in one of the larger SEC field offices,²¹⁶ a team of over 30 examiners shared a single administrative support FTE. This naturally meant that many of those examiners were using their time to perform administrative tasks such as filling out expense reports and filing paperwork.

Fourth, broker-dealer examiners have historically also conducted oversight exams.²¹⁷ In a typical broker-dealer exam, the examiner's responsibility is to detect fraud and rule violations and address emerging areas of risk at the firm. However, during an oversight exam, examiners assess the efficiency and effectiveness of FINRA's examination processes. While the difference is subtle, there may be variations in the skills required for someone trained to inspect broker-dealers to also be responsible for assessing FINRA's operations. Note here that OCIE is in the process of creating a separate group of examiners at headquarters dedicated to oversight exams, which would resolve this issue.

Fifth, as markets and regulated entities become more complex, the examiners will increasingly need to rely on subject matter experts for advice on specific topics. Currently, the SEC does not have an established network of experts to assist with exams, nor does it have a protocol by which examiners can identify and contact the experts. While there are staff members within the SEC who have various functional or industry expertise, they are not officially designated as an expert, and are not expected to assist with exams as part of their job. Examiners generally rely on their personal networks to find these specialists and informally ask for advice. In contrast, FINRA maintains an internal database of designated subject matter experts. The experts are expected to assist with exams, if called upon. The expert database is available to all examiners, and there is a standard procedure for contacting the experts. FINRA is also seeking ways to expand their expert network program so that the experts can be integrated into an exam for a longer period of time. The Hong Kong SFC maintains a similar network of experts whereby examiners in the field can request expert advice on a certain topic, and a central supervisory group within the exam function will quickly identify and alert an appropriate subject matter expert. At the banking regulators, the majority of senior bank examiners are specialists. As such, there is a high degree of collaboration on any given bank exam. The lead examiner can quickly identify and reach out to colleagues to provide expert advice on various aspects of an exam, if needed.

Sixth, there is potentially room for improvement in terms of the quality and quantity of training. The SEC conducts formal training for all newly hired examiners and supervisors at the home office and in regional offices. The initial

²¹⁶ Larger in terms of staff headcount in the office.

²¹⁷ Examinations of broker-dealers with the primary purpose of auditing FINRA's examination program.

training program focuses on examination procedures, financial products, and fraud detection. Trainers include professionals from the SEC staff, industry, other regulatory agencies, and academia. Examiners also have access to online training videos accessible on demand. Ongoing training opportunities sponsored by the SEC and through external sources are also available for examiners to stay abreast of industry trends and new exam procedures.

While such training initiatives are valuable, there are opportunities for enhancement. For example, OCIE holds four new-hire training sessions a year at headquarters, but examiners are hired throughout the year in the regional offices, and sometimes do not receive training for several weeks after they start. Some training materials may be too generic and not reflect the nuances of specific exam procedures and regional variations. Several regional offices interviewed indicated that they spend time and resources training their own examiners because they felt that the basic training sessions were insufficient. OCIE has plans underway to revamp the examiner training curriculum, including creating a certification program similar to those employed at FDIC and Federal Reserve.

In comparison, FINRA places all newly hired junior examiners into a one-year full-time training program combining classroom lessons and field work. This program is synchronized with FINRA's hiring waves and new examiners can begin the program immediately. At the NFA, new hires also immediately receive three weeks of initial classroom training followed by on-the-job training. After four to five months on the job, staff members then receive an additional week of advanced classroom training. All staff members have access to regular ongoing training sessions. The NFA's training program was reviewed by the CFTC and determined to be adequate for newly hired and existing compliance audit staff.

Examiners at the FDIC and Fed receive extensive initial and ongoing training sessions over a period of multiple years with the goal of passing a commissioning test administered by their respective agency. The training includes both structured classroom sessions and on-demand, mandatory online sessions. The FDIC also offers an official mentoring program pairing junior examiners with senior staff.

Seventh, it is vital that examiners have easy access to relevant data and information technology systems and tools to support their work. For example, once a document request is made, the examiner will need the right tools to process any raw data received. Examiners can also benefit from workflow tools. This may include process tools that help an examiner follow a set process and track progress, milestones, and key findings during an exam. Workflow tools can also consist of metrics or guidelines to evaluate an examined entity in a standardized way. Such tools can include hardware at the home office and in the field, along with customized or commercially available software applications.

Compared to other financial regulators, the SEC has less sophisticated technology and fewer metrics to support its exam program. Section 7.3 provides a more detailed assessment of the SEC's technology systems. Examiners typically

use publicly available information on the internet and historical exam results to research broker-dealers and IA/ICs. They have rudimentary workflow tools, which are often developed informally by regional exam teams and not centrally planned and funded. For example, examiners in one field office developed a spreadsheet tool to help them track exam progress. This tool was adopted by examiners working in other field offices. However, the tool has several limitations – it is not yet web-based and therefore difficult to share. It makes it difficult to search information, and it is not easily tailored to different exam scopes. Examiners also do not have a clear set of guidelines for how they should evaluate an examined entity. While it is important to give examiners flexibility to use their experience and expertise, having a consistent framework to use across all exams would also be beneficial. OCIE, in its effort to revamp the national examination program, has identified technology as one of five key areas for improvement.²¹⁸

There are many examples of robust tools and metrics being used in other regulators' exam programs. For example, FINRA maintains a profile on every registered broker-dealer, which is continuously updated as data are gathered through examinations and broker-dealer disclosures. FINRA also has a software workflow tool, which examiners use to adjust the exam scope and track progress during the exam. The tool is used by examiners in all district offices, and data can be easily integrated into FINRA's central databases. Similar workflow and data analysis tools are also utilized by examiners at the NFA and the CME Group when they conduct audits on behalf of the CFTC. At the banking regulators, all banks are assessed using the CAMELS system, an international bank-rating system where the examiners rate the banking institution according to six factors.²¹⁹ This system helps regulators monitor the highest risk banks. Banks also regularly file Call Reports containing material information regarding their financial stability, which examiners use to select and scope examinations. The OCC has invested in tools that allow examiners from a remote location to search OCC databases and analyze bank records more readily and securely. The OCC is also upgrading its computer hardware and broadband access in order "to support [its] highly mobile work force any time, anywhere, using any computer securely and efficiently."²²⁰

Summary

The SEC's examination program operates under a strong statutory mandate and with a clear mission. The program uses a risk-based approach for exam selection and scoping in line with industry best practices. The program

²¹⁸ The five key components are: strategy, structure, people, process, and technology.

²¹⁹ The six factors examined are as follows: C - Capital adequacy, A - Asset quality, M - Management quality, E - Earnings, L - Liquidity, S - Sensitivity to Market Risk. Bank supervisory authorities assign each bank a score on a scale of one (best) to five (worst) for each factor. If a bank has an average score less than two it is considered to be a high-quality institution, while banks with scores greater than three are considered to be less-than-satisfactory establishments.

²²⁰ United States. U.S. Department of the Treasury. Office of the Comptroller of the Currency. *Annual Report Fiscal Year 2009*. Washington: GPO, 2010. Print.

appears to have comparatively lower examiner to registrant ratios. There are several ways for the SEC to improve its exam program, including optimizing how examiners spend their time, building a network of experts to support them, and enhancing the quality and quantity of training.

7.5.2 High-frequency trading assessment

7.5.2.1 Key questions explored

- *What is high-frequency trading?*
- *What is the effect of high-frequency trading on the capital markets?*
- *What does the SEC require to effectively monitor the effects of high-frequency trading?*

7.5.2.2 Findings

Overview of high-frequency trading: High-frequency trading (HFT) is a strategy that relies on the frequent turnover of many small positions based on the detection of minute inefficiencies or market patterns. Technology and speed are key characteristics: the strategy requires automated systems capable of identifying trading opportunities and placing a large volume of trades at speeds measured in milliseconds.

The traders that employ high-frequency trading strategies are typically proprietary trading firms; some also fulfill a formal market making function. Regardless, like traditional market makers, most high-frequency traders aim to capture the spread between the price at which a security can be bought and sold. These spreads are razor-thin, typically fractions of pennies. Given this, high-frequency traders make a huge number of trades, typically holding positions for very short periods of time. Most employ a “delta-neutral” strategy, i.e. they close out positions by the end of each day.

As a result of the scale the strategy requires, high-frequency trading has emerged as one of the most significant drivers of volume in the capital markets over the last decade. It is estimated that high-frequency trading now accounts for ~56 percent of US equity trade volume, up from 35 percent in 2005.²²¹ High-frequency trading is a growing phenomenon in other markets as well.

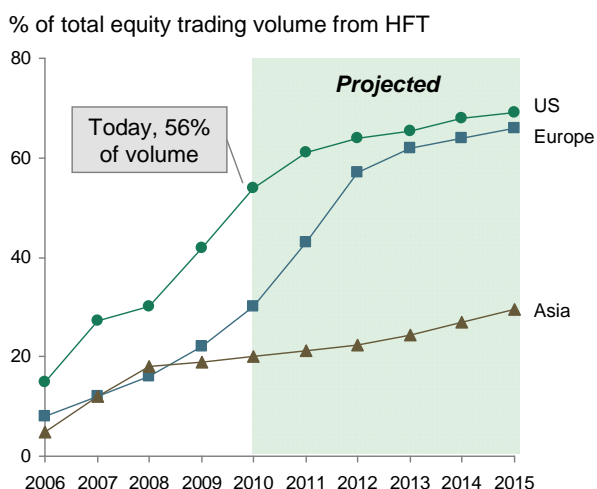
Two sets of developments have been key enablers and catalysts for the rise of high-frequency trading. The first is a series of changes that have modernized the structure of the capital markets. These include the shift to electronic trading, decimalization, competition between trading venues, and

²²¹ TABB Group.

direct market access. Advancement in technology—the lifeblood of high-frequency trading—is the second key enabler. Examples include increased computing power, the broad availability of low latency bandwidth, and advances in the fields of complex event processing and business intelligence, which drive trading algorithms.

Exhibit 7.5.2.2-1: High-frequency trading growth

High frequency trading estimated to be 56% of US equity volume



Source: TABB Group; BCG analysis

Key enablers: technology and changes to market structure

Technological innovation

- Faster, cheaper computing power
- Advancements in the field of complex event processing
- Increase in availability of low-latency bandwidth

Shift to electronic trading

Rise of alternative trading systems

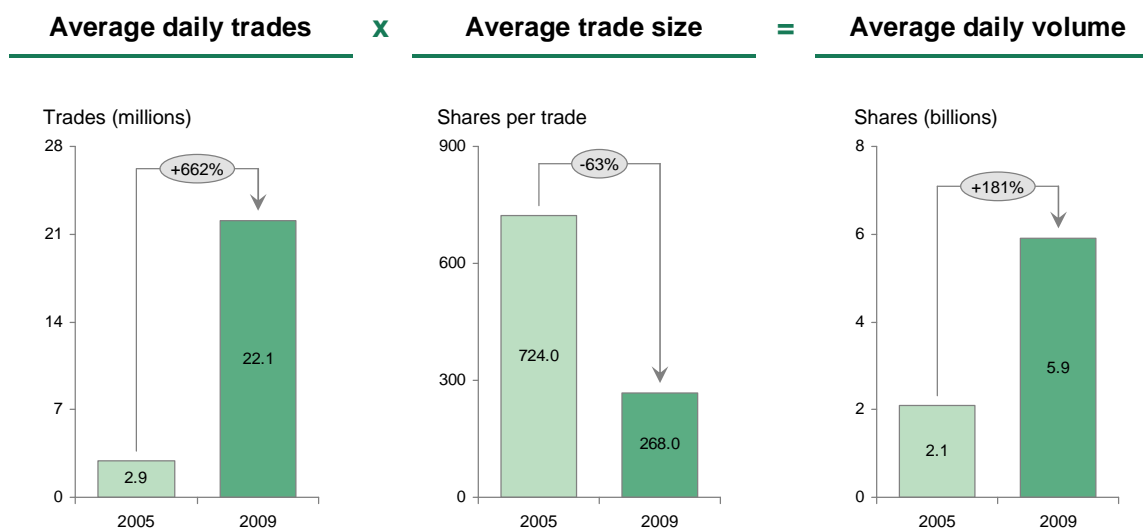
Decimalization

Regulatory changes, e.g., Reg NMS

Effect of high-frequency trading on the capital markets: The rise of high-frequency trading is credited with having a significant impact on the capital markets. It is seen as a major driver of the massive rise in trading volume over the last decade: from 2005 to 2009, the volume in NYSE-listed stocks rose by 3x; during the same period, the number of trades executed each day rose by ~8x.²²² This rise in volume, coupled with the market making function of high-frequency trading, has had the effect of deepening the capital markets and tightening spreads. In this manner, the rise of high-frequency trading has added liquidity to the market.

²²² US Securities and Exchange Commission, *Concept Release on Equity Market Structure*. Release No. 34-61358. Print.

Exhibit 7.5.2.2-2: Trends in trading activity, partly driven by high-frequency trading



Note: All data is consolidated NYSE-listed
Source: US Securities and Exchange Commission, "Concept Release on Equity Market Structure," 1/14/2010 [Release 34-61358; File S7-02-10], BCG analysis.

Critics contend this liquidity, while beneficial in normal circumstances, is far less consistent than that provided by traditional market makers. The pullback of high-frequency traders during the events of May 6, 2010 is cited as a contributing factor in the wild market swings that took place. The SEC and CFTC’s report concluded that while many high-frequency traders continued to actively trade during the market dip, others scaled-back their activity or withdrew from the market entirely.²²³ This temporary loss of liquidity exacerbated the market swing and price dislocation that occurred. A similar criticism holds in normal market circumstances as well; high-frequency trading is often cited as a potential source of increased market volatility.

High-frequency trading creates new potential for market manipulation, through schemes that leverage the speed and throughput of high-frequency trading infrastructure. Such practices include improper order cancellation tactics known as quote stuffing, passive market making activities, layering, and abusive data latency arbitrage strategies such as “front running.” Meanwhile, legitimate practices common to high-frequency trading are seen as reducing market fairness. For example, by co-locating their servers with exchange and ATS matching engines, a small number of high-frequency traders have gained a material speed advantage over other investors, potentially creating an uneven playing field.

SEC monitoring of high-frequency trading: To identify and investigate securities violations (e.g., layering), proactively assess and mitigate risks (e.g.,

²²³ United States. U.S. Securities and Exchange Commission and U.S. Commodity Futures Trading Commission. *Preliminary Findings Regarding the Market Events of May 6, 2010*, Washington: GPO, 2010. Print.

potential for price dislocation), and inform policy (e.g., circuit breaker settings), the SEC must monitor the effects of high-frequency trading. More specifically, the SEC must be able to:

- Identify and investigate market participants that employ the increasingly sophisticated forms of market manipulation high-frequency trading enables
- Perform detailed reviews of market events, such as the Events of May 6, 2010
- Identify and assess broad market trends relevant to high-frequency trading, such as increased market volatility

To effectively support these objectives, the SEC should seek to develop at least three of the capabilities outlined in Chapter 5 of this document: risk IQ, leveraging communities of interest, and technology sophistication.

Risk IQ: The SEC must be able to gather information relevant to high-frequency trading from across the SEC, SROs, and the broader community of interests (e.g., investor tips), prioritize this information, connect the dots, develop actionable insights, and then communicate these insights, as appropriate, to the relevant entities for action

Leveraging communities of interest: The SEC should seek seamless access to the market data that SROs collect in order to better support the agency's oversight activities, examination programs, and enforcement actions. Implementation of the proposed Consolidated Audit Trail would be a significant step in this direction

Technology sophistication: The SEC should have staff who understands how to leverage the technology and perform the analytics required to support investigations and assessments related to high-frequency trading. More important, the SEC requires people who know how high-frequency traders use technology

Summary

The emerging scale and importance of high-frequency trading in the capital markets, coupled with its potential negative effects, argues for continued SEC attention. Monitoring these effects will require the SEC to develop three capabilities: risk IQ, leveraging communities of interest, and technology sophistication.

7.6 Glossary

ACRONYM	DEFINITION
ALJ	Administrative Law Judge
AMEX	American Stock Exchange
ANC	Alternative Net Capital
APA	Administrative Procedure Act of 1946
ARP	Automation Review Program
ATS	Alternative Trading System
AUM	Assets Under Management
BCG	The Boston Consulting Group
BOX	Boston Options Exchange
BSE	Boston Stock Exchange
CAMELS	Capital adequacy, Asset quality, Management, Earnings, Liquidity, Sensitivity to market risk
CAT	Consolidated Audit Trail
CBOE	Chicago Board Options Exchange
CCP	Central Counterparty
CF	Division of Corporation Finance
CFO	Chief Financial Officer
CFPB	Consumer Financial Protection Bureau
CFR	Code of Federal Regulations
CFTC	Commodity Futures Trading Commission
CHX	Chicago Stock Exchange
CIO	Chief Information Officer
CLO	Chief Learning Officer
CME	Chicago Mercantile Exchange
CMQA	Configuration Management and Quality Assurance
COE	Center of Excellence
COO	Chief Operating Officer
CPA	Certified Public Accountant
CPC	Capital Planning Committee
CRA	Community Reinvestment Act
CRO	Chief Regulatory Officer
CS	Competitive Service
CTO	Chief Technology Officer
CY	Calendar Year
DCIO	Division of Clearing and Intermediary Oversight
DMA	Direct Market Access
DTC	Depository Trust Company
DTCC	Depository Trust & Clearing Corporation
EAB	Enterprise Architecture Board
EBPM	Evidence-Based Performance Management
ECN	Electronic Crossing Network
ED	Executive Director
EDGAR	Electronic Data-Gathering, Analysis, and Retrieval
EIC	Examiner-in-Charge
EO	Executive Order
ES	Excepted Service
ESHA	Excepted Service Hiring Authority
FASB	Financial Accounting Standards Board
FATF	Financial Action Task Force
FCM	Futures Commission Merchant

FCPA	Foreign Corrupt Practices Act
FDIC	Federal Deposit Insurance Corporation
FFIEC	Federal Financial Institutions Examination Council
FHFA	Federal Housing Finance Agency
FHL	Federal Housing Loan
FIFO	First In, First Out
FINRA	Financial Industry Regulatory Authority
FIRREA	Financial Institutions Reform, Recovery and Enforcement Act of 1989
FOIA	Freedom of Information Act of 1966
FSA	Financial Services Authority
FSB	Financial Stability Board
FSOC	Financial Stability Oversight Council
FTE	Full-time Equivalent
FY	Fiscal Year
GAAP	Generally Accepted Accounting Principles
GAO	Government Accountability Office (formerly General Accounting Office)
GPO	Government Printing Office
HFT	High Frequency Trading
HR	Human Resources
HUB	SEC case management system
IA/IC	Investment Adviser / Investment Company
IARD	Investment Adviser Registration Depository
IC	Individual Contributor
IDP	Individual Development Plan
IG	Inspector General
IM	Division of Investment Management
IOC	Information Officers' Council
IOMA	The Institute of Management & Administration
IOSCO	International Organization of Securities Commissions
IPO	Initial Public Offering
IQ	Intelligence Quotient
ISE	International Securities Exchange
ISS	Infrastructure Support Services
IT	Information Technology
ITCPC	Information Technology Capital Planning
ITIL	Information Technology Infrastructure Library
LCCB	Lifecycle Configuration Control Board
MSRB	Municipal Securities Rulemaking Board
MUI	Matter Under Investigation
NASD	National Association of Securities Dealers
NCUA	National Credit Union Administration
NEP	National Exam Program
NFA	National Futures Association
NRSRO	Nationally Recognized Statistical Rating Organization
NSCC	National Securities Clearing Corporation
NSX	National Stock Exchange
NTEU	National Treasury Employees Union
NYSE	New York Stock Exchange
OALJ	Office of Administrative Law Judges
OAS	Office of Administrative Services
OCA	Office of the Chief Accountant
OCC	Office of the Comptroller of the Currency
OCIE	Office of Compliance Inspections and Examinations

OCCO	Office of the Chief Operating Officer
OCRA	Office of Credit Rating Agencies
ODRP	OTC Derivatives Regulators' Forum
OED	Office of the Executive Director
OEEEO	Office of Equal Employment Opportunity
OFM	Office of Financial Management
OFOIA	Office of Freedom of Information Act and Record Management Services
OGC	Office of the General Counsel
OHR	Office of Human Resources
OIA	Office of International Affairs
OIAD	Office of the Investor Advocate
OIEA	Office of Investor Education and Advocacy
OIG	Office of the Inspector General
OIT	Office of Information Technology
OLIA	Office of Legislative and Intergovernmental Affairs
OMB	Office of Management and Budget
OMS	Office of Municipal Securities
OMWI	Office of Minority and Women Inclusion
OPA	Office of Public Affairs
OPM	Office of Personnel Management
OS	Office of the Secretary
OSP	Office of Sales Practices
OTC	Over-The-Counter
PCAOB	Public Company Accounting Oversight Board
PCX	Pacific Coast Exchange
PHLX	Philadelphia Stock Exchange
PIP	Performance Improvement Plan
PMO	Program Management Office
PRA	Paperwork Reduction Act of 1980
PRB	Project Review Board
PWP	Performance Work Plan
Reg NMS	Regulation National Market System
RIF	Reduction in Force
ROOR	Risk Oversight and Operational Regulation
RSFI	Division of Risk, Strategy, and Financial Innovation
SDLC	Software Development Lifecycle
SEC	The U.S. Securities and Exchange Commission
SFC	Hong Kong Securities & Futures Commission
SO	Senior Officer
SoC	Span of Control
SRO	Self-regulatory organization
STARS	Super Tracking And Reporting System
STP	Straight Through Processing
TCR	Tips, Complaints, and Referrals
TM	Division of Trading and Markets
TRB	Technical Review Board
UFIRS	Uniform Financial Institutions Rating System
USC	Code of Laws of the United States of America
XBRL	eXtensible Business Reporting Language