



Item 1: Cover Sheet

BlackRock Alternatives Management, LLC

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This Brochure provides information about the qualifications and business practices of BlackRock Alternatives Management, LLC, as well as its affiliated “relying advisers”, Global Energy & Power Infrastructure Advisors, L.L.C. and Global Energy & Power Infrastructure II Advisors, L.L.C. (collectively, the “Advisers”). If you have any questions about the contents of this Brochure, please contact BlackRock Alternatives Management, LLC at the telephone number provided above. Information in this Brochure has not been approved or verified by the United States Securities and Exchange Commission (“SEC”) or by any state securities authority.

The Advisers are registered as investment advisers with the SEC. Registration as an investment adviser does not imply any level of skill or training.

Additional information about BlackRock Financial Management Inc. is available on the SEC’s website at www.adviserinfo.sec.gov.

Item 2. Material Changes

Since the last annual update to the Form ADV Part 2A (the “Brochure”) on March 26, 2020 material changes to this Brochure include amendments to the following items:

Item 4 Advisory Business– *Services of Affiliates*

On February 1, 2021, BlackRock Inc. completed its acquisition of Aperio Holdings, LLC and other equity interests related to Aperio Holdings, LLC, upon which BlackRock acquired all of the outstanding equity interests of Aperio Holdings and, indirectly, all the equity interests in Aperio Group, LLC. As a result of the acquisition, Aperio Group, LLC (“Aperio”) is now an indirect wholly-owned subsidiary of BlackRock Inc. Aperio manages domestic, international, and global equity portfolios for high-net-worth individuals, institutions, and intermediaries such as wealth managers, consultants, and family offices. In addition, Aperio provides sub-advisory investment management services to registered mutual funds and pooled investment vehicles, including private funds. For further information about Aperio Group LLC, including its business practices and advisory services, please refer to its Form ADV brochure available on the SEC’s website at www.adviserinfo.sec.gov

Item 10 – Other Financial Industry Activities and Affiliations – Relationships or Arrangements with Affiliates and/or Related Persons

On May 15, 2020, PNC completed a secondary offering of 31,628,573 shares of common stock, par value \$0.01 per share (“Common Stock”) of BlackRock, Inc. (which included Common Stock issuable upon the conversion of BlackRock’s Series B Convertible Participating Preferred Stock). In addition, on May 15, 2020, BlackRock completed its repurchase from PNC of 2,650,857 shares of Common Stock from PNC. As of March 31, 2020, PNC had owned approximately 22.0% of BlackRock’s voting common stock outstanding and held approximately 22.4% of BlackRock’s capital stock. Following the completion of the secondary offering, as well as BlackRock’s repurchase of common stock from PNC (the “PNC Transaction”), PNC has no significant interest in BlackRock. As a result of the PNC Transaction, Item 10 has been updated to remove reference to PNC’s ownership interest in BlackRock.

Item 11 – Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

References to and/or conflicts relating to products or services of PNC and/or its respective other affiliates, directors, partners, trustees, managers, members, officers, and employees have been removed.

Item 3. Table of Contents

Item 1: Cover Sheet	i
Item 2. Material Changes	ii
Item 3. Table of Contents	iii
Item 4. Advisory Business	1
Overview of the Advisers	1
Advisory Services	1
Services of Affiliates	1
Item 5. Fees and Compensation	2
Advisory Fees	2
Timing and Payment of Advisory Fees	2
Other Fees and Expenses	3
Fees Paid to Adviser by Third Parties	4
Co-Investments	5
Item 6. Performance-Based Compensation and Side-By-Side Management	5
Item 7. Types of Clients	6
Overview of Clients	6
Item 8. Methods of Analysis, Investment Strategies and Risk of Loss	8
Alternative Mandates	9
Investment Strategy Risks	9
Technology and Cybersecurity Risk	17
Operating Events	18
Item 9. Disciplinary Information	19
Item 10. Other Financial Industry Activities and Affiliations	19
Affiliated Broker-Dealers	19
Affiliated Registered Investment Advisers	20
Affiliated Commodity Pool Operator / Commodity Trading Advisor	20
Relationships or Arrangements With Affiliates and/or Related Persons	20
Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading	26
Blackrock's Global Personal Trading Policy and Other Ethical Restrictions	27
Outside Activities	28
Political Contributions	28
Potential Conflicts Relating to Advisory Activities	28
Decisions Made and Actions Taken by the Blackrock Investment Advisers May Raise	
Potential Conflicts of Interest	33
Side-by-Side Management	35
Certain Principal Transactions in Connection with the Organization of a Private Fund and Blackrock US Fund	36
Certain Proprietary Transactions by BlackRock	36
Potential Restrictions and Conflicts Relating to Information Possessed or Provided by BlackRock	37
Potential Conflicts that Arise with Respect to Services Provided by or Through Various BlackRock Entities	38
Potential Conflicts Relating to BlackRock Clients' Use of Investment Consultants and Blackrock's Relationship with Pension Consultants	44
Blackrock In-Sources or Outsources Certain Services to Third Parties	44
Potential Restrictions on Investment Adviser Activity	45
Other Relationships with Clients and Market Participants	46

Legal Representation.....	46
Resolution of Conflicts	47
Item 12. Brokerage Practices	47
Selection of Brokers, Dealers and Other Trading Venues and Methods.....	47
Competing or Complementary Investments and Trade Aggregation.....	49
Directed Brokerage	51
Non-Discretionary Accounts	51
Changes to Blackrock’s Brokerage Arrangements.....	51
Item 13. Review of Accounts	51
Nature and Frequency of Client Account Review	51
Frequency and Content of Client Account Reports	52
Item 14. Client Referrals and Other Compensation	52
Payments to BlackRock by a Non-Client in Connection with Advice Provided to a Client	52
Solicitation, Introduction or Placement Arrangements	52
Item 15. Custody	53
Item 16. Investment Discretion.....	54
Item 17. Voting Client Securities	54
Item 18. Financial Information.....	56
GLOSSARY	57
BlackRock Client and Vendor Privacy Notice.....	59

Item 4. Advisory Business

Overview of the Advisers

BlackRock Alternatives Management, LLC (“BAMLLC”) is registered as an investment adviser with the Securities and Exchange Commission (“SEC”) and is an indirect wholly-owned subsidiary of BlackRock, Inc., a publicly traded company (together with its subsidiaries, “BlackRock”). Global Energy & Power Infrastructure Advisors, L.L.C. (“GEPIA”) and Global Energy & Power Infrastructure II Advisors, L.L.C. (“GEPIA II”) are affiliated advisers of BAMLLC organized as separate legal entities. BAMLLC, GEPIA and GEPIA II are permitted to satisfy their obligation to register with the SEC through the filing of a single Form ADV by BAMLLC, with GEPIA and GEPIA II as relying advisers. GEPIA and GEPIA II (each, individually, an “Adviser”), and BAMLLC (collectively, the “Advisers”) have been in business since May 11, 2009, March 29, 2012 and March 6, 2017, respectively. The Advisers’ primary advisory services focus on alternative investment strategies, including global energy and natural resources industries, as well as the infrastructure sector. The Advisers generally have common policies and procedures with respect to investment advisory clients. As of December 31, 2019, the Advisers, in aggregate, managed a total of \$11.31 billion of regulatory assets under management, all of which is managed on a discretionary basis.

Advisory Services

The Advisers provide investment advisory services to a variety of alternative investment vehicles, including separate accounts and commingled investment vehicles that would be investment companies as defined in the Investment Company Act of 1940, as amended (the “Investment Company Act”), but for section 3(c)(1) or 3(c)(7) thereof (collectively, “Private Funds”). Investment services to clients may be provided on a discretionary or non-discretionary basis. The types of clients to which each Adviser provides investment management services are disclosed in the Advisers’ Form ADV Part 1 and summarized in Item 7 (“Types of Clients”) of this Brochure. Depending on the investment strategy or strategies that a client wishes to pursue, the client’s ultimate contractual relationship may be with one or more of the Advisers.

Each Adviser generally provides investment management services in accordance with applicable investment guidelines and restrictions, including applicable restrictions on investing in certain securities, or types of securities or other financial instruments, that are developed in consultation with the client, or in accordance with the mandate selected by the client. Each pooled investment vehicle managed or otherwise advised by an Adviser is managed in accordance with its investment guidelines and restrictions and generally is not tailored to the individualized needs of any particular fund shareholder or fund investor, and an investment in such a vehicle does not, in and of itself, create an advisory relationship between the shareholder or investor and an Adviser. The Advisers use both automated and/or manual processes to manage portfolios in accordance with their stated portfolio investment guidelines and restrictions.

The current primary focus of the Advisers is to manage assets for Private Funds and institutional clients through separate accounts with mandates that focus on alternative investment strategies and invest in debt and equity instruments relating to the infrastructure sector, including the global energy and natural resources industries. For additional information regarding the services provided to Private Funds and separate accounts by the Advisers, please refer to Item 7 (“Types of Clients”) of this Brochure.

Services of Affiliates

BlackRock, Inc. operates its investment management business through the Advisers, as well as through multiple affiliates, some of which are also investment adviser registered with the SEC, one of which is a limited purpose national banking association chartered by the United States (“U.S”) Department of Treasury’s Office of the Comptroller of the Currency, and some of which are registered only with non-U.S. regulatory authorities and some of which are registered with multiple regulatory authorities (collectively, “BlackRock Investment Advisers”). The Advisers use the services of their broker-dealer affiliates which are registered under the Securities Exchange Act of

1934, as amended (the “Exchange Act”) and members of the Financial Industry Regulatory Authority (“FINRA”), as needed. For additional information, please refer to Item 10 (“Other Financial Industry Activities and Affiliations”) and Item 12 (“Brokerage Practices”) of this Brochure. The Advisers use the services of one or more BlackRock, Inc. subsidiaries or appropriate personnel of one or more BlackRock, Inc. subsidiaries for investment advice, portfolio execution and trading, operational support, and client servicing in their local or regional markets or their areas of special expertise without specific consent by the client, except to the extent explicitly restricted by the client in or pursuant to its investment management agreement (“IMA”) or inconsistent with applicable law. Arrangements among affiliates take a variety of forms, including but not limited to dual employee, delegation, participating affiliate, sub-advisory, sub-agency, or other servicing agreements. This practice is designed to make BlackRock’s global capabilities available to an Adviser’s clients in as seamless a manner as practical within a varying global regulatory framework. In these circumstances, the Adviser with which the client has its IMA remains fully responsible for the account from a legal and contractual perspective. No additional fees are charged for the affiliates’ services except as set forth in the client’s IMA, governing documents and/or offering memorandum (“OM”).

Item 5. Fees and Compensation

Advisory Fees

An Adviser’s fees generally depend on the services being provided. For investment management services, fees typically are expressed as a percentage of assets under management. Fee arrangements vary by client, and are based on a number of different factors, including investment mandate, services performed, and account/relationship size. To the extent permitted under the Investment Advisers Act of 1940, as amended (the “Advisers Act”), the Advisers can negotiate and charge performance-based fees, as well as asset-based fees. In addition, fees and allocations are often fixed, fixed plus performance, or performance only. Certain fixed fees are required to be paid up front. For an additional discussion of performance-based fees and allocations, please refer to Item 6 (“Performance-Based Compensation and Side-by-Side Management”) of this Brochure.

Timing and Payment of Advisory Fees

Private Funds

With respect to any Private Fund managed or advised by any of the Advisers (“Adviser Private Funds”), the applicable fees and expenses are set forth in the Adviser Private Fund’s IMA, subscription agreement and/or other governing documents, or the Adviser Private Fund’s Offering Memorandum (“OM”), if the Adviser Private Fund has issued an OM.

Asset-based fees generally are paid monthly, quarterly or semi-annually, and are generally calculated on the value of the account’s net or managed assets or, in the case of certain closed-end Adviser Private Funds, committed capital, invested capital or, if applicable, the vehicle’s loan capital. Without limiting the generality of the foregoing, as compensation for investment advisory services currently rendered to an Adviser Private Fund, each Adviser Private Fund typically is charged an annual management fee, payable quarterly. The management fees during the commitment period of such Adviser Private Fund generally are based on aggregate capital commitments of the limited partners and are asset-based thereafter, although in certain Adviser Private Funds, management fees are charged on a blended basis based on committed and invested capital. The management fees are negotiated collectively with the limited partners of each Adviser Private Fund, and are subject to waiver or reduction by the applicable Adviser. The management fees during the commitment period typically range from 1% to 2%. Management fees are paid by the Adviser Private Fund on behalf of the limited partners by (i) requiring limited partners to make capital contributions in respect of such fees, or (ii) withholding the amount of such fees from investment proceeds that would otherwise be distributable to the limited partners of such Adviser Private Fund. In some situations, the Advisers may cause an Adviser Private Fund to incur

indebtedness for the payment of management fees. Upon termination of a relevant advisory agreement, management fees that have been prepaid are returned on a prorated basis.

Performance-based fees or other performance-based compensation generally will be based on specified yield or total return benchmarks or periodic or cumulative performance “hurdles” and generally are payable: (i) on a quarterly or annual basis; (ii) at the time of withdrawal or redemption with respect to the amount withdrawn; and/or (iii) as redeemed or as investments are realized and/or capital is distributed. Clawback or deferral provisions also apply to performance-based fees paid with respect to certain Adviser Private Funds. Without limiting the generality of the foregoing, the general partners of the Adviser Private Funds are also currently entitled to receive carried interest of up to 20% of profits on distributions derived from the disposition of investments (and, in certain circumstances, other income from investments) following a preferred return to the limited partners as set forth in each Adviser Private Fund’s OM, where applicable, and other governing documents. The timing and amount of performance-based fees or allocations typically are described in the relevant governing documents and/or the OM, if applicable.

Institutional Separate Accounts

BAMLLC’s fees for managing a separate account are determined through negotiation with each client and are set forth in BAMLLC’s IMA with the client. An Adviser’s fee may not cover the client’s pro rata share of the fees, expenses and/or transaction charges incurred by any mutual fund, exchange-traded funds (“ETFs”) or other pooled investment vehicles (including funds or vehicles managed by an Adviser) in which the account invests. When an Adviser invests an account in an investment company registered under the Investment Company Act and advised or sub-advised by BAMLLC (“US Registered Funds”), the fee paid by clients may or may not be: (i) reduced by the account’s pro-rata share of any management fees or other fees or expenses paid by the US Registered Fund to BlackRock (including any fees paid pursuant to Rule 12b-1 of the Investment Company Act or other shareholder servicing plan) as a result of such investment or (ii) assessed on the client assets invested in such US Registered Fund.

Other Fees and Expenses

In addition to the fees described above, certain clients bear other costs associated with investments or accounts including but not limited to: (i) custodial charges, brokerage fees, commissions and related costs; (ii) interest expenses; (iii) taxes, duties and other governmental charges; (iv) transfer and registration fees or similar expenses; (v) costs associated with foreign exchange transactions; (vi) other portfolio expenses, including but not limited to index licensing fees; (vii) costs, expenses and fees (including investment advisory and other fees charged by the investment advisers of funds in which the client’s account invest) associated with products or services that are necessary or incidental to such investments or accounts, (viii) administrative services and (ix) to the extent negotiated in the IMA, certain of the expenses described in the next paragraph. With respect to certain of the services described in clause (vii), which include, but are not limited to, custodial, brokerage, futures, banking, consulting or third-party advisory or legal services, each client is required to establish business relationships with relevant service providers or other counterparties based on the client’s own credit standing. BlackRock will not have any obligation to allow its credit to be used in connection with the establishment of such relationships, nor is it expected that such service providers or counterparties will consider or rely on BlackRock’s credit in evaluating the client’s creditworthiness.

Adviser Private Funds also generally bear their own organizational, operating and other expenses including, but not limited to, in addition to those listed above: (i) sales expenses; (ii) legal expenses (which includes expenses incurred in connection with an Adviser Private Fund’s legal and regulatory compliance with U.S. and non-U.S. laws and regulations (including reporting on and compliance with Form PF), and expenses incurred in connection with complying with provisions in side letter agreements, including “most favored nations” provisions); (iii) internal and external accounting, audit, custody, administration and tax preparation expenses; (iv) out-of-pocket costs of any legal counsel (including litigation expenses); (v) insurance costs, including the cost of any D&O liability or other insurance and indemnification (including advances) or extraordinary expense or liability relating to the affairs of

Adviser Private Funds; (vi) placement compensation payable to any placement agent (including any out-of-pocket expenses of such placement agent and any indemnification expenses payable to such placement agent); (vii) expenses of the limited partner advisory boards for certain Adviser Private Funds and meetings of the limited partners; (viii) expenses of liquidating and dissolving the Adviser Private Funds, including any fees and expenses of the Adviser Private Funds' liquidator; (ix) certain travel expenses; (x) other service provider expenses (e.g., expenses related to directors of an Adviser Private Fund); (xi) all expenses incurred in connection with an Adviser Private Fund's business, affairs and operations, including identifying, structuring, managing, evaluating, trading, conducting due diligence on, investing in, acquiring, holding, restructuring, disposition of (including the transfer or sale of), any portfolio investments or prospective investments (whether or not consummated), including "broken-deal expenses," legal, accounting, engineering, consulting, management, non-disclosure agreement service providers, and other professional fees, fees of finders or sourcing partners, and travel and lodging expenses; (xii) all expenses incurred in connection with the securing and servicing of financing, including expenses related to the negotiation and documentation of agreements with one or more lenders or the posting of collateral; (xiii) all principal and interest on, and fees, costs and expenses arising out of, all borrowings and guarantees made by, and other indebtedness of, the Adviser Private Funds; (xiv) all extraordinary expenses or liabilities; (xv) all professional fees incurred in connection with the business or management of the Adviser Private Funds, including reasonable dues for professional organizations related to the investment strategy of the Adviser Private Funds; (xvi) all expenses relating to the potential transfer or actual transfer of investors' interests in the Adviser Private Funds (to the extent not paid by the transferor or transferee); (xvii) all expenses relating to any letter agreements, distribution agreements and other similar agreements with investors and prospective investors and modifications and amendments to such agreements; (xviii) all expenses incurred in connection with the creation of, and any restructuring or amendments or supplements to, the OM or governing documents of the Adviser Private Funds or, of the general partner and related entities; (xix) all expenses incurred in connection with the formation of alternative investment vehicles and special purpose vehicles and subsidiaries of the Adviser Private Funds; (xx) any amounts paid by the Adviser Private Funds or alternative investment vehicles for any hedging transactions (including any amounts necessary to satisfy margin requirements) or permitted borrowing requirements; (xxi) all expenses incurred in connection with multimedia, analytical, database, news or other third-party research services and related terminals for the delivery of such services; (xxii) all fees charged by third parties for sourcing and/or managing portfolio investments, including fees paid to administrators of portfolio investments; (xxiii) all third-party fees and expenses charged to the Adviser Private Funds, including in connection with tax and legal advice, custodial services and compliance services; (xxiv) all fees charged, and reasonable out-of-pocket expenses incurred, by the Adviser Private Funds' administrators and custodians; (xxv) management fees; and (xxvi) any value added tax payable in respect of any expenses, fees or costs set forth in clauses (i) – (xxv) above. Generally, feeder funds bear a pro rata share of the expenses associated with the related master fund. Accounts or Adviser Private Funds that invest with an underlying manager or in underlying funds generally bear associated fees (which typically include both asset based and performance-based fees) and expenses of such underlying managers and/or underlying funds. Investors and clients bear the cost of investments in funds, which can include US Registered Funds (including ETFs), or other pooled investment vehicles (including Private Funds) for which BlackRock Investment Advisers serve as investment adviser or sub-adviser ("Affiliated Funds"). Further details on expenses that are charged are in the relevant OM and/or other governing documents.

Fees Paid to Adviser by Third Parties

With respect to certain Private Funds and separate accounts an Adviser or one of its employees or affiliates at times receives commitment fees, structuring fees, administrative agency fees, break-up fees, financing fees, directors' fees, consulting fees, transaction fees, advisory fees, closing fees and other similar fees from a portfolio investment of or counterparty to such Private Fund and separate account, respectively, as well as placement or other similar fees payable to a broker-dealer ("Third-Party Fees"). The management fee received by an Adviser from a Private Fund or separate account or one of its affiliates may be reduced by the amount of Third-Party Fees received by such Adviser, or its employees or its affiliates. The extent to which an Adviser or one of its employees or affiliates may retain such Third-Party Fees, if at all, is set forth in such Private Fund's OM and/or governing documents or the IMA governing the separate account, respectively. Further details on Third-Party Fees are in

Item 6. Performance-Based Compensation and Side-By-Side Management

such Private Fund's OM and/or governing documents or the IMA governing the applicable separate account, respectively.

Various conflicts of interest may exist when Third-Party Fees can be retained by an Adviser, or its employees or its affiliates and are not required to be applied to reduce the amount of the management fee received by such Adviser. For an additional discussion of the conflicts of interest presented by an Adviser's or its employee's or its affiliate's entitlement to retain Third-Party Fees, please refer to Item 11 ("Code of Ethics, Participation or Interest in Client Transactions and Personal Trading – Conflicts of Interest Presented by the Retention of Third-Party Fees") of this Brochure.

For an additional discussion of brokerage and other transaction costs, please refer to Item 12 ("Brokerage Practices") of this Brochure.

Co-Investments

The Advisers from time to time offer certain persons (affiliated or unaffiliated) the opportunity to co-invest in particular investments alongside of a Private Fund, subject to certain restrictions. In each case where co-investors participate in an investment, the Advisers will allocate expenses associated with such investment, including broken-deal expenses, among such co-investors and other participants in the investment in accordance with BlackRock's expense allocation policies and procedures.

Item 6. Performance-Based Compensation and Side-By-Side Management

As discussed in Item 5 ("Fees and Compensation") of this Brochure, fee arrangements vary by client, and are based on a number of different factors. Where applicable, performance-based fees or other performance-based compensation is generally based on specified yield or total return benchmarks or periodic or cumulative performance "hurdles" or an appropriate index and generally are payable to the Adviser or an affiliate of the Adviser. The timing and amount of performance-based fees or allocations typically are described in the relevant governing documents and/or the OM, if applicable.

Clients should be aware that when an Adviser or an affiliate receives performance-based fees or allocations, or BlackRock personnel have any other financial incentive to achieve gains in excess of the disincentive to suffer losses, BlackRock and/or such personnel have an incentive to choose investments that are riskier or more speculative than might otherwise be chosen.

In addition, the Advisers manage different types of accounts having different fee arrangements. Side-by-side management by Advisers of accounts raises potential conflicts of interest. For example, in certain cases, an Adviser or its related persons have a financial interest in a Private Fund, and certain clients may be subject to performance-based fees or allocations while others are not or are charged higher, lower or otherwise different performance-based fees or allocations. An Adviser has an incentive to favor certain accounts over others that are less lucrative where: (i) the actions taken on behalf of one account potentially impact other similar or different accounts (e.g., because such accounts have the same or similar investment styles or otherwise compete for investment opportunities, have potentially conflicting investments or investment styles, or have differing abilities to engage in short sales and economically similar transactions); and (ii) the Adviser and its personnel have differential interests in such accounts (i.e., expose the Adviser or its related persons to differing potential for gain or loss through differential ownership interests or compensation structures, including circumstances where some accounts pay only asset-based fees while others are subject to performance or incentive fees or allocations). To help mitigate such potential conflicts of interest, BlackRock's policies and procedures state that investment decisions are to be made in accordance with the fiduciary duties owed to each such account and without consideration of BlackRock's or an Adviser's (or either of their personnel's) pecuniary, investment or other financial interests.

As a result of certain regulations governing the ability of accounts investing side-by-side, it is possible that different account types are not permitted to participate in an investment opportunity at the same time. The decision as to which accounts participate will take into account the suitability and the strategy of the applicable accounts. It is possible that an account is prevented from participating due to such investment opportunity being more appropriate within the primary strategy or secondary of another account.

Item 7. Types of Clients

Overview of Clients

As discussed in Item 4 (“Advisory Business”) of this Brochure, the Advisers’ investment management services are offered to a variety of clients. The Advisers’ clients include financial institutions and Private Funds and in the future may include, without limitation, real estate investment trusts, profit sharing plans, pension funds and other retirement accounts, charitable and endowment organizations, banks and thrift institutions, estates and trusts, and other institutional type accounts (both taxable and tax-exempt), government agencies, government chartered corporations, quasi-governmental agencies, state and local governments and non-U.S. pension funds, national banks, as well as high net worth and other individuals. Not every Adviser covered herein will manage each type of client account. The Advisers can advise both U.S. and non-U.S. clients subject to applicable law. Each of the Advisers generally utilizes the common policies and procedures described in this Brochure.

An Adviser may seek to obtain, verify, and record information that identifies each client and, as applicable, their owners and controllers of investors who retain the Adviser to manage the account or who invest in a fund managed by the Adviser, in order to help the U.S. Government fight the funding of terrorism and money laundering activities and comply with economic sanctions. The Adviser will also screen clients and, as applicable, the owners and controllers of investors who invests in Adviser Private Funds, against appropriate sanctions lists, such as those administered by the United States Office of Foreign Assets Control, European Union and United Nations, and any other applicable regimes to where the Adviser operates.

Adviser Private Funds

Adviser Private Funds currently include energy infrastructure funds (i.e., funds focusing on the energy and renewable power sector) and in the future may include, without limitation: other infrastructure funds; single investor funds; fixed income funds; equity funds; direct private equity funds and special situations funds; funds of private equity or hedge funds and funds that invest primarily in other affiliated or unaffiliated investment vehicles (“Funds of Funds”) and direct co-investment funds; and opportunistic funds.

Adviser Private Funds are organized as domestic or offshore (non-U.S.) companies, limited partnerships, limited liability companies, corporate trusts or other legal entities, in order to meet the legal, regulatory and tax demands of investors and as determined to be appropriate by the applicable. As a general matter, each Adviser Private Fund is managed in accordance with its investment objectives, strategies and guidelines and is not generally tailored to the individualized needs of any particular investor in the Adviser Private Fund (each an “Investor”). In addition, an investment in an Adviser Private Fund does not, in and of itself, create an advisory relationship between the Investor and an Adviser. Therefore, Investors must consider whether the Adviser Private Fund meets their investment objectives and risk tolerance prior to investing in an Adviser Private Fund. Information about each Adviser Private Fund, including its investment risks, can be found in its OM and/or other governing documents, which will be available to current and prospective Investors only through a BlackRock-affiliated broker-dealer or, another authorized party or directly from BlackRock. In some cases, an Adviser Private Fund is established for the benefit of a single investor, in which case the Adviser Private Fund is tailored to the individualized needs of the investor. BlackRock, or an affiliate, generally acts as general partner, managing member or investment manager or otherwise exercises investment discretion with respect to these products in which investors invest. Certain BlackRock non-U.S. affiliates act as placement agents with respect to the distribution of Adviser Private Funds to investors outside the U.S. While this Brochure includes information relevant to investors, this Brochure is designed solely to provide information about the Advisers and should not be considered to be an offer of interests in any Adviser Private Fund.

Private Funds that are offered to U.S. Persons, defined under Regulation S of the Securities Act of 1933 (“U.S. Persons”) are typically excepted from the definition of an “investment company” pursuant to Section 3(c)(1) (such Private Funds, the “3(c)(1) Funds”) or Section 3(c)(7) (such Private Funds, the “3(c)(7) Funds”) of the Investment Company Act of 1933, as amended (the “Securities Act”). Interests in the Private Funds are offered on a private placement basis or under Regulation S of the Securities Act. Interests in the 3(c)(1) Funds are offered to persons who are “accredited investors” as defined under the Securities Act, and “qualified clients” as defined in Rule 205-3 under the Advisers Act (to the extent a performance-based fee is charged). Interests in the 3(c)(7) Funds are offered to persons who are both “accredited investors” as defined under the Securities Act and “qualified purchasers” as defined under the Investment Company Act. In some cases, the Adviser Private Funds are exempt commodity pools for which an Adviser is a commodity pool operator that: (i) is exempt from certain reporting, recordkeeping and disclosure requirements pursuant to Rule 4.7 under the Commodity Exchange Act (“CEA”); (ii) is a registered commodity pool operator; or (iii) is exempt from registration and related requirements pursuant to CEA Rule 4.13(a)(3), or other provisions under the CEA and the rules of the U.S. Commodities Futures Trading Commission (“CFTC”) thereunder. In the future, one or more of the Advisers may register as a commodity pool operator, in which case certain Adviser Private Funds may be exempt commodity pools for which such Adviser is a commodity pool operator that is provided exemptive relief from certain reporting, recordkeeping and disclosure requirements pursuant to Rule 4.7. In connection with any of these exemptions, investors are required to meet additional requirements. Additionally, investors in Adviser Private Funds are subject to certain other eligibility requirements which are set forth in the OM and/or other governing documents for each of the Adviser Private Funds. BlackRock personnel (including, but not limited to, the Advisers’ investment strategy personnel responsible for the management of such Adviser Private Funds or other client accounts) who are qualified purchasers, “knowledgeable employees” (as defined in Rule 3c-5 under the Investment Company Act) or who meet the Adviser Private Fund’s eligibility criteria and other applicable regulatory requirements, and certain other eligible personnel of BlackRock are permitted to invest in the Adviser Private Funds.

Private Funds that are organized under the laws of jurisdictions outside of the U.S. may be offered outside of the U.S. to U.S. Persons, pursuant to Section 7(d) of the Investment Company Act and the relevant SEC guidance thereunder, such Private Funds can also be offered on a private placement basis to U.S. Persons (typically tax-exempt institutions) that are both “accredited investors” as defined under the Securities Act and, for 3(c)(7) Funds, “qualified purchasers” as defined under the Investment Company Act.

Certain of the Adviser Private Funds operate using “master-feeder” structures, pursuant to which trading operations reside in a “master fund” while investors access the master fund directly or invest through one or more “feeder funds” that, in turn, invest (directly or indirectly) in the master fund. Adviser Private Funds can also use special purpose vehicles to aggregate investments by Adviser Private Funds into certain underlying investments or for structuring purposes, or parallel fund structures that divide investors for tax or other purposes.

BlackRock and its related persons often invest in and/or serve as general partner or managing member, or on the board of directors or advisory board, of an Adviser Private Fund. BlackRock, and its related persons generally act as investment manager or otherwise exercise investment discretion with respect to certain Adviser Private Funds and often provide services other than advice (including, but not limited to, administration, organizing and managing the business affairs, executing and reconciling trades, preparing financial statements and providing audit support, preparing tax related schedules or documents, and sales and investor relations support, diligence and valuation services) to such funds, in some cases for a fee separate and apart from the advisory fee. An Adviser Private Fund often pays or reimburses BlackRock for certain organizational and offering expenses and operating expenses related to the Adviser Private Fund.

Institutional Separate Accounts

As discussed above in Item 4 (“Advisory Business”) of this Brochure, BAMLLC provides investment management services directly to institutional clients through separate accounts or single investor funds

pursuant to a negotiated IMA or other governing documents between BAMLLC as the investment adviser and the client. As part of its institutional separate account business, BAMLLC develops and employs investment strategies to meet individual client risk profiles. An institutional client typically consults with BAMLLC at the outset of the investment adviser-client relationship to establish customized investment guidelines applicable to BAMLLC's management of the client's account, and such guidelines are expected to often vary significantly among institutional accounts with the same investment objective.

Item 8. Methods of Analysis, Investment Strategies and Risk of Loss

In managing discretionary client accounts and providing recommendations to non-discretionary clients, the Advisers utilize various investment strategies and methods of analysis implemented by BlackRock's Investment Groups. Item 8 describes various methods of analysis and investment strategies, as well as the primary risks associated with these investment strategies. However, it is not possible to identify all risks associated with investing and the particular risks applicable to a client account will depend on the nature of the account, its investment strategy or strategies and the types of securities held.

While an Adviser seeks to manage accounts so that risks are appropriate to the strategy, it is often not possible or desirable to fully mitigate risks. Any investment includes the risk of loss and there can be no guarantee that a particular level of return will be achieved. Clients and investors should understand that they could lose some or all of their investment and should be prepared to bear the risk of such potential losses. Clients and investors should read carefully all applicable informational materials and offering/governing documents, including OMs for further information on the various risks associated with investing, prior to retaining an Adviser to manage an account or investing in any BlackRock investment product.

Advisers often consider credit ratings when analyzing bonds, notes and other debt-related investments and when evaluating the tenancy of real estate assets and the credit risk of certain real estate-related investments for client accounts. A credit rating generally reflects an assessment by the rating's provider of the relative credit risk of an investment compared to other investments rated by the provider (please see "Investment Strategy Risks - Credit/Default Risk" below). Credit rating agencies, including nationally recognized statistical rating organizations (each, a "Rating Agency"), may rate specific investments (e.g., bonds), issuers (e.g., corporations, governments and financial institutions) and/or programs (e.g., commercial paper programs). Certain types of investments generally are not rated by Rating Agencies, such as non-US government/sovereign obligations, US agency securities, time deposits at financial institutions, and derivative instruments such as credit default swaps. For those types of investments, as well as U.S. Treasury securities (some of which are not rated), where a Rating Agency has not rated the specific investment but has rated the investment's issuer, program, financial institution or underlying reference asset, an Adviser typically considers the investment to have the same Rating Agency rating as its issuer, program, financial institution or underlying reference asset, as appropriate. In the case of municipal securities, where one Rating Agency provides multiple ratings for the same security (e.g., "underlying", "insured" and/or "enhanced" ratings), an Adviser may consider the security to have the highest of the multiple ratings. For infrastructure debt, an Adviser may consider an internal credit score that may or may not differ from the Rating Agency rating of the issuer.

Certain new issue securities (regardless of type) are rated by a Rating Agency at the time of their initial offering. Preliminary prospectuses or term sheets for new issue securities often include an expected rating for the security (as determined by the underwriter and/or issuer) or a Rating Agency rating for the issuer of the security. When deciding whether to purchase a new issue security that has not yet been rated by a Rating Agency, an Adviser typically will attribute an expected rating to the security based on: (i) the expected rating of the security set forth in the preliminary prospectus or term sheet for the security; (ii) the Rating Agency's rating for the issuer of the security set forth in the preliminary prospectus or term sheet for the security; (iii) with respect to asset-backed securities, the rating of a prior issuance; or (iv) other factors. Please see "Investment Strategy Risks - New Issue Securities Risk" below for some of the risks associated with new issue securities.

Credit ratings are subject to change and do not reflect all risks associated with an investment.

Clients and investors should be aware that while an Adviser does not limit its advice to particular types of investments, mandates can be limited to certain types of securities or to the recommendation of investment advisers or managed funds, and are not always diversified. The accounts managed by the Advisers are generally not intended to provide a complete investment program for a client or investor. Clients and investors are responsible for appropriately diversifying their assets to guard against the risk of loss.

Alternative Mandates

BlackRock alternatives focus on sourcing and managing high-alpha investments with lower correlation to public markets and developing a holistic approach to address client needs in alternatives investing. Our alternatives products fall into two main categories: 1) core alternatives, and 2) currency and commodities. Core includes alternative solutions, direct hedge funds, direct private equity funds, hedge fund and private equity solutions (Funds of Funds), opportunistic private equity and credit, real estate and infrastructure offerings. Certain of these products involve a higher level of investment risk, while seeking greater returns than traditional investment products.

Alternative products invest in a wide array of instruments depending on their respective investment guidelines and objectives, including but not limited to equity securities, debt securities, swaps, warrants, commercial paper, government securities, municipal securities, options contracts, future contracts and Private Funds. A primary component of the Advisers' investment management services currently are the products and services offered in the infrastructure and related asset classes. Further information can be found in the relevant OM and/or governing document, if applicable, for each Adviser Private Fund or the IMA for each separate account.

BlackRock solicits clients to invest in such products, from time to time and when appropriate, as these investments are not necessarily appropriate for all clients. Not all clients afforded the opportunity to invest will choose to invest. BlackRock may on a discretionary basis invest in such products on a client's behalf, in accordance with the client's investment guidelines and restrictions.

Investment Strategy Risks

BlackRock supports its investment strategies with proprietary technology, such as that provided by BlackRock Solutions® ("BRS"), which produces risk management reports using technology such as its "Aladdin"® technology platform. In some cases, BlackRock's Risk & Quantitative Analysis Group ("RQA") generates supplementary daily risk reports. However, RQA generally provides periodic detailed risk analyses, including risk reports that are discussed with portfolio managers, across all asset classes, as part of the RQA risk oversight process. Among other things, RQA's role enables the risks associated with the portfolios managed by the Advisers to be understood by relevant portfolio managers and reviewed for conformity with client objectives. Prospective clients and investors should be aware that no risk management system is fail-safe, and no assurance can be given that risk frameworks employed by RQA and an Adviser's portfolio managers (e.g., stop-win, stop-loss, Sharpe Ratios, loss limits, value-at-risk or any other methodology now known or later developed) will achieve their objectives and prevent or otherwise limit substantial losses. No assurance can be given that the risk management systems and techniques or pricing models will accurately predict future trading patterns or the manner in which investments are priced in financial markets in the future. BlackRock investment professionals employ quantitatively-based financial and analytical models to aid in the selection of investments for clients and to determine the risk profile of client accounts. The success of an investment program and trading activities depends, in part, on the viability of such analytical models. Additional risks for relevant products are more fully described in such products' offering and/or governing documentation.

Certain risks apply specifically to particular investment strategies or investments in different types of securities or other investments that clients and investors should be prepared to bear. The risks involved for different client accounts or funds will vary based on each client's investment strategy and the type of securities or other

investments held in the client's account or the fund. The following are descriptions of various primary risks related to the investment strategies used by the Advisers. Not all possible risks are described below. Clients and investors should read carefully all applicable informational materials and offering/governing documents, including OMs and prospectuses for further information on the various risks prior to retaining an Adviser to manage an account or investing in any BlackRock investment product.

Asset Allocation Strategy Risk. Asset allocation strategies do not assure profit or diversification and do not protect against loss. There is a risk that the asset allocation may be incorrect in view of actual market conditions. In addition, an asset allocation strategy determination could result in underperformance as compared to other strategies with similar investment objectives and asset allocation strategies.

Asset Class Risk. Securities in a portfolio can underperform in comparison to the general securities markets, a particular securities market, or other asset classes.

Borrowing Risk. Borrowing may exaggerate changes in the net assets and returns of a portfolio. Borrowing will cost the portfolio interest expense and other fees, potentially reducing a portfolio's return. This can at times result in a need for the portfolio to liquidate positions when it may not be advantageous to do so to satisfy its borrowing obligations. Borrowing arrangements can be used to meet short-term investment and liquidity needs or to employ forms of leverage that entails risks, including the potential for higher volatility and greater declines of a portfolio's value, and fluctuations of dividend and other distribution payments.

Commodity Risk. Negative changes in a commodity market could have an adverse impact on the value of commodity-linked investments including companies that are susceptible to fluctuations in commodity markets. The value of commodity-linked investments can be affected by changes in overall market movements, taxation, terrorism, nationalization or expropriation, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity, such as, weather (e.g., drought, flooding), livestock disease, embargoes, tariffs and international economic, political and regulatory developments. The prices of sector commodities (e.g., energy, metals, agriculture and livestock) can fluctuate widely due to factors such as changes in value, supply and demand and governmental regulatory policies.

Competition Risk. There can be no assurance that the Advisers will be able to locate, consummate and exit investments that satisfy a portfolio's rate of return objectives or that a portfolio will be able to invest fully its assets.

Concentration Risk. Concentrating investments in an issuer or issuers, in a particular country, group of countries, region, market, industry, group of industries, sector or asset class means that performance will be more susceptible to loss due to adverse occurrences affecting that issuer or issuers, particular country, group of countries, region, market, industry, group of industries, sector or asset class than a more diversified mix of investments.

Controlling Interest Risk. Because of its equity ownership, representation on the board of directors and/or contractual rights, a portfolio may be considered to control or influence the conduct of portfolio companies. Under certain circumstances, such ownership or roles could be used by third parties as the basis for such parties to assert environmental, pension-related, securities law or other claims against such portfolio or its owners or affiliates.

Conversion of Equity Investments Risk. After its purchase, a non-equity investment directly or indirectly held by a portfolio, such as a convertible debt obligation may convert to an equity security (converted investment). Alternatively, a portfolio may directly or indirectly acquire equity securities in connection with a restructuring event related to one or more of its non-equity investments. Challenges in liquidating the converted investment at an advantageous time, would impact the performance of the portfolio.

Counterparty Risk. Transactions, including certain derivative transactions, entered into directly with a counterparty are subject to the risk that the counterparty will fail to perform its obligations in accordance with the agreed terms and conditions of the transaction. A counterparty's bankruptcy or other failure to perform its obligations due to financial difficulties, would result in significant delays in obtaining any recovery in a bankruptcy or other reorganization proceeding or no recovery in such circumstances.

Credit/Default Risk. Debt issuers and other counterparties of fixed income securities or instruments in some instances default on their obligation to pay interest, repay principal or make a margin payment, or default on any other obligation. Additionally, the credit quality of securities or instruments could deteriorate (e.g., downgraded by one or more Rating Agencies), which would impair a security's or instruments liquidity and decrease its value.

Currency Risk. Currencies are purchased and sold for portfolios through the use of forward contracts or other instruments. A portfolio that seeks to trade in foreign currencies can have limited access to certain currency markets due to a variety of factors including government regulations, adverse tax treatment, exchange controls, and currency convertibility issues. Certain portfolios can hold investments denominated in currencies other than the currency in which the portfolio is denominated. Currency exchange rates can be volatile, particularly during times of political or economic unrest or as a result of actions taken by central banks. A change in the exchange rates has the potential to produce significant losses to a portfolio, particularly if unhedged in whole or in part.

Debt Instruments Risk. Generally, investments in debt and credit-related instruments can be secured or unsecured and can be structurally or contractually subordinated to substantial amounts of senior indebtedness. Other factors can materially and adversely affect the market price and yield of such debt investments, including investor demand, changes in the financial condition of the applicable portfolio company, government fiscal policy and domestic or worldwide economic conditions.

Derivative Risk. Investments in derivatives, or similar instruments, including but not limited to, options, futures, options on futures, forwards, participatory notes, swaps, structured securities, tender-option bonds and derivatives relating to foreign currency transactions, which can be used to hedge a portfolio's investments or to seek to enhance returns, entail specific risks relating to liquidity, leverage and credit that can reduce returns and/or increase volatility. Losses in a portfolio from investments in derivative instruments can result from the potential illiquidity of the markets for derivative instruments, the failure of the counterparty to fulfill its contractual obligations, the portfolio receiving cash collateral under the transactions and some or all of that collateral being invested in the market, or the risks arising from margin posting requirements and related leverage factors associated with such transactions. In addition, many jurisdictions continue to review practices and regulations relating to the use of derivatives, or similar instrument. Such reviews could make such instruments more costly, limiting the availability of, or otherwise adversely affecting the value or performance of such instrument.

Developed Countries Risk. Investments in developed countries subject a portfolio to regulatory, political, currency, security, demographic, and economic risk specific to developed countries. Developed countries are impacted by changes to the economic health of certain key trading partners, regulatory burdens, debt burdens, and the price or availability of certain commodities. Developed countries tend to represent a significant portion of the global economy and have generally experienced slower economic growth than some other countries or regions.

Distressed Securities Risk. Investments in companies that are in poor financial condition, lack sufficient capital or are involved in bankruptcy or reorganization proceedings face the unique risks of lack of information with respect to the issuer, the effects of bankruptcy laws and regulations and greater market volatility than is typically found in other securities markets. As a result, investments in securities of distressed companies involve significant risks that could result in a portfolio, incurring losses with respect to such investments.

Due Diligence of and Conduct at Portfolio Companies. Before making investments, the Advisers will typically conduct due diligence that it deems reasonable and appropriate based on the facts and circumstances applicable to each investment. From time to time, outside consultants, legal advisers, accountants, investment banks and other third parties are involved in the due diligence process to varying degrees depending on the type of investment. Such involvement of third-party advisers, consultants and other third parties may present a number of risks. The due diligence investigation that an Adviser carries out with respect to any investment opportunity may not reveal or highlight all relevant facts that may be necessary or helpful in evaluating such investment opportunity. Moreover, such an investigation will not in itself result in the investment being successful.

Emerging Markets Risk. Investments in emerging markets can be subject to a greater risk of loss than investments in more developed markets, as they are more likely to experience inflation risk, political turmoil and rapid changes in economic conditions. Investing in the securities of emerging markets involves certain considerations not typically associated with investing in more developed markets, including but not limited to, the small size of such securities markets and the low volume of trading (possibly resulting in potential lack of liquidity and in price volatility), political risks of emerging markets which can include unstable governments, government intervention in securities or currency markets, nationalization, restrictions on foreign ownership and investment, laws preventing repatriation of assets and legal systems that do not adequately protect property rights. Further, emerging markets can be affected adversely by changes to the economic health of certain key trading partners, such as the U.S., regional and global conflicts and terrorism and war. Emerging markets often have less uniformity in accounting and reporting requirements, unreliable securities valuation and greater risk associated with custody of securities.

Energy and Natural Resources Industries Risks. Investments in the energy and natural resources industries and energy infrastructure assets are subject to certain special risks, including, but not limited to, the following:

- *Volatility of Commodity Prices.* The performance of all or a portion of a portfolio's investments may substantially depend upon prevailing prices of commodities, which have been, and may in the future be, volatile and subject to wide fluctuations in response to uncertain market factors that are beyond the control of an Adviser.
- *Infrastructure Assets.* Generally, investments in infrastructure assets or businesses may be affected by a number of factors including economic conditions, political events, competition, regulation and the financial position and business strategy of customers. Many of these factors are outside of the control of the owner, operator and management of a project and the related portfolio company.
- *Regulatory Risk; Government, Agency and Rate Risk.* The energy and natural resources industries are subject to comprehensive U.S. and non-U.S. federal, state and local laws and regulations, which could cause additional expenditures, decreased revenues, restrictions and delays that could materially and adversely affect the portfolio companies and the prospects of the portfolio.
- *Uncertainty of Estimates.* Estimates of energy and natural resources reserves and of factors such as solar energy intensity and movement of wind and water flow by qualified engineers are subject to wide variances based on changes in commodity prices and certain technical assumptions. Accordingly, it is possible for such estimates to be significantly revised from time to time, creating significant changes in the value of the assets or businesses owning such reserves.
- *Environmental Regulation.* Environmental laws, regulations and regulatory initiatives play a significant role in the energy and natural resources (including renewable power) industries and new and more stringent environmental laws, regulations and regulatory initiatives or stricter interpretations of current laws or regulations could impose substantial additional costs on portfolio investments.
- *Operational Risk and Catastrophic and Force Majeure Events.* The long-term profitability of energy and natural resource assets is partly dependent upon the efficient operation and maintenance of the assets and asset-owning portfolio investments. Inefficient operation and maintenance and a wide variety of events outside of a portfolio's control, including, natural disasters, may reduce the profitability of portfolio investments, adversely affecting a portfolio's financial returns.
- *Drilling, Exploration, Development and Mining Risks.* From time to time, a portfolio may invest in businesses or projects that engage in exploration and development, a speculative business involving a high degree of risk.
- *Importance of PPAs and Exposure to Merchant Power Pricing.* A portfolio investment's expected revenue generally will be dependent on it being able to enter into and sell power under medium to long-term arrangements governing power sales, which can include bilateral agreements, power hedges, feed-in-tariffs and contracts associated with the sale of renewables obligation certificates and other contractual power sale arrangements (any such arrangements are referred to as "PPAs"). There can be no assurance

that market prices will be at levels that enable a portfolio's projects to operate profitably or as projected, which may have a material adverse effect on a portfolio's performance levels.

- *Political and Societal Challenges.* Energy and energy-related projects are often subject to siting requirements. Proposals to site an energy plant or any associated infrastructure may be challenged based on alleged security concerns, disturbances to natural habitats for wildlife and adverse aesthetic impacts, as well as federal, state, local and private site selection concerns. In addition, there is the possibility that political and societal challenges could delay or prohibit the construction of a power project or impair its operations.
- *Sovereign Risk.* The rights of certain portfolio companies to extract mineral resources, or to generate, deliver or sell energy or related services and equipment are often granted by or derive from approval by governmental entities and are subject to special risks, including the risk that the relevant governmental entity will exercise sovereign rights and take actions contrary to the rights of a portfolio or the relevant portfolio company or project under the relevant agreement.
- *Terrorist Activities.* The continued threat of terrorism and the impact of military or other action have led to and will likely lead to increased volatility in prices for electricity and could affect the financial results of the portfolios due to a portfolio company being forced to increase preventative security measures or expand its insurance coverage, adversely affecting the profitability of the investment therein.
- *Effects of Ongoing Changes in the Electric Industry.* A portfolio's investments in energy and natural resource assets will be directly and indirectly affected by changes in the electric utility industries, such as increasing competitive pressures and increasing environmental regulations and standards.
- *Technical Risk.* Investments in the energy industry are subject to technical risks, including the risk of mechanical breakdown, spare parts shortages, failure to perform according to design specifications and other unanticipated events, which may adversely affect operations.
- *Climate Change and Natural Events May Reduce Energy Production Below Expectations.* Prolonged changes in climatic conditions may have a significant impact on the revenues, expenses and conditions of portfolio investments.

ESG Investing Risk – A portfolio that employs an ESG strategy may seek to achieve ESG-related outcomes, to achieve exposure to overall ESG performance or particular ESG themes, and/or to screen out particular companies and industries. Such ESG strategies may reduce or increase a portfolio's exposure to certain companies or industries and the portfolio may forego certain investment opportunities as a result. Such portfolio's performance results may be lower than other portfolios that do not seek to invest in issuers based on ESG characteristics or that use different criteria when screening out particular companies and industries. In addition, every active investment team at BlackRock considers material ESG information in its investment process alongside traditional measures of the investment management process, regardless of a portfolio's investment strategy. Portfolio management considers certain ESG characteristics with the goal of enhancing long-term performance, but investors may differ in their views of what constitutes positive or negative ESG characteristics. In evaluating a security or an issuer's ESG characteristics, BlackRock may be dependent upon information and data from third party providers, which may be incomplete, inaccurate or unavailable. As a result, there is a risk that BlackRock could incorrectly assess a security or issuer. There is also a risk that BlackRock may not apply the relevant ESG criteria correctly or that a portfolio could have indirect exposure to issuers that do not meet the relevant ESG criteria used by such portfolio. BlackRock does not make any representation or warranty, express or implied, with respect to the fairness, correctness, accuracy, reasonableness or completeness of such ESG assessment. Further, there may be limitations with respect to the readiness of ESG data in certain sectors, as well as limited availability of investments with relevant ESG characteristics in certain sectors. BlackRock may change its ESG assessment of an issuer over time. While BlackRock views ESG considerations as having the potential to contribute to a portfolio's long-term performance, there is no guarantee that such results will be achieved.

Equity Securities Risk. Equity securities are subject to changes in value and their values can be more volatile than other asset classes. The value of equity securities varies in response to many factors. These factors include, without

limitation, factors specific to an issuer and the industry in which the issuer securities are subject to stock risk. Historically, U.S. and non-U.S. stock markets have experienced periods of substantial price volatility and should be expected to do so again in the future.

Fraud. Of paramount concern in originating loans is the possibility of material misrepresentation or omission on the part of a borrower. Such inaccuracy or incompleteness may adversely affect the valuation of the collateral underlying the loans or may adversely affect the likelihood that a lien on the collateral securing the loans has been properly created and perfected. Under certain circumstances, payments to a portfolio may be reclaimed if any such payment or distribution is later determined to have been made with intent to defraud or prefer creditors.

Fraudulent Conveyance Risk. If a court in a lawsuit brought by an unpaid creditor or representative of creditors of a borrower, such as a trustee in bankruptcy or the borrower as debtor-in-possession, were to find that the borrower did not receive fair consideration or reasonably equivalent value for incurring indebtedness evidenced by a loan made by a portfolio and the grant of any security interest or other lien securing such investment made by a portfolio, and, after giving effect to the incurring of such indebtedness, the borrower (a) was insolvent; (b) was engaged in a business for which the assets remaining in such borrower constituted unreasonably small capital; or (c) intended to incur, or believed that it would incur, debts beyond its ability to pay such debts as they mature, such court could invalidate, in whole or in part, such indebtedness and such security interest or other lien as fraudulent conveyances, subordinate such indebtedness to existing or future creditors of the borrower or recover amounts previously paid by the borrower (including to the relevant portfolio) in satisfaction of such indebtedness or proceeds of such security interest or other lien previously applied in satisfaction of such indebtedness.

Frontier Markets Risk. Investments in frontier markets are subject to a greater risk of loss than investments in more developed and traditional emerging markets. Frontier markets are more likely to experience inflation, currency and liquidity risks, political turmoil and rapid changes in economic conditions than more developed and traditional emerging markets. Frontier markets often have less uniformity in accounting and reporting requirements, unreliable securities valuation and greater risk associated with custody of securities.

Hedging Risk. Hedging techniques could involve a variety of derivatives, including futures contracts, exchange-listed and over-the-counter put and call options on securities, financial indices, forward foreign currency contracts, and various interest rate transactions. A transaction used as a hedge to reduce or eliminate losses associated with a portfolio holding or particular market that a portfolio has exposure, including currency exposure, can also reduce or eliminate gains. Hedges are sometimes subject to imperfect matching between the hedging transaction and its reference portfolio holding or market (correlation risk), and there can be no assurance that a portfolio's hedging transaction will be effective. In particular, the variable degree of correlation between price movements of hedging instruments and price movements in the position being hedged creates the possibility that losses on the hedge will be greater than gains in the value of the positions of the portfolio. Increased volatility will generally reduce the effectiveness of the portfolio's currency hedging strategy. Hedging techniques involve costs, which could be significant, whether or not the hedging strategy is successful. Hedging transactions, to the extent they are implemented, will not necessarily be completely effective in insulating portfolios from currency or other risks.

Illiquid and Long-Term Investment Risk. Certain portfolios may invest in private debt instruments secured by infrastructure or other assets for which the number of potential purchasers and sellers, if any, is often limited. This factor may have the effect of limiting the availability of these obligations for origination or purchase by a respective portfolio and may also limit the ability of a portfolio to sell such obligations at their fair market value prior to termination of such portfolio or in response to changes in the economy or financial markets. In particular, such investments will be relatively illiquid and there can be no assurance that a portfolio will be able to realize on such investments in a timely manner.

Income Risk. A portfolio's income can decline in some instances when interest rates decrease. During periods of falling interest rates if an issuer is able to repay principal prior to the security's maturity ("prepayment"), the portfolio could be caused to reinvest in securities with a lower yield, resulting in a decline in the portfolio's income.

Interest Rate Risk. When interest rates increase, fixed income securities or instruments will generally decline in value. Long-term fixed income securities or instruments will normally have more price volatility because of this risk than short-term fixed income securities or instruments.

Issuer Risk. A portfolio's performance depends on the performance of individual securities to which the portfolio has exposure. Adverse changes to the financial condition or credit rating of an issuer of those securities often cause the value of the securities to decline or become worthless.

Investment Style Risk. Different investment styles tend to shift in and out of favor depending upon market and economic conditions and investor sentiment. Portfolios can outperform or underperform other portfolios that invest in similar asset classes but employ different investment styles.

Leverage Risk. A portfolio utilizing leverage will be subject to heightened risk. Leverage often involves the use of various financial instruments or borrowed capital in an attempt to increase the return on an investment and is often intrinsic to certain derivative instruments. Leverage can take the form of borrowing funds, trading on margin, derivative instruments that are inherently leveraged, including but not limited to, forward contracts, futures contracts, options, swaps (including total return financing swaps and interest rate swaps), repurchase agreements and reverse repurchase agreements, or other forms of direct and indirect borrowings and other instruments and transactions that are inherently leveraged. Any such leverage, including instruments and transactions that are inherently leveraged, can result in the portfolio's market value exposure being in excess of the net asset value of the portfolio. A portfolio could need to liquidate positions when it is not advantageous to do so to satisfy its borrowing obligations. The use of leverage entails risks, including the potential for higher volatility and greater declines of a portfolio's value, and fluctuations of dividend and other distribution payments.

Liquidity Risk. Liquidity risk exists when particular investments are difficult to purchase or sell (e.g., not publicly traded and/or no market is currently available or may become less liquid in response to market developments). This can reduce a portfolio's returns because the portfolio may be unable to transact at advantageous times or prices. Investments that are illiquid or that trade in lower volumes may be more difficult to value.

Long/Short Strategy Risk. There is no guarantee that returns on a portfolio's long or short positions will produce high, or even positive, returns and the portfolio could lose money if either or both the portfolio's long and short positions produce negative returns.

Management Risk. A portfolio is subject to management risk, which is the risk that the investment process, techniques and analyses applied will not produce the desired results, and those securities or other financial instruments selected for a portfolio will result in returns that are inconsistent with the portfolio's investment objective. Portfolios advised by BlackRock are subject to threshold limitations on aggregate and/or portfolio-level ownership interests in certain companies and commodities arising from statutory regulatory or self-regulatory organization requirements or company ownership restrictions (e.g., poison pills or other restrictions in organizational documents). In addition, legislative, regulatory, or tax developments affect the investment techniques or opportunities available in connection with managing the portfolio and can also adversely affect the ability of the portfolio to achieve its investment objective (e.g., where aggregate and/or portfolio-level ownership thresholds or limitations must be observed, a portfolio is subject to investment limitations in certain companies arising from statutory, regulatory or self-regulatory organization requirements or company ownership restrictions).

Market Risk. Market risk is the risk that one or more markets in which the portfolio invests will go down in value, including the possibility that the markets will go down sharply and unpredictably. The value of a security or other asset may decline due to changes in general market conditions, economic trends or events that are not specifically related to the issuer of the security or other asset, or factors that affect a particular issuer or issuers, exchange, country, group of countries, region, market, industry, group of industries, sector or asset class. Local, regional or global events such as war, acts of terrorism, the spread of infectious illness or other public health issue, recessions, or other events could have a significant impact on the portfolio and its investments. Selection risk is the risk that the securities selected will underperform the markets, the relevant indices or the securities selected by other

investment managers for other portfolios with similar investment objectives and investment strategies. This means the portfolio may lose money.

Non-Diversification Risk. Non-diversification of investments means a portfolio invests a large percentage of its assets in securities issued by or representing a small number of issuers or exposure types. As a result, a portfolio's performance depends on the performance of a small number of issuers or exposures.

New Issue Securities Risk. Investing in new issue securities involves risks that are in addition to those associated with investments which have been trading for an extended period of time because information typically used to evaluate investments often is not available for new issue securities. Subsequent to the purchase of a new issue security by an Adviser, information about the security or its issuer may become publicly available (e.g., the issuance of a credit rating by a Rating Agency) which could cause an Adviser to alter its view on the appropriateness of the investment for a portfolio.

Non-U.S. Securities Risk. Investments in the securities of non-U.S. issuers are subject to the risks associated with non-U.S. markets in which those non-U.S. issuers are organized and operate, including but not limited to, risks related to foreign currency, limited liquidity, less government regulation, privatization, and the possibility of substantial volatility due to adverse political, economic, geographic events, or other developments, differences in accounting, auditing and financial reporting standards, the possibility of repatriation, expropriation or confiscatory taxation, adverse changes in investment or exchange controls or other regulations and potential restrictions on the flow of international capital. These risks are often heightened for investments in smaller capital markets, emerging markets, developing markets or frontier markets.

Offshore Investor Risk. A portfolio seeking to trade in foreign currencies can have limited access to certain currency markets due to a variety of factors including government regulations, adverse tax treatment, exchange controls, and currency convertibility issues. These limitations and restrictions impact the availability, liquidity and pricing of the financial instruments that are necessary for the portfolio to gain exposure to the currency markets, impairing the portfolio's ability to achieve its investment objective.

Operational Risk. Inadequate or failed internal processes, people and systems, or external events can pose a direct or indirect risk when investing. This includes any errors, omissions, systems breakdown, natural disasters, and fraudulent activity, which could cause impact in terms of unavailability of services and potentially resulting in financial losses.

Private Investment Risk. Investments in private investments, including debt or equity investments in operating and holding companies, investment funds, joint ventures, royalty streams, commodities, physical assets, and other similar types of investments can be highly illiquid and long-term. A portfolio's ability to transfer and/or dispose of private investments is expected to be highly restricted. BlackRock may not be able to obtain material information about the private investment that other investors obtain. Private investments are not subject to the same reporting and disclosure requirements as public companies, which may increase valuation risk for those investments.

Real Assets Risk. Investments in real assets such as real estate, infrastructure and energy are subject to certain risks, including, but not limited to, the following: (i) construction risks, including labor disputes or work stoppages, shortages of material or interruptions to the availability of necessary equipment; (ii) accidents, adverse weather, force majeure or catastrophic events, such as explosions, fires or terrorist activity; (iii) personal injury or property damage; (iv) failures on the part of third-party managers or sub-contractors appointed in connection with investments or projects to adequately perform their contractual duties or operate in accordance with applicable laws; (v) exposure to stringent and complex foreign, federal, state and local laws, ordinances and regulations, including those related to financial crime, permits, government contracting, conservation, exploration and production, tenancy, occupational health and safety, foreign investment and environmental protection; (vi) environmental hazards, such as natural gas leaks, product and waste spills, pipeline and tank ruptures, and unauthorized discharges of products, wastes and other pollutants; (vii) changes to the supply and demand for properties and/or tenancies or fluctuations in the price of commodities; (viii) the financial resources of tenants; and (ix) contingent liabilities on disposition of assets.

Real Estate Risk. Historically real estate has experienced significant fluctuations and cycles in value and local market conditions which result in reductions in real estate opportunities, value of real property interests and, possibly, the amount of income generated by real property. All real estate-related investments are subject to the risk attributable to, but not limited to: (i) inability to consummate investments on favorable terms; (ii) inability to complete renovation, expansion or development on advantageous terms; (iii) adverse government, environmental and tax regulations; (iv) leasing delays, tenant bankruptcies and low occupancy levels and lease rates; and (v) changes in the liquidity of real estate markets. Real estate investment strategies which employ leverage are subject to risks normally associated with debt financing, including the risk that: (a) cash flow after debt service will be insufficient to accumulate sufficient cash for distributions; (b) existing indebtedness (which is unlikely to be fully amortized at maturity) will not be able to be refinanced; (c) terms of available refinancing will not be as favorable as the terms of existing indebtedness; or that the loan covenants will not be complied with. It is possible that property could be foreclosed upon or otherwise transferred to the mortgagee, with a consequent loss of income and asset value.

Short Selling Risk. Short sales in securities that it does not own exposes a portfolio to speculative exposure risks. If a portfolio makes short sales in securities that increase in value, the portfolio will lose value. Certain securities may not be available or eligible for short sales. Short selling involves the risks of: increased leverage, and its accompanying potential for losses; the potential inability to reacquire a security in a timely manner, or at an acceptable price; the possibility of the lender terminating the loan at any time, forcing the portfolio to close the transaction under unfavorable conditions; the additional costs that may be incurred; and the potential loss of investment flexibility caused by the obligation to provide collateral to the lender and set aside assets to cover the open position. There can be no assurance that a portfolio will be able to close out a short sale position at any particular time or at an acceptable price. Loss on short positions is subject to potential offset by investing short-sale proceeds in other investments.

U.S. Economic Risk. The U.S. is a significant trading partner with other countries. Certain changes in the U.S. economy can have an adverse effect on the economy and markets of other countries.

Valuation Risk. The net asset value of a portfolio as of a particular date may be materially greater than or less than its net asset value that would be determined if a portfolio's investments were to be liquidated as of such date. For example, if a portfolio was required to sell a certain asset or all or a substantial portion of its assets on a particular date, the actual price that a portfolio would realize upon the disposition of such asset or assets could be materially less than the value of such asset or assets as reflected in the net asset value of a portfolio. Volatile market conditions could also cause reduced liquidity in the market for certain assets, which could result in liquidation values that are materially less than the values of such assets as reflected in the net asset value of a portfolio.

Volatility Risk. The prices of a portfolio's investments can be highly volatile. Price movements of assets are influenced by, among other things, interest rates, general economic conditions, the condition of the financial markets, developments or trends in any particular industry, the financial condition of the issuers of such assets, changing supply and demand relationships, programs and policies of governments, and national and international political and economic events and policies.

Technology and Cybersecurity Risk

BlackRock is dependent on the effectiveness of the information and cybersecurity policies, procedures and capabilities it maintains to protect the confidentiality, integrity, and availability of its computer and telecommunications systems and the data that resides on or is transmitted through them. An externally caused information security incident, such as a cyber-attack including a phishing scam, malware, or denial-of-service attack, or an internally caused incident, such as failure to control access to sensitive systems, could materially interrupt business operations or cause disclosure or modification of sensitive or confidential client or competitive information. Moreover, BlackRock's increased use of mobile and cloud technologies could heighten these and other operational risks, as certain aspects of the security of such technologies may be complex, unpredictable or

beyond BlackRock's control. BlackRock's growing exposure to the public Internet, as well as any reliance on mobile or cloud technology or any failure by third-party service providers to adequately safeguard their systems and prevent cyber-attacks, could disrupt BlackRock's operations and result in misappropriation, corruption or loss of personal, confidential or proprietary information. In addition, there is a risk that encryption and other protective measures may be circumvented, particularly to the extent that new computing technologies increase the speed and computing power available. Moreover, due to the complexity and interconnectedness of BlackRock's systems, the process of upgrading existing capabilities, developing new functionalities and expanding coverage into new markets and geographies, including to address client or regulatory requirements, may expose BlackRock to additional cyber- and information-security risks or system disruptions, for BlackRock, as well as for clients who rely upon, or have exposure to, BlackRock's systems. Although BlackRock has implemented policies and controls, and takes protective measures, to strengthen its computer systems, processes, software, technology assets and networks to prevent and address potential data breaches, inadvertent disclosures, cyber-attacks and cyber-related fraud, there can be no assurance that any of these measures prove effective.

In addition, due to BlackRock's interconnectivity with third-party vendors, advisers, central agents, exchanges, clearing houses and other financial institutions, BlackRock may be adversely affected if any of them are subject to a successful cyber-attack or other information security event, including those arising due to the use of mobile technology or a third-party cloud environment. BlackRock also routinely transmits and receives personal, confidential or proprietary information by email and other electronic means. BlackRock collaborates with clients, vendors and other third parties to develop secure transmission capabilities and protect against cyber-attacks. However, BlackRock cannot ensure that it or such third parties have all appropriate controls in place to protect the confidentiality of such information.

Any information security incident or cyber-attack against BlackRock or third parties with whom it is connected, or issuers of securities or instruments in which the client portfolios invests, including any interception, mishandling or misuse of personal, confidential or proprietary information, have the ability to cause disruptions and impact business operations, potentially resulting in financial losses, the inability to transact business, violations of applicable privacy and other laws, loss of competitive position, regulatory fines and/or sanctions, breach of client contracts, reputational harm or legal liability. Furthermore, many jurisdictions in which BlackRock operates have laws and regulations relating to data privacy, cybersecurity and protection of personal information, including the General Data Protection Regulation, which expands data protection rules for individuals within the European Union and for personal data exported outside the European Union. Any determination of a failure to comply with any such laws or regulations could result in fines and/or sanctions against the BlackRock.

Operating Events

Trade errors and other operational mistakes ("Operating Events") occasionally occur in connection with an Adviser's management of funds and client accounts ("Portfolios"). The Advisers have policies and procedures that address identification and correction of Operating Events, consistent with applicable standards of care and client documentation. An Operating Event generally is compensable by an Adviser to a client or fund when it is a mistake (whether an action or inaction) in which the Adviser has, in the Adviser's reasonable view, deviated from the applicable investment guidelines or the applicable standard of care in managing a Portfolio, subject to the considerations set forth below.

Operating Events may include, but are not limited to: (i) the placement of orders (either purchases or sales) in excess of the amount of securities intended to trade for a Portfolio; (ii) the purchase (or sale) of a security when it should have been sold (or purchased); (iii) the purchase or sale of a security not intended for the Portfolio; (iv) the purchase or sale of a security contrary to applicable investment guidelines or restrictions; (v) incorrect allocations of trades; (vi) failure to properly file for and/or pay taxes; and (vii) transactions with a non-authorized counterparty. Operating Events can also occur in connection with other activities that are undertaken by an Adviser and its affiliates, such as net asset value calculation, management fee calculations, calculations of carried interest or incentive fees, trade recording and settlement and other matters that are non-advisory in nature.

An Adviser makes its determinations regarding Operating Events pursuant to its policies on a case-by-case basis, in its discretion, based on factors it considers reasonable, including regulatory requirements, contractual obligations, and business practices. Not all Operating Events will be considered compensable mistakes. Relevant factors an Adviser considers when evaluating whether an Operating Event is compensable include, among others, the nature of the service being provided at the time of the event, specific applicable contractual and legal requirements and standards of care, whether an applicable investment objective or guideline was contravened, the nature of the client's investment program, and the nature of the relevant circumstances. Operating Events may result in gains or losses or could have no financial impact. Clients or funds generally are entitled to retain any gain resulting from an Operating Event.

When BlackRock determines that reimbursement by BlackRock is appropriate, the client or fund will be compensated as determined in good faith by BlackRock. BlackRock will determine the amount to be reimbursed, if any, based on what it considers reasonable guidelines regarding these matters in light of all of the facts and circumstances related to the Operating Event. In general, compensation is expected to be limited to direct and actual losses, which may be calculated relative to comparable conforming investments, market factors and benchmarks and with reference to related transactions and/or other factors BlackRock considers relevant. Compensation generally will not include any amounts or measures that BlackRock determines are indirect, consequently, speculative or uncertain.

Item 9. Disciplinary Information

There have not been any legal or disciplinary events that are material to the Advisers' advisory business or the integrity of the Advisers' management.

Item 10. Other Financial Industry Activities and Affiliations

BlackRock is a broad financial services organization. In some cases, the Advisers have business arrangements with related persons/companies that are material to the Advisers' advisory business or to their clients. In some cases, these business arrangements create a potential conflict of interest, or the appearance of a conflict of interest between the Adviser and a client. The services that BlackRock provides its clients through its Advisers or through investments in a BlackRock investment product, as well as related conflicts of interest, are discussed in Item 11 ("Code of Ethics, Participation or Interest in Client Transactions and Personal Trading") of this Brochure. Potential conflicts of interest are also discussed in other governing documents, including but not limited to in an OM and/or IMA.

Affiliated Broker-Dealers

BlackRock Investments, LLC ("BRIL") and BlackRock Execution Services ("BES") are indirect wholly-owned subsidiaries of BlackRock, Inc. registered under the Exchange Act.

- BRIL is primarily engaged in the distribution of BlackRock proprietary and third-party registered investment companies, including through wholesale marketing, to other registered broker-dealers, investment advisers, banks and other entities, as well as through self-directed online treasury management platforms, marketing 529 municipal fund securities and the sale of certain other investment products to institutional investors. BRIL also acts as placement agent for certain Private Funds advised by BlackRock Realty, affiliated registered investment advisers and BTC, and acts as the distributor for BlackRock's exchange-traded funds registered under the Investment Company Act ("US iShares ETFs").
- BES provides account introduction and execution services to certain transition accounts of BlackRock Investment Advisers and affiliates that have been authorized or directed by the transition clients to use BES to the extent consistent with applicable laws.

Affiliated Registered Investment Advisers

The Advisers have affiliates that are direct or indirect wholly-owned subsidiaries of BlackRock, Inc., registered as investment advisers with the SEC under the Advisers Act. Additional information about the Advisers and affiliated registered investment advisers is available on the SEC's website at www.adviserinfo.sec.gov.

- BlackRock (Singapore) Limited
- BlackRock Advisors, LLC
- BlackRock Asset Management North Asia Limited
- BlackRock Asset Management Schweiz, AG
- BlackRock Capital Investment Advisors, LLC
- BlackRock Capital Management, Inc.
- BlackRock Financial Management, Inc.
- BlackRock Fund Advisors
- BlackRock International Limited
- BlackRock Investment Management, LLC
- BlackRock Realty Advisors, Inc.
- FutureAdvisor
- Tennenbaum Capital Partners, LLC
- SVOF/MM, LLC
- Aperio Group, LLC

Affiliated Commodity Pool Operator / Commodity Trading Advisor

The Advisers are exempt commodity pool operators and exempt commodity trading advisors. Affiliates of the Adviser are registered or exempt from registration as commodity trading advisors or commodity pool operators:

- BlackRock Advisors, LLC, BlackRock Financial Management, Inc., BlackRock Fund Advisors, BlackRock Investment Management, LLC and BTC are registered as commodity pool operators and commodity trading advisors.
- BlackRock International Limited is registered as a commodity trading advisor.
- iShares Delaware Trust Sponsor, LLC is registered as a commodity pool operator.
- BlackRock (Singapore) Limited, BlackRock Asset Management North Asia Limited, BlackRock Capital Management, Inc., BlackRock Investment Management (UK) Limited, BlackRock Capital Investment Advisors LLC, SVOF/MM, LLC and Tennenbaum Capital Partners, LLC are exempt commodity pool operators and exempt commodity trading advisors.
- BlackRock Realty Advisors, Inc. is an exempt commodity trading advisor.

All of the non-exempt Advisers listed above are members of the National Futures Association (the "NFA"). The NFA and CFTC each administer a comparable regulatory system covering futures contracts, swaps and various other financial and derivative instruments in which certain investment management clients of BlackRock ("BlackRock Clients") invest.

Relationships or Arrangements With Affiliates and/or Related Persons

BlackRock Advisors, LLC as of December 31, 2019 owned approximately 36.5% economic interest, and 4.9% voting interest in 52nd Street Capital Advisors LLC.

BTC, an indirect subsidiary of BlackRock, Inc., is a national banking association organized under the laws of the U.S. and operates as a limited purpose trust company. BTC provides investment management and other fiduciary services for client accounts, including trust accounts, common trust funds and group trusts maintained by BTC

Item 10. Other Financial Industry Activities and Affiliations

and other unregistered investment vehicles. BTC also provides securities lending services to certain registered and unregistered investment funds managed by BlackRock. BTC is registered as a Municipal Advisor with both the SEC and the Municipal Securities Rulemaking Board.

A subsidiary of BlackRock, Inc. and Chubb Limited (“Chubb”) partially funded the creation of a reinsurance company, ABR Reinsurance Capital Holdings Ltd. (together with its wholly owned subsidiary ABR Reinsurance Ltd., “ABR Re”), pursuant to which BlackRock has a non-controlling ownership interest (“ABR Re Transaction”). Chubb is a publicly traded company whose securities are held in BlackRock Client accounts. The subsidiary of BlackRock, Inc. and Chubb have representation on the board of directors of ABR Re. Certain employees and executives of BlackRock have a less than ½ of 1% ownership interest in ABR Re. BlackRock Financial Management, Inc. manages the investment portfolio of ABR Re. ABR Re participates as a reinsurer with respect to a portfolio of reinsurance contracts written by subsidiaries of Chubb.

BlackRock, Inc. owns indirectly through BlackRock Financial Management, Inc. a non-controlling interest in a joint venture, Luminex Trading & Analytics LLC (“Luminex”). Luminex is an independent equity trading venue owned and operated by a consortium of leading investment management firms. It provides a platform for investment managers to trade large blocks of stock with other investment managers at a lower cost and uses transparent trading rules and protocols.

Through a holding company subsidiary, BlackRock, Inc. owns a non-controlling interest in iCapital Networks (“iCapital”). iCapital is a financial technology platform that provides access to alternative investments for high-net-worth investors and their financial advisers. iCapital’s platform provides combination of due diligence capabilities, technology and relationships with alternative asset managers to facilitate investments in hedge funds and private equity funds, including BlackRock. Certain employees of BlackRock serve on iCapital’s Board of Directors. iCapital may serve as the managing member or general partner of, and/or other service provider to, certain investment funds managed by BlackRock.

BlackRock, Inc. indirectly owns a non-controlling interest in Acorns Grow Incorporated (“Acorns”). Acorns is a personal investment application that allows Acorn clients to automatically invest spare change in ETFs, including ETFs advised by a BlackRock Investment Adviser. BlackRock has an observer on Acorns’ Board of Directors.

Through a holding company subsidiary, BlackRock, Inc. owns a non-controlling interest in Envestnet Inc. (“Envestnet”). Envestnet provides unified wealth management technology and products to financial advisers and other institutions. Their flagship product is an advisory platform that integrates the services and software used by financial advisers in wealth management. Certain funds recommended by Envestnet may be advised by a BlackRock Investment Adviser.

BlackRock, Inc. indirectly owns a non-controlling interest in Gallatin Point Capital LLC (“Gallatin”). A BlackRock subsidiary provides certain analytics and related services to Gallatin. Gallatin is an alternative investment firm. One of Gallatin’s founders is a consultant for BlackRock.

Through a holding company subsidiary, BlackRock, Inc. owns a minority position in Scalable Capital GmbH (“Scalable”). Scalable is a European robo-advisor that recommends or invests client assets in ETFs, including ETFs advised by a BlackRock Investment Adviser. BlackRock has a board member and an observer on Scalable’s Board of Directors.

Through a holding company subsidiary, BlackRock, Inc. owns a non-controlling interest in Managed Account Partners (Holdings) Limited, a company that provides managed account services through its wholly-owned subsidiary, Managed Account Partners Limited.

Cachematrix Holdings, LLC is an indirect, wholly-owned subsidiary of BlackRock, Inc., that together with its subsidiaries, provides technology to banks and other clients, where the purpose of such technology is to facilitate online trading in money market funds (managed by BlackRock, as well as third-party asset managers) and other products.

On September 21, 2018 BlackRock Mexico Operadora, S.A. de C.V., Sociedad Operadora de Fondos de Inversion (“BlackRock Mexico Operadora”), based in Mexico, became an indirect, wholly-owned subsidiary of BlackRock, Inc. BlackRock Mexico Operadora, among other services, manages Mexican mutual funds and offers investment management services in Mexico.

BlackRock uses BES to provide account introduction and execution services on behalf of BlackRock’s Clients in accordance with policies and procedures that are designed to provide for compliance with the requirements of (and BlackRock’s duties under) the Advisers Act, Investment Company Act, the Employee Retirement Income Security Act of 1974, as amended (“ERISA”), other laws and regulations and related relief, as applicable to the transaction. These policies and procedures, and the related laws and regulations, address the potential for conflicts of interest arising in connection with using an affiliate to provide trade execution services on behalf of such BlackRock Clients.

BlackRock Index Services, LLC (“BIS”), an affiliate of the Advisers, is the index provider to client accounts advised by affiliated BlackRock Investment Advisers, including US Registered Funds. The BlackRock Investment Advisers and BIS have established a governance framework designed to prevent the undue influence of the BlackRock Investment Advisers in the operation of any index developed by BIS (“BIS Index”). This framework includes information barriers to restrict the sharing of confidential information and a committee that approves index methodology changes and is independent of portfolio management and trading. BIS Indices can be utilized by funds, accounts and other investment products and tools. When permitted, BIS indices may include certain US Registered Funds advised by an Adviser as an index constituent. Certain of these indices are Underlying Indices of investment vehicles including certain US Registered Funds advised by an Adviser. Where BIS is the index provider, BlackRock may pay BIS licensing fees for use of a BIS Index or index name, but only when permissible under applicable law.

BlackRock Solutions®

BlackRock Solutions® (“BRS”), a business unit within BlackRock, provides a broad range of risk management, investment accounting and trade processing tools to a variety of clients, including insurance companies, asset managers, pension funds, investment consultants, real estate investment trusts, commercial and mortgage banks, savings institutions, government agencies, and central banks. Using proprietary technology, analytics, and product knowledge, BRS is able to assist these clients in measuring financial risks in their portfolios and across their lines of business on both the asset and liability sides of their balance sheets. BRS makes available its proprietary enterprise trading system and risk reporting tools to other firms or companies. In 2019 BlackRock acquired eFront Holding SAS (“eFront®”), a provider of investment management systems for alternative assets. The eFront business is part of BRS and enables BRS to provide technology solutions across public and private assets.

Multi-Asset Strategies & Solutions

Multi-Asset Strategies & Solutions (“MASS”), a business unit within BlackRock, provides customized, multi-asset class services to institutional clients and intermediated retail clients, which may include market commentary, asset allocation, analytics-based advice, model portfolio recommendations, and portfolio and risk management services. MASS generally utilizes BlackRock’s internal resources, which may include, but is not limited to, its manager due diligence team for pre-investment due diligence and ongoing manager due diligence with respect to products and strategies managed by BlackRock Investment Advisers and non-affiliated investment advisers (such diligence, “Manager Research”), in order to offer clients a wide variety of investment options across asset classes, jurisdictions and liquidity profiles.

Method of Analysis:

MASS’ investment process for Multi-Asset Strategies begins with analysis of the client’s objectives, constraints and preferences. MASS generates its portfolio construction using a combination of different

asset allocation analyses, which may include strategic asset allocation, tactical asset allocation, and Manager Research and security selection.

- Strategic Asset Allocation (“SAA”) - Designing a portfolio based on long-term investment beliefs and market condition assumptions which will track broad asset class indices or liability benchmarks.
- Tactical Asset Allocation (“TAA”) – Blending diversified excess return sources, including factor and market timing, over a shorter-time horizon.
- Manager Research and Security Selection - Conducting pre-investment due diligence and ongoing due diligence with respect to products and strategies managed by BlackRock Investment Advisers and non-affiliated investment advisers.

MASS strategy and portfolio management teams seek to select the products and managers that correlate to the assumptions used to produce the SAA and reflect the group’s investment insights and convictions, with consideration of applicable Manager Research, fees and diversification if applicable.

The applicable investment guidelines of a client mandate may authorize MASS to select or recommend: (i) investment strategies managed by BlackRock Investment Advisers, including US Registered Funds or other pooled investment vehicles (including Private Funds) for which BlackRock Investment Advisers serve as investment adviser or sub-adviser (“Affiliated Funds”), or (ii) investment strategies managed by non-affiliated investment advisers (“External Products”), or (iii) investment strategies managed by both the BlackRock Investment Advisers, including Affiliated Funds, and non-affiliated investment advisers, including External Products. To the extent permitted by a client’s investment guidelines, where MASS implements certain types of investment on a client’s behalf, including illiquid or alternative products, there may be an opportunity to negotiate the terms of the related investment documentation. When such products are serviced by BlackRock Investment Advisers, MASS will not negotiate such terms on the client’s behalf.

If Manager Research services are provided, then before recommending or allocating client assets to actively managed investment strategies managed by portfolio manager teams within the BlackRock Investment Advisers or to non-affiliated investment advisers, MASS professionals will consider Manager Research including (i) due diligence at the enterprise level, which compares managers to peer firms, based on consideration of factors, including, without limitation, each firm’s global compliance processes, corporate governance, and regulatory disclosure documents and (ii) investment due diligence for both BlackRock Investment Advisers and non-affiliated investment advisers, which considers such advisers’ investment teams, investment philosophies and processes, investment performance and fee structures. In some cases, the due diligence process for BlackRock Investment Advisers and Affiliated Funds may be different than that for non-affiliated investment advisers and External Products with limited operational due diligence performed on certain offerings. Generally, with respect to portfolio manager teams within the BlackRock Investment Advisers or non-affiliated investment advisers that manage passive investment strategies, Manager Research performs operational due diligence on such managers and investment due diligence at the index platform level.

MASS will not review the entire universe of available External Products that may be appropriate for a MASS client account, but rather will only review a subset of such External Products that have been reviewed and approved by MASS as determined in its sole discretion. As a result, there may be one or more External Products that would be a more appropriate addition to the client account than the investment product selected by MASS, from the standpoint of the factors that MASS has taken into consideration or other factors. Such External Products may outperform the investment product selected for the MASS client account.

In connection with a client account or an asset class within a client account that, pursuant to its guidelines invests only in Affiliated Funds, MASS will not review or consider External Products. As a result, there may be one or more External Products that would be a more appropriate addition to the MASS client account than the Affiliated Fund selected by MASS, from the standpoint of the factors that MASS has taken into consideration or other factors. Such External Products may outperform the Affiliated Fund selected for the MASS client account.

Where the terms of the governing agreement between MASS and its client grant MASS the authority to choose between products or strategies in a particular asset class managed by BlackRock Investment Advisers (including Affiliated Funds) and non-affiliated investment advisers, MASS faces conflicts of interest when it makes an investment decision or recommendation to allocate to one or more products or strategies managed by BlackRock Investment Advisers, in circumstances where BlackRock receives additional fees and/or other compensation in connection with such Affiliated Fund. Because BlackRock will on an overall basis receive higher fees, compensation and other benefits if the assets of a client account that pay two layers of fees (i.e., client accounts that do not invest on a fee-free basis or that do not receive an offset or credit) are allocated to Affiliated Funds rather than solely to External Products, MASS will be incentivized to recommend or allocate the assets of client accounts to Affiliated Funds. Furthermore, MASS will have an interest in allocating or recommending the assets of client accounts to Affiliated Funds that impose higher fees than those imposed by other Affiliated Funds or that provide other benefits to BlackRock. Correspondingly, MASS may be disincentivized to consider or recommend the removal of a client's assets from, or the modification of a client's allocations to, a BlackRock Investment Adviser or Affiliated Fund at a time that it otherwise would have where doing so would decrease the fees, compensation and other benefits to BlackRock, including where disposal of an Affiliated Fund by the client account would likely adversely affect the Affiliated Fund with respect to its liquidity position or otherwise.

In addition, the fee structure of certain client accounts (pursuant to which MASS may be required to compensate non-affiliated investment advisers out of the fee it receives from the client account) may incentivize MASS to select non-affiliated investment advisers with lower compensation levels (including non-affiliated investment advisers that discount their fees based on aggregate account size or other relationships) in order to increase the net fee to MASS, and not select other non-affiliated investment advisers that might also be appropriate for the client account. Fee breakpoints in a client account may also be affected by BlackRock's business relationships and the size of accounts other than a MASS client account and may directly or indirectly benefit BlackRock and other client accounts. MASS client accounts will not be entitled to any compensation with respect to such benefits received by BlackRock and other client accounts.

The terms of the governing agreement between MASS and its client may limit the client account to utilize only Affiliated Funds or only External Products or for particular asset classes or strategies within the client account. However, in other cases, the governing agreement provides that both Affiliated Funds and External Funds may be utilized for the client account or for particular asset classes or strategies within the client account. In such cases, the governing agreement may provide that the MASS client must consent to, or may permit the client to veto, MASS' investment in Affiliated Funds or strategies managed by BlackRock Investment Advisers. Alternatively, or in addition, the governing agreement between MASS and its client may incorporate portfolio targets where the portfolio has an expected minimum percentage of Affiliated Funds.

In some circumstances the governing agreement between MASS and its client may provide for a single layer of fees. In such circumstances MASS will have an incentive to select or recommend External Products as BlackRock does not receive additional fees from such client accounts in respect of investments in investment strategies managed by BlackRock Investment Advisers, including Affiliated Funds even though BlackRock is providing additional services to the client accounts. However, in such circumstances there may be countervailing considerations outside of the best interests of the client that may incentivize MASS to select or recommend investment strategies in BlackRock Investment Advisers including Affiliated Funds (e.g. increased assets under management) over External Products.

Conflicts Relating to the Use of Tactical Tilts

MASS may utilize tactical investment ideas derived from short-term market views (“Tactical Tilts”) for client accounts. There are material risks related to the use of Tactical Tilts for client accounts. For example, the timing for implementing a Tactical Tilt or unwinding a position can materially affect the performance of such Tactical Tilt. For various reasons, other businesses within BlackRock may implement a Tactical Tilt or unwind a position for client accounts or on their own behalf at a different time than MASS does on behalf of MASS client accounts, or may implement a Tactical Tilt that is different from the Tactical Tilt implemented by MASS on behalf of MASS client accounts, which could have an adverse effect on MASS client accounts and may result in poorer performance by MASS client accounts than by BlackRock or other client accounts. In addition, unless otherwise agreed in the agreement governing the client account, MASS monitors a client account’s Tactical Tilt positions only on a periodic basis. Therefore, changes in market conditions and other factors may result in substantial losses to a client account, and no assurance can be given that a Tactical Tilt position will be unwound before the client account suffers losses. The use of Tactical Tilts also may include the risk of reliance on models.

Conflicts Relating to the Use of Target Ranges and Rebalancing

Certain client accounts, either generally or with respect to particular asset classes and/or product classes, may allocate to both Affiliated Funds and External Products in accordance with target allocations or target ranges. For these client accounts, the conflicts and risks described above with respect to allocating assets to both Affiliated Funds and External Products apply. In addition, to the extent a client designates target allocations or target ranges for Affiliated Funds and External Products within a client account or a particular asset class or strategy within a client account, allocations of a client account’s assets may, from time to time, be out of balance with the client account’s target ranges for extended periods of time or at all times due to various factors, such as fluctuations in, and variations among, the performance of the investment products to which the assets are allocated and reliance on estimates in connection with the determination of percentage allocations. Any rebalancing by MASS of the client account’s assets may have an adverse effect on the performance of the client account. For example, the client account’s assets may be allocated away from an over-performing investment product and allocated to an under-performing investment product, which could be harmful to the client account. In addition, the achievement of any intended rebalancing may be limited by several factors, including the use of estimates of the net asset values of the investment products, and, in the case of investments in investment products that are pooled investment vehicles, restrictions on additional investments in and redemptions from such investment products. Similarly, the use of target ranges in respect of product classes may result in a client account containing a significantly greater percentage of Affiliated Funds than would otherwise be the case, including during periods in which Affiliated Funds underperform External Products. In such circumstances, there may be one or more External Products that would be a more appropriate addition to a client account than the Affiliated Funds then in the client account. Such External Products may outperform the Affiliated Funds then in the client account.

Financial Markets Advisory

BlackRock’s Financial Markets Advisory Group (“FMA”) works with financial institutions, official institutions and market intermediaries and utilities globally, and provides advice on balance sheet and capital markets exposures, as well as a wide range of other strategic, regulatory and operational challenges. FMA also delivers capital markets, risk management, and investment management capabilities to advise holders or prospective holders of complex, difficult to value or special-situation portfolios, including advice relating to the management, retention, restructuring, disposition and valuation of such assets.

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

BlackRock Investment Advisers make decisions for their clients in accordance with their fiduciary obligations to such clients.

As a global provider of investment management, risk management and advisory services to institutional and retail clients, BlackRock engages in a broad spectrum of activities, including sponsoring and managing a variety of public and private investment funds, Funds of Funds and separate accounts across fixed income, cash management, equity, multi-asset, alternative investment and real estate strategies, providing discretionary and non-discretionary financial advisory services, providing enterprise trading systems, risk analytics, investment accounting and trading support services under the BRS business and engaging in certain broker-dealer activities, transition management services, mortgage servicing and other activities. BlackRock acts as, among other things, an investment manager, investment adviser, broker-dealer and, under certain circumstances, an index provider.

BlackRock, makes payments, out of its own profits or other sources, to affiliated or unaffiliated financial institutions, broker-dealers or other entities for distribution and sales support activities, including participation in marketing activities, educational programs, conferences, and technology development and reporting, or sub-accounting, administrative, shareholder processing or other services related to shares or shareholders of investment companies and other funds for which BlackRock provides investment advisory services, or for other services or activities that facilitate investments by BlackRock Clients in such funds. These payments would be in addition to any payments made or fees paid directly by the investment companies or other funds.

BlackRock has direct and indirect interests in the global fixed income, currency, commodity, equity, and other markets in which BlackRock Clients invest. As a result, BlackRock and its directors, managers, members, officers, and employees (collectively, the “BlackRock Group”), including those involved in the management, sales, investment activities, business operations, or distribution of BlackRock’s services and products, are engaged in businesses and have interests other than that of managing the assets of BlackRock Clients. These activities and interests include potential multiple advisory, transactional, financial, and other interests in securities, instruments, and companies that are directly or indirectly purchased or sold by or on behalf of BlackRock Clients by BlackRock and other persons.

As a result of the various activities and interests of the BlackRock Group as described below, BlackRock Clients could have multiple business relationships with members of the BlackRock Group and BlackRock Investment Advisers will, on behalf of BlackRock Clients, invest in, engage in transactions with, make voting decisions with respect to, or obtain services from entities for which the BlackRock Group performs, or seeks to perform, risk management, investment system outsourcing, financing, investment banking, lending, loan servicing, or other services. Although the relationships and activities of the BlackRock Group tend to offer attractive opportunities and services to BlackRock Clients, such relationships and activities may under certain circumstances give rise to potential conflicts of interest between or among the BlackRock Group and BlackRock Clients or have other potentially negative effects on BlackRock Clients. Additionally, consistent with applicable law, BlackRock and its respective affiliates and personnel can receive greater compensation or greater profit in connection with an account for which BlackRock serves as an adviser than with an account advised by an unaffiliated investment adviser. Differentials in compensation result from, among other reasons, BlackRock paying a portion of its advisory fee to its affiliate or other compensation arrangements, including for portfolio management, brokerage transactions, or account servicing. Any differential in compensation creates a potential financial incentive on the part of BlackRock, its affiliates and personnel to recommend BlackRock over unaffiliated investment advisers, to effect transactions differently in one account over another, or to favor accounts in which they have more significant interests over those in which they have a lesser (or no) interest.

The BlackRock Investment Advisers manage the assets of BlackRock Clients in accordance with the investment mandate selected by each BlackRock Client and applicable law, and will seek to give advice to, and make investment decisions for, such BlackRock Client that the BlackRock Investment Adviser believes to be in the best

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

interests of such BlackRock Client. However, from time to time, investment allocation decisions are made which adversely affect the size or price of the assets purchased or sold for a BlackRock Client and the results of the investment activities of a BlackRock Client may differ significantly from the results achieved by the BlackRock Investment Advisers for other current or future BlackRock Clients. Thus, the management of numerous accounts for BlackRock Clients and other services provided by the BlackRock Investment Advisers creates a number of potential conflicts of interest. Additionally, regulatory and legal restrictions (including those relating to the aggregation of positions among different funds and accounts) and BlackRock's internal policies and procedures restrict certain investment activities of BlackRock Investment Advisers for BlackRock Clients.

These and other potential conflicts are discussed generally herein or in the relevant IMA, offering documents and/or governing documents of the investment funds managed or served by the various BlackRock Investment Advisers, which should be reviewed in conjunction with any investment in that fund. Given the interrelationships among the BlackRock Group and the changing nature of the business, affiliations and opportunities, as well as legislative and regulatory developments, there may be other or different potential conflicts that arise in the future or that are not covered by this discussion. As a fiduciary to the BlackRock Clients, however, BlackRock is committed to putting the interests of BlackRock Clients ahead of its own in the provision of investment management and advisory services.

Blackrock's Global Personal Trading Policy and Other Ethical Restrictions

BlackRock's and the Advisers' directors, officers, and employees buy, sell, and hold for their own and their family members' accounts public securities, private securities, and other investments in which such BlackRock personnel have a pecuniary interest, whether because they are also bought, sold, or held for BlackRock Clients or through accounts (or investments in funds) managed by BlackRock Investment Advisers or otherwise. As a result of differing trading and investment strategies or constraints, positions taken by BlackRock directors, officers, and employees can be the same as or different from, or made contemporaneously or at different times than, positions taken for BlackRock Clients.

As these situations involve potential conflicts of interest, BlackRock has adopted policies and procedures relating to personal securities transactions, insider trading and other ethical considerations, including the Global Personal Trading Policy in accordance with Rule 17j-1 under the Investment Company Act and Rule 204A-1 under the Advisers Act (the "Rules"). These policies and procedures are intended to identify and prevent actual conflicts of interest with clients and to resolve such conflicts appropriately if they do occur.

In conformity with the Rules, the Global Personal Trading Policy contains provisions regarding employee personal trading and, reporting requirements that are designed to address potential conflicts of interest that might interfere or appear to interfere with making decisions in the best interest of BlackRock Clients, and together with BlackRock's Code of Business Conduct and Ethics (referred to collectively as the "Code"), requires employees to comply with the applicable federal securities laws, as well as fiduciary principles applicable to BlackRock's business, including that employees must avoid placing their own personal interests ahead of BlackRock Clients' interests.

The Global Personal Trading Policy requires that employees at BlackRock conduct all of their personal investment transactions in a manner that is consistent with applicable federal securities laws, the BlackRock Global Insider Trading Policy and other policies of BlackRock. These requirements include reporting of personal investment accounts, pre-clearance of personal trading transactions, as well as reporting investment transactions. The Global Personal Trading Policy also generally prohibits employees from acquiring securities in initial public offerings, and contains prohibitions against profiting from short-term trading, subject to very limited exceptions. The Global Personal Trading Policy also imposes "blackout" periods on certain employees, including portfolio management personnel, prohibiting transactions in certain securities during time periods surrounding transactions in the same securities by BlackRock Client accounts. Moreover, the Global Personal Trading Policy and other BlackRock policies contain provisions that are designed to prevent the use of material non-public information.

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

Any member of the BlackRock Group covered by the Code who fails to observe its requirements or those contained in related BlackRock policies and procedures is subject to potential remedial action. BlackRock will determine on a case by case basis what remedial action should be taken in response to any violation, including potential voiding or reversal of a trade, the cost of which will be borne by the employee or owner of the account or limiting an employee's personal trading for some period of time. The Global Personal Trading Policy will be made available to a BlackRock Client or prospective client upon request.

Outside Activities

Members of the BlackRock Group have a duty to act solely in the interest of BlackRock's Clients; as such BlackRock's Global Outside Activity Policy requires that BlackRock employees obtain approval from their line manager and Legal & Compliance before engaging in any outside activities so that BlackRock has the opportunity to consider whether such activities create actual or potential conflicts of interest. The Global Outside Activity Policy is intended to identify activities that have the potential to conflict with an employee's role at BlackRock and/or BlackRock's activities.

Political Contributions

BlackRock's U.S. Political Contributions Policy establishes the requirements that apply when BlackRock and its employees make or solicit U.S. political contributions or engage in political activities in the U.S. The policy prohibits BlackRock and its employees from making or soliciting U.S. political contributions for the purpose of obtaining or retaining business. The policy requires employees to pre-clear U.S. political contributions before they, their spouse, domestic partner, or dependent children make any contributions to a political candidate, government official, political party, or political action committee ("PAC") in the U.S.

The BlackRock PAC, a non-partisan political action committee, is supported voluntarily by eligible U.S. employees to help elect U.S. federal candidates who the PAC's Board of Directors determine share BlackRock's values and goals.

Potential Conflicts Relating to Advisory Activities

The results of the investment activities provided to a BlackRock Client can differ significantly from the results achieved by BlackRock Investment Advisers for other current or future BlackRock Clients. BlackRock Investment Advisers will manage the assets of a BlackRock Client in accordance with the investment mandate selected by such BlackRock Client. However, members of the BlackRock Group (including BlackRock Investment Advisers) may give advice and take action with respect to their own account, any other BlackRock Client that competes or conflicts with the advice a BlackRock Investment Adviser may give to, or an investment action a BlackRock Investment Adviser may take on behalf of, a BlackRock Client (or a group of BlackRock Clients), or advice that may involve different timing than that of a BlackRock Client. The potential conflicts include, in particular, members of the BlackRock Group and one or more BlackRock Clients buying or selling positions while another BlackRock Client is undertaking the same or a differing, including potentially opposite, strategy. Similarly, BlackRock Investment Advisers' management of BlackRock Client accounts may benefit members of the BlackRock Group including, to the extent permitted by applicable law and contractual arrangements, investing BlackRock Client accounts directly or indirectly in the securities of companies in which a member of the BlackRock Group for itself or its clients, has an equity, debt, or other interest. In addition, to the extent permitted by applicable law and contractual arrangements, BlackRock Clients may engage in investment transactions which may result in other BlackRock Clients being relieved of obligations or otherwise have to divest or cause BlackRock Clients to have to divest certain investments. In some instances, the purchase, holding, and sale, as well as voting of investments by BlackRock Clients may enhance the profitability or increase or decrease the value of a BlackRock Group member's or other BlackRock Clients' own investments in such companies. This may give rise to potential conflicts of interest.

Financial or Other Interests in Underlying Funds

Funds of Funds or other accounts managed by an Adviser often acquire a financial interest in certain underlying funds which generally, but not always will include direct or indirect receipt of a portion of any management or performance-based fees paid by the underlying funds to their respective general partner, managing member, or investment adviser. These interests can involve additional rights such as board representation or other means to influence the management or business decisions of such underlying fund. These relationships create the potential for conflicts of interest between Funds of Funds or accounts receiving such interests and other funds or accounts managed by an Adviser.

Cross Trades

In certain circumstances, BlackRock Investment Advisers effect purchases and sales between BlackRock Clients or clients of affiliates (“cross trades”) if BlackRock Investment Advisers believe such transactions are appropriate based on each party’s investment objectives and guidelines, subject to each client’s governing documents, applicable law and regulation (but are not required to effect such cross-trades). In this regard, BlackRock maintains a cross-trading program covering various strategies pursuant to which securities are bought and sold among BlackRock Clients. Cross trades for accounts subject to ERISA are made in accordance with applicable U.S. Department of Labor (“DOL”) regulations and relevant exemptions. Where a US Registered Fund participates in a cross trade, the Advisers will comply with the US Registered Fund’s procedures adopted pursuant to Rule 17a-7 under the Investment Company Act and related regulatory authority. In certain circumstances, based on product and account type, an independent pricing source might be used. BlackRock Investment Advisers seek to assure that the price used in a cross trade is fair and appropriate, and in keeping with, or as required by the relevant regulations. In addition, a BlackRock Client account may enter into “agency cross transactions,” in which a member of the BlackRock Group may act as broker for such BlackRock Client account and for the other party to the transaction, to the extent permitted under applicable law and subject to the terms of the governing documents of such BlackRock Client account. In such cases, the relevant BlackRock Investment Adviser and such affiliate may have a potentially conflicting division of loyalties and responsibilities regarding both parties to the transaction. The authority of the BlackRock Investment Advisers to conduct such agency cross-transactions is subject to the right of the BlackRock Client account investors to revoke such authority by the affirmative vote of a majority of those BlackRock Client account investors who are not directly or indirectly affiliated with the relevant BlackRock Investment Adviser, voting as a single class or, in the case of certain BlackRock Client accounts, the approval of the respective advisory boards of such BlackRock Client accounts. To the extent that any provision of Section 11(a) of the Exchange Act or any of the rules promulgated thereunder is applicable to any transactions effected by the relevant BlackRock Investment Adviser, such transactions will be effected in accordance with the requirements of such provisions and rules.

Inconsistent Investment Positions and Timing of Competing Transactions

From time to time, BlackRock takes an investment position or action for one or more accounts that is different from, or inconsistent with, an action or position taken for one or more other accounts having similar or differing investment objectives, resulting in potential adverse impact, or in some instances benefit, to one or more affected accounts. For example, a BlackRock Client may buy a security and another BlackRock Client may establish a short position in that same security. The subsequent short sale could result in a decrease in the price of the security which the first BlackRock Client holds. Conversely, a BlackRock Investment Adviser may establish a short position in a security for a BlackRock Client and another BlackRock Investment Adviser may buy that same security for a different BlackRock Client. The subsequent purchase may result in an increase of the price of the underlying position in the short sale exposure to a BlackRock Client’s detriment. Similarly, transactions in investments by one or more BlackRock Clients and members of the BlackRock Group may have the effect of diluting or otherwise disadvantaging the values, prices or investment strategies of another BlackRock Client, particularly, but not limited to, in small capitalization, emerging market, or less liquid strategies. This may occur when portfolio decisions regarding a BlackRock Client account are based on research or other information that is also used to support portfolio decisions for other client accounts. When one BlackRock Investment Adviser implements a portfolio decision or strategy ahead of, or contemporaneously

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

with, similar portfolio decisions or strategies of another BlackRock Investment Adviser (whether or not the portfolio decisions emanate from the same research analysis or other information), market impact, liquidity constraints, or other factors could result in one or more BlackRock Clients receiving less favorable trading results, the costs of implementing such portfolio decisions or strategies could be increased or such BlackRock Clients could otherwise be disadvantaged. On the other hand, potential conflicts also arise when portfolio decisions regarding a BlackRock Client benefit other BlackRock Clients, for example, where the sale of a long position or establishment of a short position for a BlackRock Client decreases the price of the same security sold short by (and therefore benefit) a BlackRock Group member or other BlackRock Clients, or the purchase of a security or covering of a short position in a security for a BlackRock Client results in an increase in the price of the same security held by (and therefore benefit) a BlackRock Group member or other BlackRock Clients.

Under certain circumstances, if a BlackRock Client (or a group of BlackRock Clients) invests in a transaction in which one or more other BlackRock Clients are expected to participate, or already have made or will seek to make, an investment, such BlackRock Clients (or groups of BlackRock Clients) may have conflicting interests and objectives in connection with such investments, including with respect to views on the operations or activities of the portfolio company involved, the targeted returns from the investment and the timeframe for, and method of, exiting the investment. For example, the BlackRock Investment Advisers' decision on behalf of other client accounts to sell, redeem from, or otherwise liquidate a security in which a BlackRock Client account is invested may adversely affect such BlackRock Client account, including by causing such investment to be less liquid or more concentrated, or by causing such BlackRock Client account to lose the benefit of certain negotiated terms. Conflicts will also arise in cases where different BlackRock Clients (or groups of BlackRock Clients) invest in different parts of an issuer's capital structure, including circumstances in which one or more BlackRock Clients own private securities or obligations of an issuer and other BlackRock Clients own public securities of the same issuer. For example, a BlackRock Client (or group of BlackRock Clients) acquiring a loan, loan participation, or loan assignment of a particular borrower in which one or more other BlackRock Clients have an equity investment. In addition, different BlackRock Clients investing in securities of an issuer that have different voting rights, dividend or repayment priorities or other features that could be in conflict with one another. In negotiating the terms and conditions of any such investments, or any subsequent amendments or waivers, the BlackRock Investment Advisers' interests, BlackRock Client (or group of BlackRock Clients) interests, and/or the interests of one or more other BlackRock Clients could conflict. If an issuer in which a BlackRock Client (or group of BlackRock Clients) and one or more other BlackRock Clients hold different classes of securities (or other assets, instruments or obligations issued by such issuer) encounters financial problems, decisions over the terms of any workout will raise conflicts of interest (including, for example, conflicts over proposed waivers and amendments to debt covenants). For example, a debt holder who could be paid in full likely will be better served by a liquidation of the issuer, whereas an equity holder or junior debt holder would be better served by a reorganization that holds the potential to create value for the equity holders. Any of the foregoing conflicts of interest will be discussed and resolved on a case-by-case basis. Any such discussions will take into consideration the interests of the relevant BlackRock Clients, the circumstances giving rise to the conflict and applicable laws. When considering whether to pursue applicable claims on behalf of BlackRock Clients, BlackRock considers various factors, including the cost of pursuing the claim and the likelihood of the outcome, and may not pursue every potential claim. BlackRock may elect not to pursue a claim on behalf of a BlackRock Client, rely on third parties to pursue such claim, actively or otherwise, on BlackRock's behalf or otherwise rely on alignment with other third parties to act on behalf of a class of securities or tranche of loans held by the applicable BlackRock Client. BlackRock Clients (and investors in Private Funds) should be aware that conflicts will not necessarily be resolved in favor of their interests. There can be no assurance that any actual or potential conflicts of interest will not result in a particular BlackRock Client or group of BlackRock Clients receiving less favorable investment terms in certain investments than if such conflicts of interest did not exist.

In order to avoid or reduce the conflicts that may arise in cases where a BlackRock Client account, directly or indirectly, and other client accounts invest in different parts of an issuer's capital structure, or for other reasons, a BlackRock Client account may choose not to invest in issuers in which other client accounts hold an existing investment (and BlackRock may grant one or more other client accounts holding such investment the right to prohibit such BlackRock Client account from making such investment), even if the general partner or

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

the BlackRock Investment Advisers believe such investment opportunity to be attractive and otherwise appropriate for such BlackRock Client account, which may adversely affect the performance of such BlackRock Client account. The inability of a BlackRock Client account to make such investments as a result of rights BlackRock has granted client accounts may have a material adverse effect on the performance of such BlackRock Client account.

The members of the BlackRock Group may also, in certain circumstances, pursue or enforce rights or take other actions with respect to a particular issuer or investment jointly on behalf of a BlackRock Client account and other client accounts. Once a BlackRock Client account and other client accounts are so joined, a BlackRock Client account may be adversely impacted by the other client accounts' activities, and transactions for such BlackRock Client account may be impaired or effected at prices or terms that may be less favorable than would otherwise have been the case had the other client accounts not pursued a particular course of action with respect to the issuer or investment. For example, one client account may dispose of or make an in-kind distribution of its portion of an investment that is jointly held on behalf of a BlackRock Client account, such client account and other client accounts, and such action may adversely affect such BlackRock Client account and such other client accounts that continue to hold such investment.

Conflicts may also arise because portfolio decisions made by the BlackRock Investment Advisers on behalf of the BlackRock Client accounts may benefit other members of the BlackRock Group or client accounts, including BlackRock Client accounts. For example, a BlackRock Client account may, subject to the terms of the governing documents of such BlackRock Client account, invest directly or indirectly in an investment, or the securities, bank loans or other obligations of issuers affiliated with BlackRock or in which another BlackRock Client account has an equity, debt or other interest. In addition, a BlackRock Client account may engage in investment transactions that may result in other client accounts being relieved of obligations or otherwise divesting of investments that such BlackRock Client account also holds, or which cause such BlackRock Client account to have to divest certain investments. The purchase, holding and sale of investments by a BlackRock Client account may enhance the profitability of another client account's own investments in and activities with respect to such investments.

Similarly, BlackRock Investment Advisers advise entities regarding estimated valuation, risk management, transition management, and potential restructuring or disposition activities in connection with their proprietary or client investment portfolios. Such activities create potential conflicts of interest, as BlackRock, on behalf of BlackRock Clients, may seek to purchase securities or other assets from the foregoing portfolios and may engage, without limitation, in related activities to bid down the price of assets in such portfolios, which may have an adverse effect on those portfolios.

Conflicts Relating to Portfolio Management of Various Accounts

BlackRock Investment Advisers make decisions for BlackRock Clients based on the investment mandates selected by such BlackRock Clients. In doing so, as a result of similarities or differences in such mandates or otherwise, BlackRock Investment Advisers have potential conflicts in connection with the investments of, and transactions effected for, BlackRock Clients, including in situations in which members of the BlackRock Group have a pecuniary or investment interest. Certain clients are limited by rules issued by regulators or self-regulatory organizations, such as short sale limits and trading halts. For additional information regarding conflicts relating to side-by-side management, please refer to Item 6 ("Performance-Based Compensation and Side-By-Side Management") and "Side-By-Side Management" in Item 11 ("Code of Ethics, Participation or Interest in Client Transactions and Personal Trading") of this Brochure.

Allocation of Investment Opportunities

The BlackRock Group manages and advises numerous accounts for BlackRock Clients around the world, such as registered and unregistered funds and owners of SMAs. BlackRock Client accounts include funds and accounts in which BlackRock, or its personnel have an interest. Certain of these BlackRock Client accounts may have investment objectives, and may utilize investment strategies, that are similar to those of one or more

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

other BlackRock Client accounts. As a result, certain investments may be appropriate for multiple BlackRock Client accounts. BlackRock's allocation of investment opportunities among various BlackRock Client accounts presents inherent potential and actual conflicts of interest, particularly where an investment opportunity is limited. These potential conflicts may be exacerbated in situations where BlackRock is entitled to higher fees and incentive compensation from certain BlackRock Client accounts than from other BlackRock Client accounts (including the Adviser Private Funds), where the portfolio managers making an allocation decision are entitled to an incentive fee, carried interest or other similar compensation from such other BlackRock Client accounts, or where there are differences in proprietary investments in BlackRock Client accounts. The prospect of achieving higher compensation or greater investment return from a BlackRock Client account than from other BlackRock Client accounts may provide incentives for the BlackRock Investment Advisers or other members of the BlackRock Group to favor such BlackRock Client account over such other BlackRock Client accounts when allocating investment opportunities. It is the policy of BlackRock not to make decisions based on the foregoing interests or greater fees or compensation.

To address these potential and actual conflicts, BlackRock has developed an Investment Allocation Policy and related guidelines. In addition, certain members of the BlackRock Group have supplemental allocation policies for making allocation decisions among BlackRock Client accounts managed by such members of the BlackRock Group (together with the Investment Allocation Policy and related guidelines, the "Allocation Policy"). The Allocation Policy is intended to ensure that investment opportunities are allocated fairly and consistently among BlackRock Client accounts over time, taking into account various factors including the BlackRock Client account's investment objectives or strategies, investment, investment guidelines and restrictions, portfolio construction, tax considerations, risk or investment concentration parameters, supply or demand for a security at a given price level, size of available investment, available capital commitments or cash availability and liquidity requirements, leverage limitations, regulatory considerations, contractual restrictions, (including with other clients), minimum investment size, relative size and such other factors as may be relevant to a particular transaction. The BlackRock Group reserves the right to allocate investment opportunities appropriate for the investment objectives of the BlackRock Client accounts in any manner deemed fair and equitable by the BlackRock Group consistent with the Allocation Policy and applicable law. The application of the Allocation Policy and the foregoing considerations may result in a particular BlackRock Client account not receiving an allocation of an investment opportunity that has been allocated to other BlackRock Client accounts following the same or similar strategy, or receiving a smaller allocation than other BlackRock Client accounts. Furthermore, as the investment programs of the BlackRock Client accounts change and develop over time, additional issues and considerations may affect the Allocation Policy and the expectations of the BlackRock Group with respect to the allocation of investment opportunities to the BlackRock Client accounts. BlackRock and the BlackRock Investment Advisers may change the Allocation Policy and guidelines relating thereto from time to time without the consent of or notice to the BlackRock Client account investors.

As a general matter, it is expected that each BlackRock Client account will participate primarily in investments sourced by the investment personnel directly responsible for managing the BlackRock Client account, allocated across the investment personnel's BlackRock Client accounts in accordance with the Allocation Policy. While the investment program of certain BlackRock Client accounts permit the making of investments sourced by investment personnel not directly responsible for managing such BlackRock Client accounts, such BlackRock Client accounts have no right or entitlement to receive an allocation of any such investment opportunity. In addition, a BlackRock Client account will not have exclusivity over investment opportunities sourced by the investment personnel directly responsible for managing such BlackRock Client account and such investment opportunities may instead be allocated, in whole or in part, to other BlackRock Client accounts that may be managed by such investment personnel or to BlackRock Client accounts managed by other investment teams.

Therefore, investment opportunities generally will be allocated, in accordance with the Allocation Policy, first, among BlackRock Client accounts for which the investment personnel sourcing the applicable investment opportunity are directly responsible; and, thereafter, as determined by BlackRock in its sole discretion. As a result, BlackRock Client accounts managed by investment personnel and BlackRock Client Accounts managed to provide additional capital will have priority over the BlackRock Client accounts not managed by such

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

investment personnel with respect to investment opportunities sourced by such investment personnel that might otherwise be appropriate for the BlackRock Client accounts not managed by such investment personnel, and in any event the BlackRock Client accounts not managed by such investment personnel will have no right or entitlement, and such BlackRock Client accounts' investors should have no expectation that any such BlackRock Client account will receive an allocation to, such investment opportunities.

In certain circumstances, subject to the Allocation Policy, the BlackRock Investment Advisers may, in their discretion, provide co-investment opportunities to investors in BlackRock Client accounts on terms determined by the relevant BlackRock Investment Adviser and without notice to the other investors in such BlackRock Client accounts. To the extent such co-investment opportunities are offered to the BlackRock Client accounts and other investors, it may present inherent conflicts of interest between the interests of a BlackRock Client account and the co-investors.

Side-by-side management by the BlackRock Group of BlackRock Client accounts may also raise other potential and actual conflicts of interest, including those associated with allocating expenses attributable to the BlackRock Client accounts, management time, services and functions among the BlackRock Client accounts. The relevant BlackRock Investment Adviser and its affiliates will attempt to make such allocations on a basis that they consider to be fair and equitable.

Agreements with Other Clients

The investment terms offered to BlackRock Client accounts or to investors in BlackRock Client accounts (including commingled investment vehicles or dedicated funds managed by the BlackRock Investment Advisers or an affiliate) with similar investment objectives as other BlackRock Client accounts may be different than those offered to such other BlackRock Client account investors and may create conflicts. In particular, with respect to investors in BlackRock Client accounts that are managed as dedicated funds or with respect to BlackRock Clients investing through separate accounts with similar investment objectives to other BlackRock Client accounts, information sharing may be more extensive, detailed and timely as compared to information available to investors in such other BlackRock Client accounts, and the liquidity of such BlackRock Client accounts may not be subject to the restrictions that otherwise apply to investors in such other BlackRock Client accounts. These differences could result in, among other things, BlackRock Client accounts selling or withdrawing from securities or other investments in which another BlackRock Client account is invested in advance of such other BlackRock Client account or otherwise adversely affecting such other BlackRock Client account.

Decisions Made and Actions Taken by the Blackrock Investment Advisers May Raise Potential Conflicts of Interest

Management of the BlackRock Client Accounts

In connection with the management of the BlackRock Client accounts, the BlackRock Investment Advisers will have the right to make certain determinations on behalf of the BlackRock Client accounts, in their discretion. For example, the relevant BlackRock Investment Adviser may determine from time to time, in its discretion, to make a distribution in kind to certain or all investors in a BlackRock Client account, segregate assets or set reserves for contingent liabilities, in each case subject to the terms of the BlackRock Client account's operating agreements. Any such determinations may affect such BlackRock Client account's investors differently and some investors may be adversely affected by such determinations by the relevant BlackRock Investment Adviser. BlackRock Client account investors may be situated differently in a number of ways, including being resident of, or organized in, various jurisdictions, being subject to different tax rules or regulatory structures and/or having different internally-or externally-imposed investment policies, restrictions or guidelines. As a result, conflicts of interest may arise in connection with decisions made by the relevant BlackRock Investment Adviser that may be more beneficial for certain BlackRock Client account investors. In making determinations on behalf of a BlackRock Client account, the relevant BlackRock Investment Adviser intends to consider the

investment objectives of such BlackRock Client account as a whole, not the investment or other objectives of any BlackRock Client account investor individually.

Managers' Decisions May Benefit the BlackRock Group and BlackRock Client Accounts

The BlackRock Group may derive ancillary benefits from certain decisions made by the BlackRock Investment Advisers. While the BlackRock Investment Advisers will make decisions for the BlackRock Client accounts in accordance with their obligations to manage the BlackRock Client accounts appropriately, the fees, allocations, compensation and other benefits to the BlackRock Group (including benefits relating to business relationships of the BlackRock Group) arising from those decisions may be greater as a result of certain portfolio, investment, service provider or other decisions made by the relevant BlackRock Investment Adviser for the BlackRock Client accounts than they would have been had other decisions been made which also might have been appropriate for the BlackRock Client accounts. For example, the BlackRock Investment Advisers may make the decision to have a member of the BlackRock Group provide administrative or other services to a BlackRock Client account instead of hiring an unaffiliated administrator or service provider; provided that such engagement is on reasonable commercial terms, as determined by the relevant BlackRock Investment Adviser in its discretion, or otherwise complies with the affiliate transaction provisions of the governing documents of such BlackRock Client account. The BlackRock Investment Advisers may also make decisions and exercise discretion with respect to a BlackRock Client account that could benefit members of the BlackRock Group that have invested in such BlackRock Client account.

Temporary Investments in Cash Management Products

Subject to applicable laws, a BlackRock Client account may invest, on a temporary basis, in short-term, high-grade assets or other cash management products, including SEC-registered investment funds (open-end or closed-end) or unregistered funds, including, if permitted by the terms of the governing documents of the relevant BlackRock Client account, any such funds that are sponsored, managed or serviced by advisory members of the BlackRock Group. In connection with any of these investments, subject to the terms of the governing documents of the BlackRock Client accounts, the BlackRock Client accounts will bear all fees pertaining to the investment, including advisory, administrative or 12b-1 fees, and no portion of any fees otherwise payable by the BlackRock Client accounts will be offset against fees payable in accordance with any of these investments (i.e., there could be "double fees" involved in making any of these investments which would not arise in connection with an investor's direct investment in such money market or liquidity funds, because a member of the BlackRock Group could receive fees with respect to both the management of a BlackRock Client account, on one hand, and such cash management products, on the other). In these circumstances, as well as in other circumstances in which any members of the BlackRock Group receive any fees or other compensation in any form relating to the provision of services, no accounting, repayment to the BlackRock Client accounts or offset of management fee will be required, unless required by the terms of the governing documents of such BlackRock Client accounts.

Other Services and Activities of the BlackRock Group

Subject to the terms of the governing documents of the relevant BlackRock Client account, the members of the BlackRock Group (including the BlackRock Investment Advisers) may provide financial, consulting and other services to, and receive compensation from, an entity which is the issuer of a security or other investment held by a BlackRock Client account, counterparties to transaction with a BlackRock Client account or third parties that also provide investment management or other services to a BlackRock Client account. In addition, subject to the terms of the governing documents of the relevant BlackRock Client account, the members of the BlackRock Group may purchase property (including securities) from, sell property (including securities) or lend funds to, or otherwise deal with, any entity which is the issuer of a security held by a BlackRock Client account, counterparties to transactions with a BlackRock Client account or third parties that also provide investment management or other services to a BlackRock Client account. In addition, it is possible that members of the BlackRock Group may receive certain transaction fees from issuers the securities of which a BlackRock Client account invests in directly or indirectly in connection with structuring, negotiating or entering into such

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

investment transactions, as well as ongoing advisory or monitoring fees. Fees may also be earned by, and expenses may be reimbursed to, members of the BlackRock Group or their personnel if such personnel serve as directors or officers of issuers the securities in which a BlackRock Client account directly or indirectly invests. The governing documents of certain BlackRock Client accounts provide that the management fee payable by such BlackRock Client accounts to their respective BlackRock Investment Advisers will be reduced by all or a portion of such fees. It is also likely that a BlackRock Client account will have multiple business relationships with and will invest in, engage in transactions with, make voting decisions with respect to, or obtain services from entities for which members of the BlackRock Group perform or seek to perform certain financial services.

The BlackRock Group may derive ancillary benefits from providing investment advisory, distribution, transfer agency, administrative and other services to a BlackRock Client account, and providing such services to such BlackRock Client account may enhance the BlackRock Group's relationships with various parties, facilitate additional business development, and enable the BlackRock Group to obtain additional business and generate additional revenue.

Transactions with Certain BlackRock Client Account Investors

BlackRock Client accounts may enter into transactions with certain investors in such BlackRock Client account, which may raise significant potential conflicts of interest. To the extent that a BlackRock Client account enters into any such transaction, such transactions will be on terms, taken as a whole, that are fair and reasonable to such BlackRock Client account, in the good faith determination of the applicable BlackRock Investment Adviser or other member of the BlackRock Group.

Investments in BlackRock Managed-Funds

In situations where BlackRock investment teams are investing in BlackRock Affiliated Funds, access to certain portfolio holding and risk characteristic data of the Affiliated Funds is not available to the investment team until it is disclosed publicly. As a result, BlackRock investment teams will not have any early access to this information about these funds that could be relevant in making an investment decision, which could adversely affect a client account or fund.

Side-by-Side Management

Side-by-side management by BlackRock Investment Advisers of US Registered Funds, separate accounts, institutional accounts, separately managed account or "wrap fee" program ("SMA Program"), Private Funds and collective trust funds also involves potential conflicts of interest, including those associated with any difference in fee structures, as well as other pecuniary and investment interests the BlackRock Group may have in an account managed by BlackRock. US Registered Funds and SMA Program accounts, for example, generally pay management fees based on a fixed percentage of assets under management, whereas institutional accounts and Private Funds often have more varied fee structures, including a combination of asset- and performance-based compensation. The prospect of achieving higher compensation from one BlackRock Client or account than from another results in a potential incentive for the applicable BlackRock Investment Adviser to favor the higher paying Client or account when, for example, placing securities transactions that the applicable BlackRock Investment Adviser believes could more likely result in favorable performance or engaging in cross trades. Similarly, other incentives include where BlackRock or its affiliates or employees have a significant proprietary investment in a fund or account, and where a BlackRock Investment Adviser has an incentive to favor such a fund or account to the detriment of other funds or accounts. BlackRock's policies and procedures state that investment decisions are to be made without consideration of BlackRock's or its employees' pecuniary or investment interests but, instead, in accordance with BlackRock's or an Adviser's (or either of their personnel's) fiduciary duties to its client accounts. For additional information regarding side-by-side management, please refer to Item 6 ("Performance-Based Compensation and Side-by-Side Management") of this Brochure.

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

In certain situations, a BlackRock Investment Adviser can influence the structure of an underlying portfolio investment for tax purposes. Such structuring may not benefit all accounts under management. The BlackRock Investment Adviser will seek to structure the underlying portfolio in a way that is fair under the circumstances but there is no guarantee a particular client account will not be harmed. Under certain circumstances, a BlackRock Investment Adviser is required to sell or exit an investment on behalf of a BlackRock Client at the direction of the BlackRock Client or due to a need for liquidity of a BlackRock Client, so as to meet the ongoing obligations of the BlackRock Client. Such transactions potentially are not in the best interests of all BlackRock Clients and could result in a reduced sales price from current market values.

Certain Principal Transactions in Connection with the Organization of a Private Fund and Blackrock US Fund

Subject to the terms of the governing documents of the relevant BlackRock Client account, a member of the BlackRock Group may enter into “principal transactions” with a BlackRock Client account within the meaning of Section 206(3) of the Advisers Act in which such member of the BlackRock Group acts as principal for its own account with respect to the sale of a security or other asset to, or purchase of a security or other asset from, such BlackRock Client account. Principal transactions will be completed in compliance with applicable law and the terms of the governing documents of the relevant BlackRock Client account. In analyzing such principal transactions, the applicable BlackRock Investment Adviser will have a conflict between acting in the best interests of a BlackRock Client account and assisting itself or its affiliates by selling or purchasing a particular security.

On occasion and subject to applicable law and applicable governing documents, BlackRock or a related person (including its affiliates or its officers, directors or employees) purchases investments on behalf of and in anticipation of opening a Private Fund for investment. Such investments are transferred to the Private Fund. Generally, to the extent permitted by law, the Private Fund pays a market rate of interest and purchases the investment at cost. Since prior to transfer, such investments would be owned by BlackRock or a related person, conflicts of interest arise regarding the decision of whether or not to transfer such investments and the timing of such transfers. In addition, from time to time, BlackRock or a related person, in order to provide initial investment capital, holds a temporary proprietary interest for a period of time after the inception of a Private Fund. BlackRock’s or the related person’s disposition of such seed investment can have an impact on the value or liquidity of such Private Fund. More information on these arrangements can be found in the OM of the particular Private Fund.

From time to time, BlackRock or a related person, in order to provide initial investment capital, holds a temporary proprietary interest for a period of time after the inception of a BlackRock US Fund . When BlackRock or the related person disposes of their interest, the shares are generally not permitted to be redeemed in conjunction with a purchase by a client account for which BlackRock serves as advisor. BlackRock’s or the related person’s disposition of shares can have an impact on the price or liquidity of the shares being sold.

Certain Proprietary Transactions by BlackRock

On occasion, BlackRock, including its affiliates, may invest in a company or otherwise seek to acquire a controlling or non-controlling stake in a company for strategic purposes. Such activity could result in a restriction on the ability of BlackRock clients to engage with such company as a counterparty or otherwise invest in such company’s securities either at the time of such engagement or at a later date. In addition, BlackRock may take action with respect to its proprietary account(s) that competes or conflicts with the advice a BlackRock Investment Adviser may give to, or an investment action a BlackRock Investment Adviser may take on behalf of, a BlackRock Client. Such activity gives rise to a potential conflict of interest.

Potential Restrictions and Conflicts Relating to Information Possessed or Provided by BlackRock

Availability of Proprietary Information

In connection with the activities of BlackRock, Inc. and BlackRock Investment Advisers, certain persons within the BlackRock Group receive information regarding proposed investment activities for BlackRock and BlackRock Clients that is not generally available to the public. Also, BlackRock Investment Advisers have access to certain fundamental analyses, research and proprietary technical models developed internally or by other members of the BlackRock Group certain third parties and their respective personnel. There will be no obligation on the part of such persons or any BlackRock Investment Adviser, to make available for use by a BlackRock Client, or to effect transactions on behalf of a BlackRock Client on the basis of, any such information, strategies, analyses or models known to them or developed in connection with their own proprietary or other activities. In many cases, such persons will be prohibited from disclosing or using such information for their own benefit or for the benefit of any other person, including BlackRock Clients. In other cases, fundamental analyses, research and proprietary models developed internally are used by various BlackRock Investment Advisers and personnel on behalf of different BlackRock Clients, which could result in purchase or sale transactions in the same security at different times (and could potentially result in certain transactions being made by one portfolio manager on behalf of certain BlackRock Clients before similar transactions are made by a different portfolio manager on behalf of other BlackRock Clients), or could also result in different purchase and sale transactions being made with respect to the same security. Further information regarding inconsistent investment positions and timing of competing transactions is set forth in “Potential Conflicts Relating to Advisory Activities” in Item 11 (“Code of Ethics, Participation or Interest in Client Transactions and Personal Trading”) of this Brochure. Similarly, one or more BlackRock Clients could have, as a result of receiving client reports or otherwise, access to information regarding BlackRock Investment Advisers’ transactions or views, including views on voting proxies, which are not available to other BlackRock Clients, and may act on such information through accounts managed by persons other than a BlackRock Investment Adviser. The foregoing transactions may negatively impact BlackRock Clients through market movements or by decreasing the pool of available securities or liquidity. BlackRock Clients could also be adversely affected when cash flows and market movements result from purchase and sale transactions, as well as increases of capital in, and withdrawals of capital from, accounts of other BlackRock Clients. These effects can be more pronounced in thinly traded securities and less liquid markets.

In addition, BlackRock Investment Advisers have no obligation to seek information from or share with any BlackRock Client any information, investment strategies, opportunities, or ideas known to members or affiliates of the BlackRock Group or developed or used in connection with other clients or activities. For example, it is possible that a client account invests in securities of companies with which an affiliate has or is trying to develop investment banking relationships, strategic partnerships, as well as securities of entities in which BlackRock, or one of its affiliates has significant debt or equity investments, in which an affiliate makes a market or in which an affiliate provides or anticipates someday providing research coverage. Such investments could cause conflicts between the interests of a client account and the interests of other clients of BlackRock or another affiliate, or cause BlackRock to be exposed to material non-public information about an issuer. Moreover, conflicts of interest could arise where members and personnel of the BlackRock Group, including BlackRock Investment Advisers’ personnel or other BlackRock personnel advising or otherwise providing services to BlackRock Clients, have possession of information not available to all BlackRock personnel, and such personnel act on the basis of such information, or are required to refrain from acting, in ways that have adverse effects on BlackRock Clients.

Material Non-Public Information/Insider Trading

BlackRock Group receives material non-public information in the ordinary course of its business. This is information that is not available to other investors or other confidential information which, if disclosed, would likely affect an investor’s decision to buy, sell or hold a security. This information is received voluntarily and involuntarily and under varying circumstances, including, but not limited to, upon execution of a non-

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

disclosure agreement, as a result of serving on the board of directors of a company, serving on ad hoc or official creditors' committees and participation in risk, advisory or other committees for various trading platforms, clearinghouses and other market infrastructure related entities and organizations. Under applicable law, members of the BlackRock Group are generally prohibited from disclosing or using such information for their personal benefit or for the benefit of any other person, regardless of whether that person is a BlackRock Client.

Accordingly, should a member of the BlackRock Group obtain, either voluntarily or involuntarily, material non-public information with respect to an issuer, it may limit the ability of BlackRock Clients to buy, sell, or hold investments and may result in an underlying security or investment being priced inconsistently across BlackRock Clients. BlackRock has no obligation or responsibility to disclose the information to, or use such information for the benefit of, any person (including BlackRock Clients), even if requested by BlackRock or its affiliates and even if failure to do so would be detrimental to the interests of that person. BlackRock has adopted a Global Insider Trading Policy and a Global Material Non-public Information Barrier Policy, which establish procedures reasonably designed to prevent the misuse of material non-public information by BlackRock and its personnel. Under the Global Insider Trading Policy, BlackRock Investment Advisers generally are not permitted to use material non-public information obtained by any department or affiliate of BlackRock in the course of its business activities or otherwise, in effecting purchases and sales in securities transactions for BlackRock Clients or for their personal accounts.

BlackRock also has adopted policies establishing information barriers to minimize the likelihood that particular investment advisory units or teams will inadvertently come into possession of material non-public information known by some other unit or team at BlackRock and thereby also minimizing the likelihood that a particular unit or team will be inadvertently precluded from taking action on behalf of its clients. Nonetheless, the investment flexibility of one or more of the BlackRock Investment Advisers or business units on behalf of BlackRock Clients may be constrained as a consequence of BlackRock's policies regarding material non-public information and insider trading and related legal requirements.

Consequently, BlackRock Investment Advisers' investment activities likely will be impacted by receipt of such information, even if a failure to act on such information is ultimately detrimental to BlackRock Clients. In addition, in certain circumstances, the use of such information would also be prohibited by BlackRock's Global Insider Trading Policy.

From time to time, certain BlackRock employees use paid expert networks and other industry experts, (subject to the BlackRock policies regarding the handling and restricted use of material non-public information). BlackRock has adopted specific policies and procedures to help prevent and/or appropriately address the receipt of any material non-public information from such expert networks.

Potential Conflicts that Arise with Respect to Services Provided by or Through Various BlackRock Entities

Subject to applicable law and contractual arrangements, BlackRock Clients have a choice of engaging the securities and futures broker or dealer, custodial, derivatives, trustee, agency, mortgage servicing, lending, banking, advisory services and other commercial services of, or investing in one of a spectrum of investment products provided or sponsored by, another BlackRock Investment Adviser, other members of the BlackRock Group. Additionally, the BlackRock Investment Advisers rely on information from, or utilize the services provided by, such persons in managing a BlackRock Client's account. These services and certain other relationships among various members of the BlackRock Group and their respective subsidiaries and related persons, with or without respect to BlackRock Clients, give rise to potential conflicts of interest and could have potentially adverse effects on BlackRock Clients, described generally below.

When these persons provide such services to BlackRock Clients, and when BlackRock Clients invest in these investment products, relevant BlackRock entities will be entitled, subject to applicable laws and contractual

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

arrangements, to assess and retain fees and other amounts that they receive in connection with such products and services, without being required to account to any BlackRock Client. Additionally, subject to applicable laws and contractual arrangements, advisory fees, or other compensation payable by BlackRock Clients may not be reduced or offset by reason of receipt by BlackRock of any such fees or other amounts. In some instances, members of the BlackRock Group when acting in such commercial capacities, take commercial steps in their own interests, which can be adverse to those of the BlackRock Clients. Except as otherwise described herein, a BlackRock Investment Adviser may not take actions to negotiate terms between a BlackRock Client and BlackRock affiliates who provide these services, nor will the BlackRock Investment Adviser generally be responsible with respect to any losses or harms suffered by the BlackRock Client in connection with the BlackRock Client's use of services or products of such persons. Additionally, as with relationships with unaffiliated counterparties as described above, BlackRock Clients will be required to establish these business or commercial relationships with BlackRock affiliates, if at all, based on the BlackRock Client's own credit standing; such persons will not consider or rely on, and neither BlackRock nor any BlackRock Investment Adviser will be required to allow the credit standing of BlackRock or any BlackRock Investment Adviser to be used in connection therewith.

Services Provided to a BlackRock Client by other BlackRock Investment Advisers or through Investments in a BlackRock Investment Product

As discussed under "Services of Affiliates" in Item 4 ("Advisory Business") of this Brochure, BlackRock Investment Advisers use the personnel or services of other BlackRock entities in a variety of ways to make available BlackRock's global capabilities to BlackRock Clients. While BlackRock believes this practice is generally in the best interests of its clients, it can give rise to certain conflicts of interest, with respect to: (i) allocation of investment opportunities; (ii) execution of portfolio transactions; (iii) client servicing; and (iv) fees. Additionally, BlackRock Clients utilizing the services of BlackRock affiliates can be disadvantaged as a result of, among other things: (i) differences in regulatory requirements of various jurisdictions or organizations to which such BlackRock affiliates are subject; (ii) time differences; (iii) the terms of BlackRock's and such affiliates' internal policies and procedures, the client's investment advisory and other agreements; or (iv) the terms of the governing documents for a Private Fund, US Registered Fund or other investment product. BlackRock and its affiliates will seek to mitigate conflicts that arise by determining not to utilize the personnel or services of a particular affiliate in circumstances where it believes the potential conflict or adverse impact of ameliorative steps outweighs the potential benefits of the relationship.

BlackRock's Registered Investment Companies, Private Funds and Other Investment Products

BlackRock Investment Advisers, when appropriate and in accordance with applicable laws, investment objectives and guidelines, will purchase on behalf of BlackRock Clients, or will recommend to BlackRock Clients that they purchase, shares of Affiliated Funds. Certain BlackRock Investment Advisers that are domiciled outside of the U.S. serve as investment manager to ETFs domiciled outside of the U.S. (the "Foreign iShares ETFs"). Certain Foreign iShares ETFs may, from time to time, invest in the securities of the US iShares ETFs pursuant to a no-action letter issued by the SEC staff.

Certain BlackRock Investment Advisers also invest BlackRock Client assets in other portfolios managed by BlackRock Investment Advisers (collectively, "Affiliated Accounts"). In the case of Funds of Funds or separate accounts managed in a similar style, this may take the form of an investment in other BlackRock Private Funds, or separate accounts managed by BlackRock affiliates. BlackRock Investment Advisers face potential conflicts when recommending the purchase of, or allocating the assets of, a BlackRock Client or Private Fund to one or more Affiliated Funds or Affiliated Accounts with respect to which BlackRock receives fees and/or other compensation. In hindsight, circumstances could be construed that such recommendation or allocation conferred a benefit upon the Affiliated Fund, Affiliated Account, or BlackRock Investment Adviser, to the detriment of the BlackRock Client or Private Fund, or vice versa.

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

As a shareholder in a pooled investment vehicle, a BlackRock Client will pay a proportionate share of the vehicle's fees and expenses. Investment by a BlackRock Client in an Affiliated Fund means that, subject to applicable laws and the terms of any such investment, BlackRock will receive directly or indirectly advisory fees and/or other compensation from the Affiliated Fund that are in addition to the fees it will receive from the BlackRock Client for managing the separate account or Private Fund. Similarly, BlackRock Clients who invest in an Affiliated Fund through a Private Fund or separate account managed by another BlackRock Investment Adviser are subject to advisory fees charged in connection therewith.

Some Affiliated Funds could be considered "start-up" or early stage funds with low assets under management. In addition, BlackRock might have its own seed capital invested in certain Affiliated Funds and/or could have discretionary control of a significant amount of BlackRock Client assets invested in such Affiliated Funds. Withdrawing seed capital or BlackRock Client assets from such Affiliated Funds could disadvantage the other BlackRock Clients and investors invested in the Affiliated Fund.

BlackRock Clients who fund their separate accounts with shares of Affiliated Funds may incur deferred sales charges upon the sale of such shares by BlackRock, which could result in compensation to BlackRock or an affiliate that is in addition to the fees BlackRock will receive for managing the separate account. BlackRock Clients should notify BlackRock if they do not want their separate account assets or Private Fund investments to be invested in Affiliated Funds. Certain BlackRock Clients can invest directly in certain Affiliated Funds or other US Registered Funds outside of their separate accounts without paying additional separate account management fees to BlackRock. Consistent with applicable law, BlackRock may waive fees and/or reimburse fees or expenses for some BlackRock Clients while not waiving fees or reimbursing fees or expenses for other BlackRock Clients.

The separate account management fees paid by certain retirement accounts (including certain accounts subject to ERISA) that invest in US Registered Funds from which BlackRock or an affiliate receives compensation (including management fees or fees paid pursuant to Rule 12b-1 under the Investment Company Act) will be reduced by the account's pro rata share of such compensation, to the extent required by applicable law. In certain circumstances, (e.g., at BlackRock's discretion, or if required by applicable contractual arrangements), BlackRock, in order to avoid duplication of advisory fees, will waive or credit all or a portion of its separate account investment management fee with respect to any assets of a BlackRock Client invested in shares of any such US Registered Funds or other pooled investment vehicles, or separately managed accounts of another BlackRock Investment Adviser. To the extent permissible under applicable law and the terms of any relevant contractual arrangement, BlackRock will institute, waive, or alter the terms of such a waiver from time to time in its sole and absolute discretion.

To the extent permitted by applicable laws, BlackRock and its affiliates make payments to financial intermediaries relating to the placement of interests in Private Funds. These payments are in addition to or in lieu of any placement fees payable by Investors in those Private Funds. These payments, potentially significant to the financial intermediary and/or its representatives, can create an incentive for the financial intermediary to recommend the Private Fund over other products.

Certain Private Funds, their Advisers and other BlackRock Investment Advisers may conform to regulations under the Bank Holding Company Act of 1956, as amended, resulting in limits or restrictions on investments in certain companies, and underlying funds. These potential restrictions are generally discussed in each applicable Private Fund's OM.

In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank") was signed into law in the U.S. Dodd-Frank is expansive in scope and requires the adoption of extensive regulations and numerous regulatory decisions, many of which have been adopted. BlackRock has a conformance program to address certain regulations adopted under Dodd-Frank, as well as financial reforms that have been introduced as part of the SEC's investment company modernization initiatives.

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

In addition, the SEC, banking regulators, the Internal Revenue Service and the CFTC each continue to review practices and regulations relating to the use of futures, swaps and other derivatives. Such reviews could result in regulations that restrict or limit the use of such products by funds or accounts. If adopted, these limitations could require BlackRock to change certain business practices or implement new compliance processes, which could result in additional costs and/or restrictions.

In the referendum held on June 23, 2016 the United Kingdom (UK) voted to leave the European Union (EU) following which a continued period of political and economic instability and volatility in the financial markets of the UK and more broadly across Europe has prevailed. On January 31, 2020 the UK formally ceased membership of the EU and entered a transition period lasting until December 31, 2020. During the transition period, the UK's existing arrangements with the EU remain unchanged while the terms of future arrangements between the UK and the EU are negotiated and agreed upon by December 31, 2020.

BlackRock has implemented a number of steps to prepare for various Brexit outcomes, including effecting organizational, governance and operational changes, applying for and receiving licenses and permissions in the EU, and engaging in client communications. Depending on the terms of the future arrangements between the UK and the EU, BlackRock may experience organizational and operational challenges, incur additional costs or face other execution risks in connection with its European operations beyond December 31, 2020.

Pricing and Valuation of Securities and Other Investments

In many cases, BlackRock's fees are based on the value and performance of the assets held in the client account. BlackRock generally does not price securities or other assets for purposes of determining fees. However, to the extent permitted by applicable laws, including ERISA, from time to time, BlackRock or an affiliate will be charged with the responsibility of, or have a role in, determining in good faith asset values with respect to BlackRock products or accounts and BlackRock, or such an affiliate, will be required to price a portfolio holding when a market price is not readily available or when BlackRock has reason to believe in good faith that the market price is unreliable. To the extent BlackRock's fees are based on the value or performance of client accounts, BlackRock would benefit by receiving a fee based on the impact, if any, of the increased value of assets in an account.

When pricing a security, BlackRock attempts, in good faith and in accordance with applicable laws, to determine the fair value of the security or other assets in question. BlackRock generally relies on prices provided by third-party pricing services, custodians, broker-dealers, index providers or other external sources for valuation purposes. When market quotations are not readily available or are believed in good faith by BlackRock to be unreliable, the security or other asset or liability is valued by BlackRock in accordance with BlackRock's valuation procedures. Valuation procedures for certain separate accounts and/or Private Funds are described in the relevant IMA, OM and/or other governing documents. With respect to Funds of Funds and other BlackRock products or accounts which invest in privately placed pooled investment vehicles managed by third parties and/or investments sponsored by such third-party managers, BlackRock generally relies on pricing information provided by the Private Fund or its manager or other service provider. While BlackRock expects that such persons will provide appropriate valuations, such persons face conflicts similar to those described above and certain investments can be complex or difficult to value. BlackRock may also perform its own valuation analysis, but generally will not independently assess the accuracy of such valuations. For certain clients, at the clients' request, BlackRock has agreed to provide "reasonable assistance" involving the valuation of securities. This typically does not include proactively communicating BlackRock's valuation judgments to such clients.

From time to time, BlackRock or an affiliate will be engaged to provide valuation assistance to certain clients with respect to certain securities or other investments. Valuation recommendations made by BlackRock for a client account can differ from the valuations for the same securities or investments assigned by a client's custodian or pricing vendors, especially if such valuations are based on broker-dealer quotes or other data sources unavailable to the client's custodian or pricing vendors. In addition, BlackRock provides a variety of

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

services to clients in connection with the evaluation of certain distressed securities or other assets, including advice relating to the management, retention, restructuring, disposition and valuation of such assets.

In certain instances described below, BlackRock, in good faith based on available information, will determine an asset's fair value using a variety of methodologies. Furthermore, in circumstances where material non-public information is available to one group at BlackRock but, consistent with BlackRock's compliance policies and procedures, is not available to all groups at BlackRock, asset valuations used for pricing of underlying investments can be inconsistent. Due to specific time and operational constraints related to the daily calculation of net asset value certain BlackRock-sponsored funds value certain assets that are held in other non-registered funds or other accounts using different pricing sources than are used by other funds and accounts. BlackRock's Global Valuation Methodologies Committee (the "GVMC") reports to and derives its authority from the Valuation Oversight Committee, which consists of senior members of RQA, BRS, Legal & Compliance and other groups at BlackRock. The GVMC is responsible for overseeing valuation and pricing issues impacting BlackRock and its clients, including the design and implementation of pricing controls and the development of valuation policies and procedures.

For certain assets that BlackRock manages on behalf of BlackRock Clients, pricing and valuation will be unavailable or unreliable, from time to time, due to market dislocations, loss of pricing coverage, or market-making activities by broker-dealers, mergers and liquidations of broker-dealers or pricing vendors that previously supplied pricing data, the distressed nature of certain forced asset sales due to deleveraging transactions, extreme market volatility in certain asset classes, uncertainty surrounding potential or actual government intervention in the markets for certain assets, and other factors that have diminished the timeliness, accuracy or reliability of asset price information. In such circumstances, a client's investments generally will be valued at fair value ("Fair Value Assets"). Fair Value Assets are valued by BlackRock in accordance with BlackRock's valuation procedures or, when held in a BlackRock-sponsored registered investment company, in accordance with valuation procedures approved by the investment company's board of directors/trustees. BlackRock may conclude that a market quotation is not readily available or is unreliable: (i) if a security or other asset does not have a price source (e.g., due to technology issues, lack of liquidity, etc.); (ii) if BlackRock believes a market quotation from a broker-dealer or other source is unreliable (e.g., where it varies significantly from a recent trade); (iii) where the security or other asset is thinly traded; (iv) where recent asset sales represent distressed sale prices not reflective of the price that a client would reasonably expect to receive from the current sale of that asset in an arm's-length transaction; or (v) where there is a significant material event subsequent to the most recent market quotation. BlackRock's good faith judgment as to whether an event would constitute a "significant event" likely to cause a material change in an asset's market price may, in hindsight, prove to be incorrect, and the fair value determination made by BlackRock may be incorrect as to the direction and magnitude of any price adjustment when compared to the next available market price. In circumstances where BlackRock typically relies on a valuation provided by a third party, if the third party fails to provide a valuation, or if BlackRock believes such valuation is not representative of fair value, BlackRock will determine fair value in good faith in accordance with its valuation policies and procedures.

On a date when the New York Stock Exchange ("NYSE") is open and the primary exchange on which a foreign asset is traded is closed, such asset will generally be valued using the prior day's price, provided that BlackRock is not aware of any significant event or other information that would cause such price to no longer reflect the fair value of the asset. In such case the asset would be treated as a Fair Value Asset.

BlackRock will submit its recommendations regarding the valuation and/or valuation methodologies for Fair Value Assets to BlackRock's GVMC or a subcommittee thereof. The GVMC or its subcommittee will accept, modify, or reject the recommendations. BlackRock's Pricing Group periodically endeavors to confirm the prices it receives from all third-party pricing services, index providers and broker-dealers, and, with the assistance of BlackRock's portfolio managers, to regularly evaluate the values assigned to the securities and other assets held by BlackRock Clients. The pricing of all Fair Value Assets is subsequently reported to the GVMC or a subcommittee thereof with appropriate oversight from the BlackRock's Valuation Oversight Committee and, in the case of assets held in BlackRock US Funds, reviewed and/or ratified by a BlackRock US Fund's board or a committee thereof.

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

When determining the price for a Fair Value Asset, BlackRock seeks to determine the price that a client would reasonably expect to: (i) receive upon the current sale of the security or asset; or (ii) pay to transfer the liability associated with the security or asset in an orderly arm's-length transaction between market participants on the date on which the security or asset is being valued. The price generally will not be determined based on what a client would reasonably expect to receive for selling an asset at a later time or if it holds the asset to maturity. Fair value determinations will be made in good faith and will be based upon all available factors that BlackRock deems relevant at the time of the determination, and can be based on analytical values determined by BlackRock using proprietary or third-party valuation models such as the Black-Scholes Option Pricing model. Nevertheless, the models and/or underlying valuation assumptions utilized by BlackRock may potentially not correctly capture the fair value of an asset, which could impact the cost paid or proceeds realized by a client upon the purchase or disposition of the asset. BlackRock's fair value determinations may differ from those made by other advisers for the same security.

Fair value represents a good faith approximation of the value of a security. In retrospect, the fair value of one or more securities can differ from the price at which those assets could have been sold during the period in which the particular fair values were used in determining a client's asset value for performance or fee calculation purposes or, in the case of registered investment companies or other pooled investment vehicles, net asset value per share or unit on purchases and redemptions. For investment companies and other pooled investment vehicles, the sale or redemption of its shares or units at net asset value, at a time when a holding or holdings are valued at fair value, can have the effect of diluting or increasing the economic interest of existing investors and result in a purchasing or redeeming investor receiving too few shares/units or too little cash.

BlackRock will communicate its valuation information or determinations to a client's custodian and/or fund accountants as reasonably requested. There may be instances where the client's custodian, pricing vendors or fund accountants assign a different valuation to a security or other investment than the valuation for such security or investment determined or recommended by BlackRock.

Banking, Custodial and Related Services

BlackRock or its affiliates own or have an ownership interest in certain trading, portfolio management, operations and/or information systems (the "Systems") used by one or more service providers providing custodial services to BlackRock Clients or funds managed by a BlackRock Investment Adviser (each a "Service Provider"). The Services Providers remunerate BlackRock or its affiliates for the use of the Systems. Such payments to BlackRock or its affiliates for the use of the Systems may enhance the profitability of BlackRock and its affiliates. The receipt of fees by BlackRock or its affiliates from a Service Provider in connection with the use of the Systems may create an incentive for BlackRock to recommend that a BlackRock Client or fund managed by a BlackRock Investment Adviser enter into or renew a custodial arrangement with a Service Provider.

Conflicts of Interest Presented by the Retention of Third-Party Fees

As discussed under "Fees Paid to an Adviser by Third Parties" in Item 5 ("Fees and Compensation") of this Brochure, an Adviser or its employees or its affiliates may be entitled to negotiate for and retain Third-Party Fees with respect to the portfolio investments of a Private Fund or separate account to the extent set forth in the applicable Private Fund's OM and/or governing documents or the IMA governing the applicable separate account, respectively, and subject to applicable laws and regulations. The entitlement of an Adviser or its employees or its affiliates in respect of such Third-Party Fees poses various conflicts of interest. For example, an Adviser is financially incentivized to seek out transactions in which a Third-Party Fee would be payable, which may result in the applicable client making investments that it might not otherwise make absent the entitlement of the Adviser to Third-Party Fees. In addition, in situations where an Adviser or its employees or its affiliates have the ability to retain a Third-Party Fee, such Adviser has the financial incentive to negotiate as high a Third-Party Fee as possible. In certain circumstances, transaction counterparties may negotiate terms

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

for the portfolio investments that yield lower returns to the client than might have been the case had the Adviser, its employee or its affiliate not been entitled to the Third-Party Fees.

Even if the terms of a Private Fund's OM and/or governing documents or the IMA governing the separate account, as applicable, do not permit the Adviser or its employees or its affiliate to retain Third-Party Fees, the client may invest alongside other clients with respect to which the Adviser or its employees or its affiliate have a right to retain such fees, which creates conflicts similar to those that arise with respect to such other clients.

Investments in Service Clients of the BlackRock Group

The BlackRock Group provides a variety of services and advice to various clients ("Service Clients"), including issuers of securities that BlackRock Investment Advisers may purchase or sell for BlackRock Clients, and may generally receive fees for these services (including fees that are contingent on the successful placement of securities and successful closing of a transaction). As a result of the relationships with the BlackRock Group, BlackRock may have an incentive to invest in securities issued by Service Clients. BlackRock believes, however, that the nature and range of Service Clients is such that it would be inadvisable to exclude the securities of Service Clients. Accordingly, absent a specific investment restriction or direction or regulatory restriction, it is possible that a BlackRock Client's account will include the securities issued by Service Clients. In addition, it is possible that the BlackRock Group will receive certain transaction fees from Service Clients the securities of which BlackRock wishes to purchase or sell on behalf of BlackRock Clients in connection with structuring, negotiating, or entering into such investment transactions, as well as ongoing advisory or monitoring fees. In some instances, fees and expenses will be earned by the BlackRock Group or its personnel if such personnel serve as directors or officers of Service Clients.

Potential Conflicts Relating to BlackRock Clients' Use of Investment Consultants and Blackrock's Relationship with Pension Consultants

Many BlackRock Clients work with pension or other institutional investment consultants or outsourced chief investment officers (collectively, "Investment Consultants"), who provide a wide array of services to pension plans and other institutions, including assisting in the selection and monitoring of investment advisers such as BlackRock Investment Advisers. From time to time, BlackRock Clients' Investment Consultants who recommend BlackRock Investment Advisers to, and provide oversight of BlackRock Investment Advisers for, BlackRock Clients also provide services to or purchase services from members of the BlackRock Group. For example, BlackRock purchases certain index and performance-related databases and human resources-related information from Investment Consultants and their affiliates. BlackRock Investment Advisers also utilize brokerage execution services of Investment Consultants or their affiliates, and members of the BlackRock Group attend conferences sponsored by Investment Consultants. Conversely, from time to time, the BlackRock Group will be hired by Investment Consultants and their affiliates to provide investment management and/or risk management services, creating potential conflicts of interest.

Blackrock In-Sources or Outsources Certain Services to Third Parties

Subject to applicable law and contractual arrangements with Blackrock Clients, BlackRock, including BlackRock Investment Advisers, from time to time, and without notice to BlackRock Clients, will in-source from or outsource to third parties, including parties which are affiliated or unaffiliated with BlackRock, certain processes or functions in connection with a variety of services that they provide to BlackRock Clients in their administrative or other capacities. Such in-sourcing or outsourcing can give rise to potential conflicts of interest, including where BlackRock or other BlackRock Clients receive favorable pricing or other benefits that arise from or are connected to another BlackRock Client's vendor relationships.

Potential Restrictions on Investment Adviser Activity

From time to time, BlackRock will be restricted from or limited in purchasing, selling or voting securities, derivative instruments or other assets, including Affiliated Accounts, on behalf of BlackRock Clients because of corporate or regulatory and legal requirements, as well as contractual restrictions, applicable to BlackRock or the securities held by BlackRock on behalf of its clients. BlackRock has developed internal policies, to the extent necessary, designed to comply with, limit the applicability of, or otherwise relate to such requirements, as well as address potential conflicts of interest. These restrictions can impact or limit BlackRock's ability to purchase, vote or sell certain securities, derivative instruments or other assets on behalf of certain BlackRock Clients at the same time as other BlackRock Clients. A client not advised by BlackRock will not necessarily be subject to the same considerations.

In some cases, BlackRock Investment Advisers do not initiate or recommend certain types of transactions, or will otherwise restrict or limit their advice with respect to securities or instruments issued by or related to companies for which BlackRock is performing advisory or other services, or companies in which BlackRock has an interest. Such limitations or restrictions can arise solely from actions taken or initiated by BlackRock and have a negative effect on BlackRock Clients. For example, from time to time, when BlackRock is engaged to provide advisory or risk management services for a company, BlackRock Investment Advisers will be prohibited from or limited in purchasing or selling securities of that company for BlackRock Client accounts, particularly where such services result in BlackRock obtaining material non-public information about the company. Similar situations could arise if: (i) BlackRock personnel serve as directors or officers of companies the securities of which BlackRock wishes to purchase or sell; (ii) BlackRock has an ownership or other interest in a company; (iii) BlackRock is provided with material non-public information with respect to the issuer of securities; (iv) BlackRock Investment Advisers on behalf of BlackRock Clients or BlackRock, Inc. participate in a transaction (including a controlled acquisition of a U.S. public company) that results in the requirement to restrict all purchases and voting of equity securities of such target company; or (v) regulations, including portfolio affiliation rules or stock exchange rules, prohibit participation in offerings by an issuer when BlackRock's Clients' have prior holdings of such issuer's securities. However, where permitted by applicable law, and where consistent with BlackRock's policies and procedures (including the implementation of appropriate information barriers), BlackRock can purchase or sell securities or instruments that are issued by such companies or are the subject of an advisory or risk management assignment by BlackRock, or in cases in which BlackRock personnel serve as directors or officers of the issuer.

In certain circumstances where BlackRock invests in securities issued by companies that operate in certain regulated industries or in certain emerging or international markets, or are subject to corporate or regulatory ownership restrictions, there will be limits on the aggregate and/or portfolio-level amount permitted to be invested or voted by BlackRock that can be exceeded only with the grant of a license, waiver, regulatory relief or corporate consent. As a result, BlackRock Investment Advisers on behalf of BlackRock Clients may limit purchases, sell existing investments, or otherwise restrict, forgo, or limit the exercise of rights (including transferring, outsourcing or limiting voting rights or foregoing the right to receive dividends) when BlackRock Investment Advisers, in their sole discretion, deem it appropriate in light of potential regulatory or corporate restrictions on ownership, voting rights, or other consequences resulting from reaching investment thresholds. Similar limitations apply to derivative instruments or other assets or instruments, including futures, options, or swaps.

In those circumstances where ownership thresholds or limitations must be observed, BlackRock seeks to equitably allocate limited investment opportunities among BlackRock Clients, taking into consideration a security's benchmark weight and investment strategy. When BlackRock's ownership in certain securities nears an applicable threshold, BlackRock will limit purchases in such securities in index portfolios to the issuer's weighting in the applicable benchmark used by BlackRock to manage the BlackRock Client account or fund and in actively managed portfolios to the issuer's weighting in the applicable risk benchmark, adjusted on the basis of scaling factors that recognize additional degrees of freedom of active mandates over index mandates. If BlackRock's Clients' holdings of an issuer exceed an applicable threshold and BlackRock is unable to obtain relief to enable the continued holding of such investments, it will be necessary to sell down these positions to meet the applicable limitations, possibly during deteriorating market conditions. In these cases, benchmark overweight positions will be sold prior to benchmark positions being reduced to meet applicable limitations. For additional information

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

regarding BlackRock's allocation policy, please refer to "Competing or Complementary Investments and Trade Aggregation" in Item 12 ("Brokerage Practices") of this Brochure.

In addition to the foregoing, other ownership or voting thresholds may trigger or require reporting, applications, licenses, or other special obligations to governmental and regulatory authorities, and such reports, applications, or licenses may entail the disclosure of the identity of the BlackRock Client or BlackRock's intended strategy with respect to such securities, instruments, or assets. Where applicable, BlackRock can elect to forego or limit certain investments or opportunities, including limitations on voting or other investor rights, rather than incur the costs of an application, registration, or license.

Under certain circumstances, BlackRock will restrict a purchase or sale of a security, derivative instrument, or other asset on behalf of BlackRock Clients in anticipation of a future conflict that may arise if such purchase or sale would be made. Any such determination will take into consideration the interests of the relevant BlackRock Clients, the circumstances that would give rise to the future conflict and applicable laws. Such determination will be made on a case by case basis.

When evaluating non-index investments on behalf of its clients, especially in the case of private and real assets, BlackRock may consider the reputational risks of such investments to itself or its clients. As a result, BlackRock may, from time to time, forego making or disposing of non-index investments on behalf of its clients based on BlackRock's evaluation of these risks, even in circumstances where such investments are legally permissible and consistent with client guidelines. With respect to index investing, however, BlackRock manages to each applicable index without regard to these risks.

Other Relationships with Clients and Market Participants

The members of the BlackRock Group have developed, and will in the future develop, relationships with a significant number of clients and other market participants, including those that may hold or may have held investments similar to the investments intended to be made by the BlackRock Client accounts, that may themselves represent appropriate investment opportunities for a BlackRock Client account or that may compete with a BlackRock Client account for investment opportunities. It is difficult to predict the circumstances under which these relationships could become material conflicts for a BlackRock Client account, but it is possible that as a result of such relationships (or agreements with other BlackRock Client accounts) the relevant BlackRock Investment Adviser may refrain from making all or a portion of any investment or a disposition on behalf of a BlackRock Client account, which may materially adversely affect the performance of such BlackRock Client account.

Legal Representation

Certain BlackRock Client accounts, as well as the relevant BlackRock Investment Adviser and/or other members of the BlackRock Group, engage one or more counsel to represent them in connection with the organization of the BlackRock Client accounts and, in the case of BlackRock Client Accounts that are Private Funds, the offer and sale of interests therein, and not for any investor in such BlackRock account or such BlackRock Client account's investors as a group. In connection with such representation, including the preparation of such BlackRock Client accounts' respective governing documents, counsel relies upon certain information furnished to them by the relevant BlackRock Investment Adviser and other members of the BlackRock Group, and does not investigate or verify the accuracy or completeness of such information. In connection with the offering and subsequent advice, such counsels' engagement is limited to the specific matters as to which they are consulted and, therefore, there may exist facts or circumstances that could have a bearing on the BlackRock Client accounts' or BlackRock's financial condition or operations with respect to which counsel has not been consulted and for which they expressly disclaim any responsibility. Counsel does not represent BlackRock Client account investors. No independent counsel has been retained (or is expected to be retained) to represent BlackRock Client account investors. No attorney-client relationship exists between any counsel and any BlackRock Client account investor.

solely by such BlackRock Client account investor making an investment in a BlackRock Client account. As a result, BlackRock Client account investors are urged to retain their own counsel.

Resolution of Conflicts

It is difficult to predict the circumstances under which one or more of the foregoing conflicts could become material, but it is possible that such relationships could require a BlackRock Client account to refrain from making all or a portion of any investment or a disposition in order for BlackRock or another member of the BlackRock Group to comply with its fiduciary duties, the Advisers Act or other applicable laws. Subject to the terms of the governing documents of the relevant BlackRock Client account, any conflicts of interest that arise between a BlackRock Client account or particular investors in a BlackRock Client account, on the one hand, and other BlackRock Client accounts or members of the BlackRock Group or affiliates thereof, on the other hand, will be discussed and resolved on a case-by-case basis by business, legal and compliance officers of the BlackRock Group, as applicable. Any such discussions will take into consideration the interests of the relevant parties and the circumstances giving rise to the conflicts. Investors in BlackRock Client accounts should be aware that conflicts will not necessarily be resolved in favor of the interests of such account or any affected Limited Partner. There can be no assurance that any actual or potential conflicts of interest will not result in an account receiving less favorable investment or other terms with respect to investments, transactions or services than if such conflicts of interest did not exist.

Item 12. Brokerage Practices

As a general rule, each Adviser receives discretionary (or non-discretionary) investment authority from its clients at the outset of an advisory relationship. Subject to the terms of the applicable IMA, the Adviser's authority often includes the ability to select brokers and dealers through which to execute transactions on behalf of its clients, and to negotiate the commission rates, if any, at which transactions are effected. In making decisions as to which securities or instruments are to be bought or sold and the amounts thereof, each Adviser is guided by the mandate selected by the client and any client-imposed guidelines or restrictions. In some cases, pursuant to the advisory relationship, each Adviser has the authority to enter into an over-the-counter derivative relationship and transaction related documentation, repurchase agreements, futures and cleared derivatives agreements, listed options agreements, prime brokerage and securities lending agreements, securities forward agreements and other brokerage and/or trading agreements in connection with the trading of certain securities or instruments.

Selection of Brokers, Dealers and Other Trading Venues and Methods

The overriding consideration in allocating client orders for execution is the maximization of client profits (or minimization of losses) through a combination of controlling transaction costs (including market impact) and seeking the most effective uses of a broker's capabilities. When an Adviser has the authority to select brokers or dealers to execute transactions for its clients, it seeks to obtain the best execution reasonably available under the circumstances (which may or may not result in paying the lowest available brokerage commissions or spread). In so doing, the Adviser considers all factors it deems relevant. Such factors are typically either venue specific or transaction specific and may include, but not be limited to: (A) for venues: (i) execution capability including speed of execution, quality of communication links to BlackRock, clearance and trade settlement history and capability and ratio of complete versus incomplete trades; (ii) ability to handle large trades in securities having limited liquidity without undue market impact and ability to provide liquidity (as principal, agent or otherwise); (iii) access to market liquidity and quotation sources; (iv) financial condition of the counterparty, including reputation and creditworthiness; (v) responsiveness and reliability in executing trades, keeping records and accounting for and correcting administrative errors; (vi) ability to maximize price improvement opportunities, including the ability to provide ad hoc information or services; and (vii) ability to comply with all regulatory requirements; and (B) for transactions: (i) price and overall cost of the transaction, including any related credit support; (ii) the size, type and timing of the transaction; (iii) existing and expected activity in the market for the security, including any trading

patterns of the security and the particular marketplace; (iv) nature and character of the security or instrument and the markets on which it is purchased or sold; (v) value of research provided, if permitted under applicable law or regulation; (vi) fund or portfolio objectives or client requirements (if permissible), as applicable; (vii) if applicable, client-directed brokerage arrangements; and (viii) applicable execution venue factors.

BlackRock performs multiple types of monitoring to maintain order execution arrangements that remain suitable for the purpose of delivering the best client outcomes consistently over time. Some aspects of monitoring take place at the level of the transaction, where appropriate, and some monitoring is done on larger samples to make the monitoring statistically meaningful. The key types of monitoring include transaction cost analysis, compliance monitoring and governance committee oversight. The specific scope and content of monitoring varies depending on the data that is available for the relevant asset class in the market.

The Advisers do not consider a broker's or dealer's sales of BlackRock or clients' products, including shares of mutual funds or ETFs, when determining whether to select such broker or dealer to execute fund portfolio transactions. In addition, when deemed appropriate by the Adviser and subject to the applicable IMA or contractual arrangements and investment guidelines, an Adviser will enter into derivatives transactions (including but not limited to futures, swaps, options and currency forward contracts) on behalf of a Client. Counterparties to these derivatives transactions are selected based on a number of factors, including but not limited to credit rating, execution prices, execution capability with respect to complex derivative structures and other criteria relevant to a particular transaction.

The Advisers endeavor to be aware of current charges assessed by relevant broker-dealers and to minimize the expense incurred for effecting portfolio transactions, to the extent consistent with the interests and policies of client accounts. However, the Advisers will not select broker-dealers solely on the basis of "posted" commission rates nor always seek in advance competitive bidding for the most favorable commission rate applicable to any particular transaction. Although the Advisers generally seek competitive commission rates, they will not necessarily pay the lowest commission or commission equivalent as transactions that involve specialized services on the part of a broker-dealer generally result in higher commission rates or equivalents than would be the case with more routine transactions. The Advisers may pay higher commission rates to those brokers whose execution abilities, brokerage or research services or other legitimate and appropriate services are particularly helpful in seeking good investment results and are consistent with applicable law and contractual arrangements.

The reasonableness of commissions is based on an Adviser's view of the broker's ability to provide professional services, competitive commission rates, research and other services which will help an Adviser in providing investment advisory services to its clients, viewed in terms of either the particular transaction or the Adviser's overall responsibility to its clients, as the extent to which the commission rate or net price associated with a particular transaction reflects the value of services provided often cannot be readily determined. In making these determinations, the Adviser recognizes that some firms are better at executing some types of orders than others and it can be in the clients' best interests to use a broker whose commission rates are not the lowest but whose executions and other services the Adviser believes are likely to result in lower overall transaction costs or more favorable or more certain results.

As noted above, from time to time an Adviser places client transactions through an electronic communication network ("ECN") or other electronic systems or alternative trading system ("ATS") or with brokers or dealers that participate in such systems, including some in which BlackRock, from time to time and in accordance with applicable law, will have an ownership or financial interest. An Adviser uses these systems only when consistent with its relevant policies and procedures and the duty to seek best execution.

Unless inconsistent with the Adviser's duty to seek best execution, an Adviser at times directs a broker to execute a trade and "step out" a portion of the commission in favor of another broker that provides brokerage or research related services to BlackRock as described above. An Adviser also at times uses step out transactions in fulfilling a client-directed brokerage arrangement, to allow for an order to be aggregated, or for regulatory or other purposes. However, BlackRock does not enter into agreements with, or make commitments to, any broker-dealer that would bind BlackRock to compensate that broker-dealer, directly or indirectly, for client referrals or sales efforts through

placement of brokerage transactions; nor will BlackRock use step out transactions or similar arrangements to compensate selling brokers for their sales efforts.

Trade Reporting

Certain client transactions are subject to reporting requirements with regulators within the United States and in jurisdictions outside of the United States. Brokers, dealers and other counterparties to such client transactions as well as market participants such as clearing houses, trading platforms or affirmation platforms may be required to report details of such client transactions to a trade repository and/or to relevant regulators, and such disclosures could result in certain client transaction data becoming available to the public.

Research and Soft Dollars

The Advisers do not use client commissions to acquire research or execution services from broker-dealers, known as “soft dollar” arrangements.

Access Fees Paid to, and Discounts Provided by, ECNs, Derivative Clearing Firms and Other Trading Systems

BlackRock also places orders for the purchase and sale of securities or other instructions for certain of its clients through electronic trading systems or ATSS, including ECNs, derivatives clearing firms, or with brokers or dealers that participate in such trading systems or platforms, consistent with its duty to seek best execution of client transactions. ECNs and derivatives clearing firms charge fees for their services, including access fees, transaction fees and/or clearing fees. Access fees may be paid by BlackRock even though incurred in connection with executing transactions on behalf of clients, while transaction fees and clearing fees generally will be charged to clients and may be included in the cost of the instrument purchased. In certain circumstances, ECNs and derivatives clearing firms offer volume discounts that will reduce the access fees typically paid by an investment adviser. BlackRock expects to qualify for these volume discounts, which have the effect of reducing the access fees paid by BlackRock. Volume discounts achieved by BlackRock may also benefit or be applied to other BlackRock affiliates or their clients.

BlackRock also, from time to time and in accordance with applicable law, makes a nominal equity investment in or financial arrangement with a trading system or enter into consulting and/or advisory relationships with such electronic trading systems in order to assist in the design and development of such systems. In addition, certain BlackRock employees or employees of affiliates serve as board members or advisory members of ECNs, derivatives clearing firms, and/or other trading systems. Although BlackRock will not accept any payment, commission, rebate, or other compensation that is based on its use of a trading system on behalf of its advisory clients, BlackRock’s use of these trading systems would result in some benefit to the trading system and therefore would, in turn, indirectly benefit BlackRock as an investor or party with a financial interest in the trading system.

Competing or Complementary Investments and Trade Aggregation

In some circumstances, BlackRock Investment Advisers seek to buy or sell the same securities contemporaneously for multiple BlackRock Client accounts. Similarly, BlackRock Investment Advisers manage or advise accounts of BlackRock Clients that have investment objectives that are similar to those of other BlackRock Clients and/or seek to make investments in securities or other instruments in which BlackRock Clients invest. This will create potential conflicts and potential differences among different BlackRock Clients, particularly where there is limited availability or limited liquidity for those investments. BlackRock has developed policies and procedures that provide that it will seek to allocate investment opportunities and make purchase and sale decisions among all BlackRock Clients in a manner that it deems fair and equitable over time. Please see Item 11 (“Potential Conflicts Relating to Advisory Activities”) of this Brochure for more information.

Although, in some instances, allocating orders among BlackRock Clients creates potential conflicts of interest because of the interests of members of the BlackRock Group or because BlackRock receives greater fees or compensation from certain BlackRock Clients, BlackRock Investment Advisers will not make allocation decisions based on such interests or greater fees or compensation. Notwithstanding the foregoing, and considering BlackRock's policy to treat all eligible BlackRock Clients fairly and equitably over time, any particular allocation decision among accounts can be more or less advantageous to any one BlackRock Client or group of BlackRock Clients and certain allocations, to the extent consistent with BlackRock's fiduciary obligations, deviate from a pro rata basis among BlackRock Clients in order to address legal, tax, regulatory, fiduciary, risk management, and other considerations. In any given circumstance, BlackRock also will consider client guidelines, the source of the investment opportunity, the nature of the mandate, the timing of a given fund or account's closing, contractual obligations, the respective committed capital of the relevant BlackRock Clients, legal or regulatory requirements, and other considerations, as applicable.

For example, BlackRock Investment Advisers allocate investment opportunities among client accounts based upon, the nature of the investment opportunity and an assessment of the appropriateness of that opportunity for a client's account, taking into consideration the various risk characteristics associated with the investment opportunity and the relative risk profiles of the client account ("allocation metrics"). The risks considered in determining the allocation metrics for a group of accounts include, without limitation; (i) the type of security being considered; (ii) the security-, issuer- and/or industry-specific risks; (iii) the actual or expected liquidity of the security; and (iv) current and expected concentrations and exposures. In certain cases, BlackRock Investment Advisers will determine that an investment opportunity or particular purchases or sales are appropriate for one or more BlackRock Clients or for the BlackRock Group, but not for other BlackRock Clients, or are appropriate for, or available to, BlackRock Clients but in different sizes, terms, or timing than is appropriate for other BlackRock Clients, or determine not to allocate to or purchase or sell for certain BlackRock Clients all investment transactions for which all BlackRock Clients may be eligible.

BlackRock Investment Advisers, in appropriate circumstances, will aggregate securities trades for a BlackRock Client with similar trades for other BlackRock Clients, but are not required to do so. In particular, a BlackRock Investment Adviser could determine not to aggregate transactions that relate to portfolio management decisions that are made independently for different accounts or if it determines that aggregation is not practicable, not required or inconsistent with, client direction. When transactions are aggregated and it is not possible, due to prevailing trading activity or otherwise, to receive the same price or execution on the entire volume of securities purchased or sold, the various prices will be averaged, in which case all participating accounts generally will be charged or credited with the average price. In addition, under certain circumstances, BlackRock Clients will not be charged the same commission or commission equivalent rates in connection with a bunched or aggregated order. The effect of the aggregation therefore, on some occasions could either advantage or disadvantage a particular BlackRock Client.

From time to time, aggregation will not be possible because a security is thinly traded or otherwise not able to be aggregated and allocated among all client accounts seeking the investment opportunity or a BlackRock client will be limited in, or precluded from, participating in an aggregated trade as a result of that BlackRock client's specific brokerage arrangements, as discussed above. In these cases, the BlackRock Investment Advisers generally will choose to allocate on a non-pro rata basis such as through random or rotational allocations among eligible accounts in such a manner as to reasonably assure that BlackRock Clients are treated fairly and equitably over time. Also, BlackRock Clients can become subject to threshold limitations on aggregate and/or portfolio-level ownership interests in certain companies arising from statutory, regulatory or self-regulatory organization requirements, or company ownership restrictions (e.g., poison pills or other restrictions in organizational documents). In these circumstances, the BlackRock client will be competing for investment opportunities with other BlackRock clients. Similarly, some BlackRock clients will be limited or restricted in their ability to participate in certain initial public offerings pursuant to FINRA rules. This will result in client accounts not being able to fully participate, or to participate at all, in such opportunities.

Given all of the foregoing factors, the amount, timing, structuring, or terms of an investment by BlackRock clients will differ from, and performance can be lower than, investments and performance of other BlackRock clients,

including those which provide greater fees or other compensation (including performance-based fees) to BlackRock Investment Advisers or are accounts in which members of the BlackRock Group have an interest. The offering documents of certain funds and accounts may include additional information about the allocation of investment opportunities, trade aggregation, and conflicts of interest generally, and include information about the allocation procedures and processes directly applicable to that fund or account.

Directed Brokerage

In certain circumstances, BlackRock accepts direction from clients or agrees to limitations with respect to BlackRock's brokerage discretion as to which brokers or dealers are to be used in effecting transactions for client accounts. Clients who direct BlackRock to use a particular broker or dealer, or otherwise limit BlackRock's brokerage discretion, should be aware that, this direction can limit BlackRock in obtaining volume discounts on aggregated orders, or in selecting brokers or dealers on the basis of best price and execution. Clients who direct brokerage can have execution of their orders delayed, since (as discussed above) in certain instances BlackRock will fill directed trades after block trading activity is completed for a particular security.

Non-Discretionary Accounts

If a client has retained a BlackRock Investment Adviser to manage an account on a non-discretionary basis ("Non-Discretionary Clients"), there is the potential for the Client to be disadvantaged because the BlackRock Investment Adviser generally must obtain the Non-Discretionary Client's approval prior to effecting investment transactions on their behalf (unless otherwise agreed to with the client). In some instances, Non-Discretionary Clients will not receive notification of proposed trades from the BlackRock Investment Adviser and/or will not provide consent to such trades until after BlackRock's discretionary accounts have finished trading. Therefore, Non-Discretionary Clients will not always benefit from aggregated or "bunched" orders, resulting in a delay in execution of orders, and resulting in their accounts receiving a price that potentially is less favorable than that obtained for discretionary accounts. In addition, in certain instances, Non-Discretionary Clients are precluded from participating in certain investment opportunities that are available to discretionary clients if BlackRock is unable to obtain the client's consent in a timely fashion. As a result of these and other factors, the performance of non-discretionary accounts can differ from (and be better or worse than) the performance of discretionary accounts following the same investment strategy.

Changes to Blackrock's Brokerage Arrangements

A BlackRock Investment Adviser may choose, from time to time, to alter or not to engage in the above described arrangements to varying degrees, without notice to BlackRock Clients, to the extent permitted by applicable law and the applicable client agreement.

Item 13. Review of Accounts

BlackRock periodically reviews client accounts and provides reports to clients regarding their accounts. The nature and frequency of these reviews, as well as the frequency and content of these reports, is discussed in more detail below.

Nature and Frequency of Client Account Review

Depending on the nature of an institutional client's portfolio, the client's own monitoring capabilities, the type of advice and the arrangements made with the client, BlackRock's frequency of client account reviews ranges from daily to quarterly. The level of review can encompass the client's portfolio, a section of the portfolio, or a specific transaction or investment. Additional reviews can be triggered by changes in the investment objectives or guidelines of a particular client or specific arrangements with particular clients. The frequency, depth, and nature

of reviews are often determined by negotiation with individual clients pursuant to the terms of each client's written IMA or by the mandate selected by the client and the particular needs of each client. Reviews typically are conducted by portfolio management and account management personnel. BlackRock holds periodic staff meetings to determine the timing, level and focus of specific client reviews and to review the appropriateness of the review already completed.

Frequency and Content of Client Account Reports

The frequency and content of reports for institutional clients vary according to the particular needs of each client and the agreement between the client and Adviser. Such reports generally contain information with respect to portfolio holdings, transactions, and performance.

Item 14. Client Referrals and Other Compensation

Payments to BlackRock by a Non-Client in Connection with Advice Provided to a Client

Certain retirement and/or pension plan sponsors will pay management fees in connection with advice provided by BlackRock to such plan directly to BlackRock instead of having the management fee deducted from the retirement or pension plan assets.

Solicitation, Introduction or Placement Arrangements

With respect to client solicitation arrangements, the Advisers Act requires that, among other things, compensation to a solicitor be made pursuant to a written agreement and, for third-party solicitor arrangements, that the solicitor provide to each person solicited for BlackRock's advisory services, a written disclosure statement (the "Solicitor's Disclosure Statement") and this Brochure (or alternate brochure required or permitted to be provided). The Solicitor's Disclosure Statement contains important information with respect to, among other things, the material terms of the compensation arrangement between BlackRock and the solicitor, the nature of the relationship, including any affiliation between the solicitor and BlackRock, whether the client bears any costs with respect to the solicitation and whether the fees paid by such a client may differ from fees paid by other similarly situated clients who are not so introduced, as a result of the solicitation, and these Solicitor's Disclosure Statements should be reviewed carefully by prospective clients.

Private Fund Placements/Introductions

From time to time, BlackRock compensates certain affiliated and unaffiliated persons or entities for client referrals or introductions to BlackRock or placements of interests in Private Funds, in compliance with applicable law, including circumstances where, in connection with discrete advisory transactions, BlackRock or an affiliate will pay or split a portion of the fees with an unaffiliated third party for assisting in obtaining a specific client. The material terms of such arrangements will be disclosed to relevant clients or investors. BlackRock informs each Private Fund investor that is the subject of such placement services that the third-party placement agent will be compensated by the investor, the Private Fund or BlackRock, as the case may be. The name of the third party providing the services also is disclosed to each relevant Private Fund investor, along with the nature of any affiliation between the third party and BlackRock. From time to time, investors also will be introduced to a Private Fund by the Private Fund's prime broker. Because an increase in the size of a Private Fund would likely result in additional compensation to the prime broker, the prime broker receives a benefit from such introductions.

Placement Arrangements

Certain BlackRock affiliates, such as BRIL in the U.S., serve as the appointed distributor to many of the iShares/BlackRock ETFs. In this capacity, the BlackRock affiliates contract with authorized participants (also called participating dealers in some jurisdictions) to facilitate the creation and redemption of the iShares/BlackRock ETFs. In the U.S., these activities may be deemed participation in a distribution of the iShares/BlackRock ETFs for statutory purposes.

Promotional and Educational Cost Reimbursements

From time to time and consistent with BlackRock policy and applicable regulation, BlackRock also pays for, or reimburses broker-dealers to cover, various costs arising from, or activities that may result in, the sale of advisory products or services, including: (i) client and prospective client meetings and entertainment; (ii) sales and marketing materials; (iii) educational and training meetings or entertainment activities with the registered representatives of such broker-dealers and other personnel from entities that distribute BlackRock's products and/or services; and (iv) charitable donations in connection with events involving personnel or clients of entities that distribute BlackRock's products and/or services.

Item 15. Custody

BlackRock may be deemed to have custody of its clients' assets including, without limitation, because certain clients authorize BlackRock to receive its advisory fees out of the assets in such clients' accounts by sending invoices to the respective custodians of those accounts. BlackRock may also be deemed to have limited custody of its client's assets where BlackRock has authority to disburse client funds to a third party on the client's behalf, pursuant to a standing letter of instruction. Such clients generally will receive account statements directly from their third-party custodians for the accounts and should carefully review these statements. Such clients should contact BlackRock immediately if they do not receive account statements from their custodian on at least a quarterly basis. As noted in Item 13 ("Review of Accounts") of this Brochure, the frequency and content of reports provided by BlackRock to clients vary according to the particular needs of each client and the agreement between the client and the Adviser. Clients should compare any reports provided by BlackRock with the account statements received from the custodian, without limitation, advisory fee deductions and transfers to a third party pursuant to a standing letter of instruction. If clients discover any discrepancy between the account statement provided by BlackRock and the account statement provided by the custodian, then they should contact BlackRock immediately.

BlackRock also could be deemed to have custody of certain Private Funds advised by an Adviser for which it or an affiliate serves as managing member or general partner. In addition, BlackRock may be deemed to have custody of certain special purpose vehicles for which an Adviser or an affiliate serves as managing member or general partner (or similar role) and through which certain clients (including Private Funds and separate account clients) make one or more investments. Investors in such Private Funds or special purpose vehicles generally will receive the vehicle's annual audited financial statements. Such Investors should review these statements carefully. If investors in the Private Funds or special purpose vehicles do not receive audited financial statements in a timely manner (120 days for most Private Funds and special purpose vehicles and 180 days for Private Funds that are Funds of Funds), then they should contact BlackRock immediately.

To the extent that a Private Fund or special purpose vehicle for which BlackRock is deemed to have custody does not provide Investors with its annual financial statements as described above, such Investors will instead receive quarterly account statements from the qualified custodian of such Private Fund or special purpose vehicle and should contact BlackRock immediately if they fail to receive such account statements.

Item 16. Investment Discretion

As a general rule, each Adviser receives discretionary (or non-discretionary) investment authority from its clients at the outset of an advisory relationship. Depending on the terms of the applicable IMA, the Adviser's authority could include the ability to select brokers and dealers through which to execute transactions on behalf of its clients, and to negotiate the commission rates, if any, at which transactions are effected. In making decisions as to which securities are to be bought or sold and the amounts thereof, each Adviser is guided by the mandate selected by the client and any client-imposed guidelines or restrictions. Unless the Adviser and the client have entered into a non-discretionary arrangement, the Adviser generally is not required to provide notice to, consult with, or seek the consent of its clients prior to engaging in transactions. Please see Item 12 ("Brokerage Practices") of this Brochure for more information.

Item 17. Voting Client Securities

Certain Private Funds managed by BlackRock and other BlackRock Clients have delegated the authority to vote proxies to BlackRock. From time to time, institutional and other clients will give BlackRock or its designee the authority to vote proxies relating to securities held in their accounts by granting such authority in IMAs. Consistent with applicable rules under the Advisers Act, BlackRock has adopted and implemented written proxy voting policies and procedures ("Proxy Voting Guidelines") that are reasonably designed: (i) to vote proxies, consistent with its fiduciary obligations, in the best interests of clients; and (ii) to prevent conflicts of interest from influencing proxy voting decisions made on behalf of clients. Nevertheless, when votes are cast in accordance with the Proxy Voting Guidelines and in a manner that BlackRock believes to be consistent with its fiduciary obligations, actual proxy voting decisions made on behalf of one client can have the effect of favoring or harming the interests of other clients, BlackRock, or its affiliates.

BlackRock provides proxy voting services as part of its investment management service to client accounts and does not separately charge a fee for this service. This function is executed by a team of dedicated BlackRock employees without sales responsibilities (the "Investment Stewardship Group"), which is considered an investment function. BlackRock maintains oversight committees ("Stewardship Advisory Committees") comprising senior BlackRock investment professionals for the following regions: Americas; Europe; Middle East and Africa; Asia Pacific; and Global. The Stewardship Advisory Committees review and approve amendments to BlackRock's Proxy Voting Guidelines (the "Guidelines") and grant authority to the Global Head of Investment Stewardship ("Global Head"), a dedicated BlackRock employee without sales responsibilities, to vote in accordance with the Proxy Voting Guidelines. The Global Head leads the Investment Stewardship Group to carry out engagement, voting, and vote operations in a manner consistent with the relevant Stewardship Advisory Committee's mandate. In conjunction with portfolio managers, the Investment Stewardship Group engages companies in discussions of significant governance issues, conducts research on corporate governance issues and participates in industry discussions to keep abreast of the field of corporate governance.

The Investment Stewardship Group, or vendors overseen by the Investment Stewardship Group, also monitor upcoming proxy votes, execute proxy votes and maintain records of votes cast. The Investment Stewardship Group has adopted policies and procedures to provide ongoing oversight of any vendors used to vote proxies in the best interest of clients. An outside vendor is used by the Investment Stewardship Group for record keeping and vote execution, sometimes including pre-population of ballots or automated voting using BlackRock's Proxy Voting Guidelines. These services are used to assist our Investment Stewardship Group in making vote recommendations for a subset of our positions (i) on routine management proposals that are clearly addressed by our Proxy Voting Guidelines and (ii) for issuers where BlackRock holds a small position. Meetings with proposals related to capital allocations, or for issuers identified as facing material governance or sustainability risks including climate risk, are systematically excluded from automated voting and are voted manually by the Investment Stewardship Group. Vendor recommendations based on the BlackRock Proxy Voting Guidelines can be overridden at any time prior to the vote deadline, and are regularly reviewed by the Investment Stewardship Group. Both BlackRock and its vendor actively monitor securities filings, research reports, issuer announcements and direct communications from

issuers to ensure awareness of supplemental disclosures and proxy materials that may require modification of votes. BlackRock's vendor's performance is reviewed on a periodic basis.

BlackRock votes (or outsources, transfers or refrains from voting) proxies for each client for which it has voting authority based on BlackRock's evaluation of the best long-term economic interests of shareholders, in the exercise of its independent business judgment, and without regard to the relationship of the issuer of the proxy (or any dissident shareholder) to the client, the client's affiliates (if any), BlackRock, or BlackRock's affiliates.

When exercising voting rights, BlackRock will normally vote on specific proxy issues in accordance with the Guidelines for the relevant market. The Guidelines are reviewed regularly and are amended consistent with changes in the local market practice, as developments in corporate governance occur, or as otherwise deemed advisable by BlackRock's Stewardship Advisory Committees. From time to time, the Stewardship Advisory Committees, in the exercise of their business judgment, will conclude that the Guidelines do not cover the specific matter upon which a proxy vote is requested or that an exception to the Guidelines would be in the best long-term economic interests of BlackRock's Clients.

In certain markets, proxy voting involves logistical issues which can affect BlackRock's ability to vote such proxies, as well as the desirability of voting such proxies. These issues include but are not limited to: (i) untimely notice of, shareholder meetings; (ii) restrictions on a foreigner's ability to exercise votes; (iii) requirements to vote proxies in person; (iv) "share blocking" (requirements that investors who exercise their voting rights surrender the right to dispose of their holdings for some specified period in proximity to the shareholder meeting); (v) potential difficulties in translating the proxy; (vi) requirements to provide local agents with unrestricted powers of attorney to facilitate voting instructions; and (vii) regulatory or contractual threshold constraints.

As a consequence, BlackRock votes proxies only on a "best-efforts" basis. In addition, the Stewardship Advisory Committees will in some circumstances determine that it is in the best interests of BlackRock Clients not to vote proxies if the committee determines that the costs (including but not limited to opportunity costs associated with share blocking constraints) associated with exercising a vote are expected to outweigh the benefit the client will derive by voting on the issuer's proposal.

Portfolio managers retain full discretion to vote the shares in the accounts they manage based on their analysis of the economic impact of a particular ballot item. Portfolio managers from time to time legitimately will reach differing but equally valid views, for their funds and the client assets in those funds, on how best to maximize economic value in respect of a particular investment. In certain circumstances, the portfolio manager of an account, in consultation with the Investment Stewardship Group, will determine that the specific circumstances of an account require that account's proxies be voted differently due to such account's investment objective or other factors that differentiate it from other accounts. However, because BlackRock Clients are mostly long-term investors with long-term investment goals, ballots are frequently cast in a uniform manner for all BlackRock Clients.

BlackRock maintains policies and procedures that are designed to prevent undue influence on BlackRock's proxy voting activity that stems from any relationship between the issuer of a proxy (or any dissident shareholder) and BlackRock, BlackRock's affiliates, a fund or a fund's affiliates. BlackRock manages most conflicts through the structural separation of the Investment Stewardship Group from employees with sales responsibilities. In certain instances, BlackRock will determine to engage an independent fiduciary to vote proxies as a further safeguard to avoid potential conflicts of interest or as otherwise required by applicable law. The independent fiduciary either will vote such proxies, or provide BlackRock with instructions as to how to vote such proxies. In the latter case, BlackRock votes the proxy in accordance with the independent fiduciary's determination. Use of an independent fiduciary has been adopted for voting the proxies related to any company that is affiliated with BlackRock, or other situations that could give rise to a potential conflict of interest.

With respect to fixed income securities or the securities of privately held issuers, proxy voting decisions generally will be made by the portfolio manager of an account or private fund and/or the Investment Stewardship Group based on their assessment of the particular transactions or other matters at issue.

Certain business units of BlackRock, Inc. maintain proxy voting policies and procedures that are applicable to their specific business units and are separate from the proxy voting policies and procedures applicable to other BlackRock business units and the Investment Stewardship Group. A summary of these policies and procedures are available to clients of those business units upon request.

Clients that have not granted BlackRock voting authority over securities held in their accounts will receive their proxies in accordance with the arrangements they have made with their service providers. BlackRock generally does not provide proxy voting recommendations to clients who have not granted BlackRock voting authority over their securities.

With regard to the relationship between securities lending and proxy voting, BlackRock's approach is driven by its clients' economic interests. The evaluation of the economic desirability of voting proxies for securities that are on loan involves balancing the likely economic significance of voting those securities against the revenue-producing value of the loan. Based on BlackRock's evaluation of this relationship, we believe that generally the likely value of casting most votes is less than the securities lending income, either because the votes will not have significant economic consequences or because the outcome of the vote would not be affected by the Adviser recalling loaned securities in order to ensure they are voted. In certain instances however, BlackRock in its discretion will determine that the value of voting outweighs the cost of recalling shares, and thus recall shares to vote in that instance.

BlackRock will provide clients, upon request, a copy of the Proxy Voting Guidelines, which is also available at:

<http://www.blackrock.com/corporate/en-us/about-us/investment-stewardship/voting-guidelines-reports-position-papers> - ("Global Corporate Governance Guidelines & Engagement Principles").

BlackRock also will provide clients, upon request with information regarding how BlackRock voted their proxies. Except with respect to U.S. Private Funds and Sub-Advised Funds where disclosure is mandated by SEC rules, BlackRock will not disclose how it voted for a client to third parties, unless specifically requested, in writing, by the client. However, where BlackRock serves as a sub-adviser to another adviser to a client, BlackRock will be deemed to be authorized to provide proxy voting records with respect to such accounts to that adviser. In addition, information on how BlackRock voted proxies for certain BlackRock US Funds can be found at:

<https://www.blackrock.com/corporate/about-us/investment-stewardship#engagement-and-voting-history> - ("Annual Stewardship Reports").

Item 18. Financial Information

Not Applicable

GLOSSARY

3(c)(1) Funds – Private Funds that are offered to U.S. Persons and are excepted from the definition of an investment company pursuant to Section 3(c)(1) of the Investment Company Act

3(c)(7) Funds – Private Funds that are offered to U.S. Persons and are excepted from the definition of an investment company pursuant to Section 3(c)(7) of the Investment Company Act

Account – A fund or account

Adviser Private Funds – Any Private Fund managed or advised by any of the Advisers, including, without limitation, Global Energy & Power Infrastructure Advisors, L.L.C. and Global Energy & Power Infrastructure II Advisors, L.L.C., together with their respective alternative investment vehicles and co-investment vehicles

Advisers – BlackRock Alternatives Management, LLC, Global Energy & Power Infrastructure Advisors, L.L.C. and Global Energy & Power Infrastructure II Advisors, L.L.C., all wholly-owned direct or indirect subsidiaries of BlackRock, Inc.

Advisers Act – Investment Advisers Act of 1940, as amended

Affiliated Accounts – Portfolios managed by BlackRock Investment Advisers

Affiliated Funds – “US Registered Funds” or other pooled investment vehicles (including Private Funds) for which BlackRock Investment Advisers serve as investment adviser or sub-adviser AIC – North Americas Investment Committee

Allocation Policy – BlackRock’s investment allocation policy and related guidelines, together with the supplemental allocation policies of certain BlackRock Group members for making allocation decisions among BlackRock Client accounts managed by such members of the BlackRock Group

ATS – Alternative Trading System

BAMLLC – BlackRock Alternatives Management, LLC

Bank Holding Company Act – Bank Holding Company Act of 1956, as amended

BES – BlackRock Execution Services

BIS – BlackRock Index Services, LLC

BIS Index – Index developed by BlackRock Index Services, LLC

BlackRock – BlackRock, Inc. together with its subsidiaries

BlackRock Clients – Investment management clients of BlackRock, Inc. and its subsidiaries

BlackRock Group – Collectively, BlackRock and its directors, managers, members, officers, and employees

BlackRock Investment Advisers – The various investment advisory subsidiaries of BlackRock, Inc. and trust company subsidiaries of BlackRock, Inc.

BlackRock US Funds – The BlackRock Multi-Asset Complex (consisting of various open-end mutual funds, including variable insurance funds and money market funds serving the institutional and retail market), and an ETF, the BlackRock Fixed-Income Complex (consisting of publicly traded closed-end investment companies and various open-end investment companies, including variable insurance funds) and the US iShares ETF Complex (consisting of ETFs)

BRIL – BlackRock Investments, LLC

BRS – BlackRock Solutions®

BTC – BlackRock Institutional Trust Company, N.A.

CEA – Commodity Exchange Act

CFTC – U.S. Commodities Futures Trading Commission

Code – Collectively, BlackRock Global Personal Trading Policy and BlackRock’s Code of Business Conduct and Ethics

Dodd-Frank – Dodd-Frank Wall Street Reform and Consumer Protection Act

DOL – U.S. Department of Labor

ECN – Electronic Communication Network

eFront – eFront Holding SAS

ERISA – Employee Retirement Income Security Act of 1974, as amended

ETFs – Exchange-traded funds

Exchange Act – The Securities Exchange Act of 1934, as amended

Fair Value Assets – Assets which are valued by BlackRock in accordance with BlackRock’s valuation procedures or, when held in a BlackRock-sponsored registered investment company, in accordance with valuation and liquidity procedures approved by the investment company’s board of directors.

FINRA – The Financial Industry Regulatory Authority

FMA – BlackRock’s Financial Markets Advisory Group

Funds of Funds – Funds that invest primarily in other affiliated or unaffiliated investment vehicles

GEPIA – Global Energy & Power Infrastructure Advisors, L.L.C.

GEPIA II – Global Energy & Power Infrastructure II Advisors, L.L.C.

Guidelines – BlackRock’s proxy voting guidelines

GVMC – BlackRock’s Global Valuation Methodologies Committee

IMA – Investment management agreement

Investment Company Act – The Investment Company Act of 1940, as amended

Investment Consultants – Pension or other institutional investment consultants, or

Investor – A particular investor in a Private Fund

iShares/BlackRock ETFs – U.S. and non-U.S. exchange-traded funds managed by a BlackRock Investment Adviser

MASS – Multi-Asset Strategies & Solutions

NFA – National Futures Association

NYSE – New York Stock Exchange

OM – Offering Memorandum

Operating Events – Trade errors and other operational mistakes made in connection with an Adviser’s management of funds and client accounts

PAC – Political Action Committee

Private Fund – Unregistered investment vehicles excepted from the definition of an “investment company” under the Investment Company Act

Portfolios – Funds and client accounts of an Adviser

PPAs – Power purchase agreements

Proxy Voting Guidelines – The written proxy voting policies and procedures adopted and implemented by BlackRock

Rating Agency – Credit rating agencies, including nationally recognized statistical rating organizations

RQA – BlackRock’s Risk & Quantitative Analysis Group

Rules – Collectively, Rule 17j-1 under the Investment Company Act and Rule 204A-1 under the Advisers Act

SEC – U.S. Securities and Exchange Commission

Securities Act – The Securities Act of 1933, as amended

Service Clients – Various clients for which the BlackRock Group provides a variety of services and advice

Service Provider – Service providers providing custodial services to BlackRock Clients or funds managed by a BlackRock Investment Adviser

SMA Program – Separately managed account or wrap fee program

Sub-Advised Funds – Third-party funds registered under the Investment Company Act and sub-advised by an Adviser

Systems – Certain BlackRock trading, portfolio management, operations and/or information systems

Third-Party Fees – The commitment fees, break-up fees, directors' fees consulting fees, transaction fees, advisory fees, closing fees and other similar fees from a portfolio investment of a Private Funds or separate account, respectively, as well as, placement or other similar fees payable to a broker that an Adviser or one of its employees or affiliates receives at times

U.S. – United States

U.S. Persons – Persons as defined under Regulation S of the Securities Act of 1933

US iShares ETFs – BlackRock's iShares exchange-traded registered investment companies which are part of the US iShares ETF Complex

US Registered Funds – BlackRock's proprietary funds registered under the Investment Company Act, together with the "Sub-Advised Funds"

Volcker Rule – Section 13 of the Bank Holding Company Act and Regulation VV (12 C.F.R. Part 248) promulgated thereunder, as amended

BlackRock Client and Vendor Privacy Notice

BlackRock is committed to processing personal information in line with all applicable privacy and data protection laws. For more information on the collection, use and disclosure of personal information by BlackRock, please see the BlackRock Client and Vendor Privacy Notice which is available at:

<https://www.blackrock.com/corporate/compliance/privacy-policy>

**BlackRock Alternatives Management, LLC****Brochure Supplement**

April 30, 2021

INTRODUCTION

BlackRock, Inc. ("BlackRock") offers investment management services through various BlackRock entities that are registered as investment advisers with the U.S. Securities and Exchange Commission ("Advisers"), as well as through multiple affiliates. As part of their investment management services, the Advisers collectively offer a variety of investment strategies, including but not limited to fixed income, cash management, equity, alternative, index and multi-asset. Each client's account is managed in accordance with the investment strategy selected by the client.

An Adviser may use the services of appropriate investment personnel of one or more of its affiliates for investment advice, except to the extent restricted by the client in or pursuant to its investment management agreement, or inconsistent with applicable law. Arrangements among affiliates, including other Advisers, take a variety of forms, including dual employee or delegation arrangements or formal sub-advisory or servicing agreements. Depending on the investment strategy or strategies that a client wishes to pursue, the client's ultimate contractual relationship may be with one or more of the Advisers or may involve the advisory services of various BlackRock investment personnel.

THE BLACKROCK BROCHURE SUPPLEMENT

This brochure supplement provides information about BlackRock investment management personnel, organized by business group, who provide investment advisory services to clients of the Advisers listed to the right. For additional information on which personnel are associated with the investment strategy you have selected, please refer to the Investment Strategy Index.

You should have received a copy of the BlackRock Alternatives Management, LLC Form ADV Part 2A (the "brochure"). Please contact your relationship manager at BlackRock if you did not receive it or if you have any questions about the contents of the brochure or this brochure supplement.

Additional information about the Advisers is available at the SEC website at www.adviserinfo.sec.gov.

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INVESTMENT STRATEGY INDEX

BlackRock Alternative Investments

BlackRock Alternative Advisors

Matter, Dave	18
Schwartz, Brian	24
Sideratos, Nicholas	26
Woolley, Mark	32

Credit-Europe

Aguilar, Jose	1
Gough, Stephen	11
Hirji, Aly	12

EMEA Middle Market

Caron, Stephan	5
----------------	---

Energy and Power Infrastructure

Florian, Mark	8
---------------	---

Event Driven

McKenna, Mark	19
---------------	----

Infrastructure Solutions

Lauper, Serge	17
---------------	----

LatAM Infrastructure

Alvarez, Carlos	2
-----------------	---

Leveraged Finance

Delbos, David	7
Garfin, Mitchell	9
Keenan, James	15
Schoenhofen, Derek	23
Tarnow, Joshua	28
Wills, Sean	30
Wilson, Carly	31

Multi-Strategy Credit

Cucunato, Jeffrey	6
-------------------	---

Private Equity Partners

Baranski, Lynn	3
Kelly, Stephen	16
Mian, Arslan	20

Steenberg, Russell	27
--------------------	----

Real Estate Debt

Karnes, Robert	14
Sefcik, Daniel	25

Real Estate Securities

Howard-Johnson, Mark	13
----------------------	----

Renewable Power

Barry, Jim	4
Giordano, David	10
O'Connor, Rory	21
O'Flynn, Teresa	22

Special Situations

Trucano, David	29
----------------	----

US Middle Market Direct Lending

Keenan, James	15
---------------	----

BlackRock Cash Management

Non-US Dollar-Denominated

Clay, Matt	33
Guipet, Olivier	34
Hauff, Paul	35

US Dollar-Denominated

Hiatt, CFA, FRM, Eric	36
Markowski, Joseph	37
Mejzak, Rich	38

INVESTMENT STRATEGY INDEX

ETF and Index Investments

Developed Markets Index

Henige, Suzanne	39
Hsui, Jennifer	40
Mason, Alan	42
Whitelaw, Amy	46

Domestic Equity Index

Henige, Suzanne	39
Jue, Creighton	41
Mason, Alan	42
Savage, Greg	43
Sietsema, Peter	44
Whitelaw, Amy	46

Emerging Market Index

Henige, Suzanne	39
Hsui, Jennifer	40
Jue, Creighton	41
Mason, Alan	42
Waldron, Matthew	45
Whitelaw, Amy	46

Index Asset Allocation

Mason, Alan	42
Savage, Greg	43
Whitelaw, Amy	46

Financial Market Advisory

Gordon, Bernard	47
Laheja, Ashwin	48
Yoo, Christina	49

Fundamental Equity

Asia Equity

Colvin, Matt	55
--------------	----

European

Bolton, Nigel	52
Constantis, Michael	56
Gries, Stefan	60
Hall, Brian	61
Hibbert, Alister	63
Hunter, Simon	65
Tovey, David	75
Zoellinger, Andreas	82

Global Emerging Markets

Fraser, Gordon	59
Vecht, Samuel	76

Global Equity

Bristow, James	53
Moreno, Vasco	71
Wheatley Hubbard, Andrew	77
Williams, Gareth	78

Health Sciences

Xie, Erin	80
-----------	----

Income & Value

Accettella, Christopher	50
Burnside, Todd	54
DeSpirito, Tony	57
King, Carrie	68
Tapia, Franco	74
Wolfe, Joseph	79
Zhao, David	81

Japan Equities

Takayama, Hiroki	73
------------------	----

Natural Resources

Accettella, Christopher	50
Bishop, Alastair	51
Fernandez, Ricardo	58
Hambro, Evy	62

INVESTMENT STRATEGY INDEX

Holl, Tom 64

Options & Derivatives

Accettella, Christopher	50
McClements, Kyle	69

Technology

Accettella, Christopher	50
Kim, Tony	67
McGeough, Simon	70

US Growth

Kemp, Lawrence	66
Ruvinsky, Phil	72

Global Fixed Income

Americas Core PM

Antonelli, David	83
Mauro, James	110
Pierre, Jermaine	115
Radell, Scott	117
Uyehara, Karen	130

Asia ex Japan

Lee, Dong Chan	107
Seth, Neeraj	123

Customized Core

Dickstein, Akiva	94
------------------	----

EMEA Core PM

Swaminathan, Sid	128
------------------	-----

Emerging Markets

Aubenas, Michel	84
Trigo Paz, Sergio	129

EURO

Krautzberger, Michael	105
-----------------------	-----

Financial Institutions

Burger, John	89
Cohen, Adam	92
Gailliot, Peter	95
Gallagher, John	96

Global

Blundell, Simon	88
Miller, Bob	111

Global Allocation

Clayton, David	91
Koesterich, Russ	103
Rieder, Rick	118

Global Alpha - Hedge Funds

Day, Peter	93
Parker, Tom	113
Ringdal, Lauritz	119

INVESTMENT STRATEGY INDEX

Investment Grade Credit

Bassas, Stephan	87
-----------------	----

Japan

Baily, Walter	86
---------------	----

Mortgages

Kraeger, Matthew	104
Sion, Ron	125

Multi Asset High Alpha

Hattem, Jack	98
Spodek, Stuart	127

Mutual Funds

Miller, Bob	111
Rieder, Rick	118
Rogal, David	120

Opportunistic

Bacro, Sacha	85
--------------	----

Securitized Assets

Garzarella, Dan	97
Incoglu, Ibrahim	100
Lakhani, Samir	106

Short Duration

Chesney, David	90
Dickstein, Akiva	94
MacLellan, CFA, CMT, Scott	108

Sterling

Blundell, Simon	88
-----------------	----

Tax Exempt

Hayes, Peter	99
--------------	----

Tax Exempt - Institutional

Pruskowski, James	116
Sheehan, Marie	124

Tax Exempt - Mutual Fund

Jaeckel, Ted	101
Kalinoski, Michael	102

Maloney, Kevin	109
O'Connor, Walter	112
Perilli, Michael	114
Romaglino, Christian	121
Schiatta, Kevin	122
Soccio, Phillip	126

Multi-Asset Strategies & Solutions

Core Portfolio Management

Sulski, John	142
--------------	-----

Diversified Strategies

Byrom, Jason	132
Ryan, Adam	140

Factor Based Strategies

Hodges, Philip	137
Hogan, Ked	138

Global Tactical Asset Allocation

Becker, Thomas	131
Green, Philip	136
Pensky, Michael	139

Income

Christofel, Justin	133
Fredericks, Michael	134
Shingler, Alex	141

Model Portfolio Solutions

Gates, Michael	135
----------------	-----

Systematic Active Equity

Almufti, Ali	143
Blumhardt, Daniel	144
Cooke, Travis	145
Franklin, Kevin	146
Mathieson, Richard	147
Rodriguez, Gerardo	148
Shen, Jeff	149

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Business Group: BlackRock Alternative Investments**Jose Aguilar**

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This brochure supplement provides information about Jose Aguilar that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Universidad de Sevilla, Bachelor of Business Administration - Finance (2005)

Universidad de Sevilla, Bachelor of Law - Business Law (2005)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Jose Aguilar may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2009 - Present, BlackRock, Managing Director in Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Jose Aguilar. James Keenan can be reached at +1.212.810.5300.

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Business Group: BlackRock Alternative Investments**Carlos Alvarez**

1968

Torre Virreyes, Calle Pedregal NO. 24, Mexico City 11040 | Mexico | Phone 52 55 5241 4300

This brochure supplement provides information about Carlos Alvarez that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

ITAM, Post Graduate Degree - Finance (1995)

ITAM, Undergraduate Degree - Accounting (1991)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Carlos Alvarez may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2015 - Present, BlackRock, Managing Director - Portfolio Management

05/2000 - 04/2015 - InterGen Servicios Mexico

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Jim Barry is the Chief Investment Officer of BlackRock Alternatives Investors and Global Head of BlackRock Real Assets and is responsible for overseeing advisory activities of the group, including those of Carlos Alvarez. Jim Barry can be reached at +353.1246.7016.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Lynn Baranski**

1966

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

This brochure supplement provides information about Lynn Baranski that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Vanderbilt University - Owen Graduate School of Management, Master of Business Administration - Finance (1992)

Wake Forest University, Bachelor of Arts - History (1988)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Lynn Baranski may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2006 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Lynn Baranski is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Russell Steenberg is the Global Head of BlackRock Private Equity Partners and is responsible for overseeing advisory activities of the group, including those of Lynn Baranski. Russell Steenberg can be reached at +1.609.282.2000.

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Business Group: BlackRock Alternative Investments**Jim Barry**

1967

2 Ballsbridge Park, 1st Floor, Dublin D04 YW83 | Ireland | Phone 353-1246-7000

This brochure supplement provides information about Jim Barry that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Harvard Business School, Master of Business Administration - Business (1994)

University College, Cork, Bachelor of Commerce - Commerce (1989)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Jim Barry may have obtained other than college or university degrees.

Business Experience (preceding five years)

03/2011 - Present, BlackRock, Managing Director - Renewable Power

07/2000 - 03/2011, NTR PLC, CEO

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Edwin Conway is the Global Head of BlackRock Alternative Investors and is responsible for overseeing advisory activities of the group, including those of Jim Barry. Edwin Conway can be reached at +1.212.810.3313.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Stephan Caron**

1966

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Stephan Caron that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Institut Supérieur de Gestion, Undergraduate Degree - Undergraduate Degree (1999)

ESCP-EAP European School and Management, Master - Management (1992)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Stephan Caron may have obtained other than college or university degrees.

Business Experience (preceding five years)

09/2014 - Present, BlackRock, Managing Director - Portfolio Management

08/2010 - 12/2013, GE Capital, Managing Director - Chief Commercial Officer

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Stephan Caron. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Jeffrey Cucunato**

1973

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Jeffrey Cucunato that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Dartmouth College, Bachelor of Arts - History (1995)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Jeffrey Cucunato may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Jeffrey Cucunato is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Jeffrey Cucunato. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**David Delbos**

1978

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about David Delbos that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Tufts University, Bachelor of Arts - History (2000)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that David Delbos may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2002 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of David Delbos. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Mark Florian**

1958

1 Lafayette Place, 2nd Floor, Connecticut, CT 06830 | | Phone 203-863-6000

This brochure supplement provides information about Mark Florian that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Chicago, Master of Business Administration (MBA) - MBA (1982)

Duke University, Bachelor of Science - Computer Science and Economics (1980)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Mark Florian may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2017 - Present, BlackRock, Managing Director

10/2008 - 06/2017, First Reserve, Managing Director - Head of Infrastructure Funds

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Jim Barry is the Chief Investment Officer of BlackRock Alternatives Investors and Global Head of BlackRock Real Assets and is responsible for overseeing advisory activities of the group, including those of Mark Florian. Jim Barry can be reached at +353.1246.7016.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Mitchell Garfin**

1975

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Mitchell Garfin that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

New York University (NYU) - Stern School of Business, MBA - Finance / Economics (2005)

University of Michigan, Bachelor of Business Administration - Finance (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Mitchell Garfin may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, BlackRock, Managing Director - High Yield Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Mitchell Garfin. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**David Giordano**

1969

40 East 52nd Street, New York, NY 10022 | | Phone 212-810-5300

This brochure supplement provides information about David Giordano that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Syracuse University, Master of Social and Economic Sciences - Finance / Energy and Environmental Studies (1996)

Dickinson College, Bachelor of Arts - Economics / Policy & Management Studies (1991)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that David Giordano may have obtained other than college or university degrees.

Business Experience (preceding five years)

04/2011 - Present, BlackRock, Managing Director - Portfolio Management

03/2010 - 03/2011, Community Energy, Inc., CFO, COO

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Jim Barry is the Chief Investment Officer of BlackRock Alternatives Investors and Global Head of BlackRock Real Assets and is responsible for overseeing advisory activities of the group, including those of David Giordano. Jim Barry can be reached at +353.1246.7016.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Stephen Gough**

1978

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Stephen Gough that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Oxford University, Undergraduate Degree - (2000)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Stephen Gough may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2014 - Present, BlackRock, Portfolio Manager

06/2013 - 05/2014, Goldentree Asset Management, Portfolio Manager

05/2008 - 06/2013, Claren Road Asset Management, Analyst

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Stephen Gough. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Aly Hirji**

1978

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

University of Bristol, Undergraduate Degree - Economics (1999)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Aly Hirji may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2018 - Present, BlackRock, Managing Director - Portfolio Manager

09/2014 - 12/2017, BlackRock, Director - Portfolio Manager

04/2004 - 06/2014, New Amsterdam Capital, Partner and Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Aly Hirji. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Mark Howard-Johnson**

1961

40 East 52nd Street, New York, NY 10022 | | Phone 212-810-5300

This brochure supplement provides information about Mark Howard-Johnson that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Dartmouth College, Bachelor of Arts - Government (1983)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Mark Howard-Johnson may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2012 - Present, BlackRock, Managing Director

01/2012 - 05/2012, Building & Land Technology, Managing Director

03/2009 - 12/2011, Occom Capital Partners, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Mark Howard-Johnson is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Anne Valentine Andrews is the Global Head of Real Assets and is responsible for overseeing advisory activities of the group, including those of Mark Howard-Johnson. Anne Valentine Andrews can be reached at +1.212.810.3313.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Robert Karnes**

1961

40 East 52nd Street, New York, NY 10022 | | Phone 212-810-5300

This brochure supplement provides information about Robert Karnes that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Northwestern University - Kellogg Graduate School of Management, Master of Business Administration - Finance (1989)

University of Notre Dame, Bachelor of Business Administration - Finance (1983)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Robert Karnes may have obtained other than college or university degrees.

Business Experience (preceding five years)

11/2011 - Present, BlackRock, Managing Director

02/2006 - 11/2011, Hillenbrand Partners, Partner / Chief Investment Officer

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Benjamin Young is the Chief Executive Officer and is responsible for overseeing advisory activities of the group, including those of Robert Karnes. Benjamin Young can be reached at +1.212.810.3500.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**James Keenan**

1976

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about James Keenan that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Notre Dame, Bachelor of Business Administration - Finance (1998)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that James Keenan may have obtained other than college or university degrees.

Business Experience (preceding five years)

09/2004 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Edwin Conway is the Global Head of BlackRock Alternative Investors and is responsible for overseeing advisory activities of the group, including those of James Keenan. Edwin Conway can be reached at +1.212.810.3313.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Stephen Kelly**

1966

60 State Street, Boston, MA 02109 | | Phone 617-357-1200

This brochure supplement provides information about Stephen Kelly that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Dartmouth College - Amos Tuck Business School, MBA - Finance (1999)

University of Maryland System, Master of Science - Engineering (1994)

University of Dayton, Bachelors Degree - Engineering (1988)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Stephen Kelly may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, BlackRock, Managing Director - Private Equity Partners

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Russell Steenberg is the Global Head of BlackRock Private Equity Partners and is responsible for overseeing advisory activities of the group, including those of Stephen Kelly. Russell Steenberg can be reached at +1.609.282.2000.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Serge Lauper**

1970

Bahnhofstrasse 39, Floors 2-4, Zurich 8001 | Switzerland | Phone 41 44 297 7373

This brochure supplement provides information about Serge Lauper that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

London Business School, Master of Finance - Finance (2000)

Zurich, Eidgenossische Technische Hochschule Zurich, Master of Engineering - Industrial Engineering (1995)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Serge Lauper may have obtained other than college or university degrees.

Business Experience (preceding five years)

09/2012 - Present, BlackRock, Managing Director - PE Portfolio Management

10/2008 - 10/2012, Swiss Reinsurance Company, Director - Head of Real Assets and Secondary Investment

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Jim Barry is the Chief Investment Officer of BlackRock Alternatives Investors and Global Head of BlackRock Real Assets and is responsible for overseeing advisory activities of the group, including those of Serge Lauper. Jim Barry can be reached at +353.1246.7016.

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Business Group: BlackRock Alternative Investments**Dave Matter**

1969

601 Union Street, 56th Floor, Seattle, WA 98101 | | Phone 206-613-6700

This brochure supplement provides information about Dave Matter that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Washington, MBA - (1998)

University of Washington, Master of Arts - International Studies (1998)

University of Pennsylvania, Bachelor of Arts - International Relations (1991)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Dave Matter may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2007 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Edwin Conway is the Global Head of BlackRock Alternative Investors and is responsible for overseeing advisory activities of the group, including those of Dave Matter. Edwin Conway can be reached at +1.212.810.3313.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Mark McKenna**

1970

40 East 52nd Street, New York, NY 10022 | | Phone 212-810-5300

This brochure supplement provides information about Mark McKenna that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

New York University, Master of Business Administration (MBA) - (1999)

New York Maritime College, Undergraduate Degree - Electrical Engineering (1992)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Mark McKenna may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2014 - Present, BlackRock, Managing Director - Portfolio Management

10/2009 - 06/2014, Harvard Management Company - Co-Founder and Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Edwin Conway is the Global Head of BlackRock Alternative Investors and is responsible for overseeing advisory activities of the group, including those of Mark McKenna. Edwin Conway can be reached at +1.212.810.3313.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Arslan Mian**

1971

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

This brochure supplement provides information about Arslan Mian that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

SAID Business School, Master of Business Administration - Finance (1997)

NED University of Engineering & Technology, Bachelor of Engineering - Avionics (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Arslan Mian may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2010 - Present, BlackRock, Managing Director - Private Equity Partners

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Russell Steenberg is the Global Head of BlackRock Private Equity Partners and is responsible for overseeing advisory activities of the group, including those of Arslan Mian. Russell Steenberg can be reached at +1.609.282.2000.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Rory O'Connor**

1975

2 Ballsbridge Park, 1st Floor, Dublin D04 YW83 | Ireland | Phone 353-1246-7000

This brochure supplement provides information about Rory O'Connor that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

INSEAD Fontainebleau, Master of Business Administration - Masters of Business Administration (2001)
University College Dublin, Bachelor of Commerce - International Commerce (and German), B.Comm Intl (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Rory O'Connor may have obtained other than college or university degrees.

Business Experience (preceding five years)

03/2011 - Present, BlackRock, Managing Director - Portfolio Management

02/2004 - 03/2011, NTR plc, Group Treasurer and Head of Corporate Finance.

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Jim Barry is the Chief Investment Officer of BlackRock Alternatives Investors and Global Head of BlackRock Real Assets and is responsible for overseeing advisory activities of the group, including those of Rory O'Connor. Jim Barry can be reached at +353.1246.7016.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Teresa O'Flynn**

1978

2 Ballsbridge Park, 1st Floor, Dublin D04 YW83 | Ireland | Phone 353-1246-7000

This brochure supplement provides information about Teresa O'Flynn that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

National University of Ireland, Galway, Bachelor of Commerce - Accounting (1998)

University College, Galway, Leaving Certificate - General (1998)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Teresa O'Flynn may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2015 - Present, BlackRock, Managing Director - Portfolio Management

04/2011 - 01/2015, BlackRock, Director

03/2008 - 03/2001, NTR plc, Vice President

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Jim Barry is the Chief Investment Officer of BlackRock Alternatives Investors and Global Head of BlackRock Real Assets and is responsible for overseeing advisory activities of the group, including those of Teresa O'Flynn. Jim Barry can be reached at +353.1246.7016.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Derek Schoenhofen**

1972

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Derek Schoenhofen that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

St. Johns University, Bachelor of Finance - Finance (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Derek Schoenhofen may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2006 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Derek Schoenhofen. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Brian Schwartz**

1978

601 Union Street, 56th Floor, Seattle, WA 98101 | | Phone 206-613-6700

This brochure supplement provides information about Brian Schwartz that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Washington, Bachelor of Arts - (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Brian Schwartz may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2001 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Dave Matter is the Co-Chief Investment Officer of BlackRock Alternative Advisors and is responsible for overseeing advisory activities of the group, including those of Brian Schwartz. Dave Matter can be reached at +1.206.613.6700.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Daniel Sefcik**

1964

40 East 52nd Street, New York, NY 10022 | | Phone 212-810-5300

This brochure supplement provides information about Daniel Sefcik that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Rutgers University, Master of Science - Economics (1997)

Colorado State University, Bachelor of Science - Economics (1986)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Daniel Sefcik may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Benjamin Young is the Chief Executive Officer and is responsible for overseeing advisory activities of the group, including those of Daniel Sefcik. Benjamin Young can be reached at +1.212.810.3500.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Nicholas Sideratos**

1970

40 East 52nd Street, New York, NY 10022 | | Phone 212-810-5300

This brochure supplement provides information about Nicholas Sideratos that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Pace University, Master of Business Administration - Finance (1996)

Pace University, Bachelor of Business Administration - Finance and General Accounting (1992)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Nicholas Sideratos may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2007 - Present, BlackRock, Managing Director - Portfolio Management BAI

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Dave Matter is the Co-Chief Investment Officer of BlackRock Alternative Advisors and is responsible for overseeing advisory activities of the group, including those of Nicholas Sideratos. Dave Matter can be reached at +1.206.613.6700.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Russell Steenberg**

1952

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

This brochure supplement provides information about Russell Steenberg that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Dartmouth College - Amos Tuck Business School, Master of Business Administration - Business Administration (1983)

American University, Master Degree - Public Administration & Urban Affairs (1976)

Saint Lawrence University, Bachelor of Arts - Government (1974)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Russell Steenberg may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2006 - Present, BlackRock, Managing Director - Private Equity Partners

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Edwin Conway is the Global Head of BlackRock Alternative Investors and is responsible for overseeing advisory activities of the group, including those of Russell Steenberg. Edwin Conway can be reached at +1.212.810.3313.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Alternative Investments**Joshua Tarnow**

1968

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Joshua Tarnow that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Wisconsin System - Madison, Bachelor of Arts - History (1990)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Joshua Tarnow may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2009 - Present, BlackRock, Managing Director - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Joshua Tarnow is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Joshua Tarnow. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**David Trucano**

1970

49 East 52nd St, 4th Floor, New York, NY 10022 | | Phone

This brochure supplement provides information about David Trucano that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Chicago, Master of Business Administration (MBA) - (1999)

Emory University, Undergraduate Degree - Economics (1993)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that David Trucano may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2012 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of David Trucano. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Sean Wills**

1962

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Sean Wills that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Emory University, Master of Business Administration - Business (1992)

Union College, Bachelor of Arts - Economics (1985)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Sean Wills may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2008 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Sean Wills. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Carly Wilson**

1982

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

University of Pennsylvania - Wharton School of Business, Bachelor of Science - Finance and Marketing (2004)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Carly Wilson may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Director - Portfolio Management

05/2009 - 12/2015, BlackRock, Vice President

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. James Keenan is the Chief Investment Officer and Global Co-Head of Credit and is responsible for overseeing advisory activities of the group, including those of Carly Wilson. James Keenan can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: BlackRock Alternative Investments**Mark Woolley**

1977

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Mark Woolley that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Washington, Bachelor of Business Administration - Business Administration (2000)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Mark Woolley may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2007 - Present, BlackRock, Managing Director - Portfolio Manager

02/2001 - 09/2007, Quellos Group, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Dave Matter is the Co-Chief Investment Officer of BlackRock Alternative Advisors and is responsible for overseeing advisory activities of the group, including those of Mark Woolley. Dave Matter can be reached at +1.206.613.6700.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Cash Management**Matt Clay**

1975

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Matt Clay that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

No applicable degree from a college or university.

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Matt Clay may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2012 - Present, BlackRock, Director - Portfolio Management

12/2009 - 12/2011, BlackRock, Vice President - Portfolio Management

02/2009 - 12/2009, Barclays Global Investors, N.A., Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Rich Mezzak is the Head of Global Portfolio Management for the Cash Management Team and is responsible for overseeing advisory activities of the group, including those of Matt Clay. Rich Mezzak can be reached at +1.302.797.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Cash Management**Olivier Guipet**

1970

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Olivier Guipet that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Universite Lumiere, Post Graduate Degree - Master of Science (Msc) (1995)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Olivier Guipet may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2016 - Present, BlackRock, Director, Portfolio Management

11/2015 - 09/2016, Bank Of America Merrill Lynch, Director, Portfolio Management

08/2009 - 10/2015, Western Asset Management, Senior Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Matthew Clay is the Head of the London Cash Portfolio Management Team within the International Cash business and is responsible for overseeing advisory activities of the group, including those of Olivier Guipet. Matthew Clay can be reached at +1.302.797.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Cash Management**Paul Hauff**

1971

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Paul Hauff that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

No applicable degree from a college or university.

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Paul Hauff may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2009 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Matthew Clay is the Head of the London Cash Portfolio Management Team within the International Cash business and is responsible for overseeing advisory activities of the group, including those of Paul Hauff. Matthew Clay can be reached at +1.302.797.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Cash Management**Eric Hiatt, CFA, FRM**

1975

2929 Arch Street, 16th Floor, Philadelphia, PA 19104 | | Phone 215-349-9700

This brochure supplement provides information about Eric Hiatt, CFA, FRM that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Boston College - Carroll School of Management, Master of Business Administration - finance (2006)

Bentley College, Bachelor of Science - finance (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Eric Hiatt, CFA, FRM may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2018 - Present, BlackRock, Managing Director - Portfolio Management

05/2012 - 12/2017, BlackRock, Director - Portfolio Management

07/2009 - 05/2012, Dwight Asset Management, Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Rich Mejzak is the Head of Global Portfolio Management for the Cash Management Team and is responsible for overseeing advisory activities of the group, including those of Eric Hiatt, CFA, FRM. Rich Mejzak can be reached at +1.302.797.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Cash Management**Joseph Markowski**

1971

2929 Arch Street, 16th Floor, Philadelphia, PA 19104 | | Phone 215-349-9700

This brochure supplement provides information about Joseph Markowski that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Drexel University, Bachelors Degree - Finance (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Joseph Markowski may have obtained other than college or university degrees.

Business Experience (preceding five years)

09/2008 - Present, BlackRock, Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rich Mezzak is the Head of Global Portfolio Management for the Cash Management Team and is responsible for overseeing advisory activities of the group, including those of Joseph Markowski. Rich Mezzak can be reached at +1.302.797.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: BlackRock Cash Management**Rich Mezzak**

1968

2929 Arch Street, 16th Floor, Philadelphia, PA 19104 | | Phone 215-349-9700

This brochure supplement provides information about Rich Mezzak that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Villanova University, Bachelor of Science - Accounting (1990)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Rich Mezzak may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2009 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Thomas Callahan is the Head of BlackRock's Global Cash Management and is responsible for overseeing advisory activities of the group, including those of Rich Mezzak. Thomas Callahan can be reached at +1.302.797.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: ETF and Index Investments**Suzanne Henige**

1981

725 Ponce de Leon Ave NE, Atlanta, GA 30306 | | Phone 470-520-5000

This brochure supplement provides information about Suzanne Henige that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - Davis, Master of Business Administration - Management (2012)

University of California System - Davis, Bachelor of Science - Management Economics (2003)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Suzanne Henige may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2011 - Present, BlackRock, Vice President - Portfolio Management

05/2009 - 04/2011, BlackRock, Vice President - Client Reporting

06/2003 - 04/2009, State Steet, Officer - Fund Accounting

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Alan Mason is the Co- Head of EII Markets and Investments and is responsible for overseeing advisory activities of the group, including those of Suzanne Henige. Alan Mason can be reached at +1.415.670.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: ETF and Index Investments**Jennifer Hsui**

1976

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Jennifer Hsui that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - Berkeley, Bachelors Degree - Economics & Biology (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Jennifer Hsui may have obtained other than college or university degrees.

Business Experience (preceding five years)

12/2010 - Present, BlackRock, Managing Director - Portfolio Management

12/2009 - 12/2010, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Jennifer Hsui is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Jennifer Hsui is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Alan Mason is the Co- Head of EII Markets and Investments and is responsible for overseeing advisory activities of the group, including those of Jennifer Hsui. Alan Mason can be reached at +1.415.670.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: ETF and Index Investments**Creighton Jue**

1970

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Creighton Jue that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - Irvine, Bachelors Degree - Economics (1992)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Creighton Jue may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2010 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Alan Mason is the Co- Head of EII Markets and Investments and is responsible for overseeing advisory activities of the group, including those of Creighton Jue. Alan Mason can be reached at +1.415.670.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: ETF and Index Investments**Alan Mason**

1960

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Alan Mason that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - Berkeley, Master Degree - Ethnomusicology (1991)

University of Louisville, Master Degree - Musicology (1989)

Baylor University, Bachelors Degree - Music Education (1983)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Alan Mason may have obtained other than college or university degrees.

Business Experience (preceding five years)

08/1991 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Alan Mason is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Alan Mason is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Alan Mason is the Co- Head of EII Markets and Investments and is responsible for overseeing advisory activities of the group, including those of Alan Mason. Alan Mason can be reached at +1.415.670.2000.

BlackRock Alternatives Management, LLC

55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: ETF and Index Investments**Greg Savage**

1971

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Greg Savage that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Colorado System - Boulder, Bachelors Degree - Accounting (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Greg Savage may have obtained other than college or university degrees.

Business Experience (preceding five years)

12/2009 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Greg Savage is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Greg Savage is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Alan Mason is the Co- Head of EII Markets and Investments and is responsible for overseeing advisory activities of the group, including those of Greg Savage. Alan Mason can be reached at +1.415.670.2000.

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Business Group: ETF and Index Investments**Peter Sietsema**

1978

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Peter Sietsema that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

California State University System - Sacramento, Bachelor of Science - Finance (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Peter Sietsema may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2015 - Present, BlackRock, Director - Portfolio Management

09/2007 - 12/2014, BlackRock, Vice President - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Peter Sietsema is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Alan Mason is the Co- Head of EII Markets and Investments and is responsible for overseeing advisory activities of the group, including those of Peter Sietsema. Alan Mason can be reached at +1.415.670.2000.

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Business Group: ETF and Index Investments**Matthew Waldron**

1974

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

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Educational Background

University of Delaware, Bachelor of Business Administration - Finance (1996)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Matthew Waldron may have obtained other than college or university degrees.

Business Experience (preceding five years)

11/2010 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Alan Mason is the Co- Head of EII Markets and Investments and is responsible for overseeing advisory activities of the group, including those of Matthew Waldron. Alan Mason can be reached at +1.415.670.2000.

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Business Group: ETF and Index Investments**Amy Whitelaw**

1971

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

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Educational Background

Dickinson College, Bachelors Degree - International Studies (1993)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Amy Whitelaw may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2015 - Present, BlackRock, Managing Director - Portfolio Management

12/2009 - 12/2014, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Amy Whitelaw is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Amy Whitelaw is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Alan Mason is the Co- Head of EII Markets and Investments and is responsible for overseeing advisory activities of the group, including those of Amy Whitelaw. Alan Mason can be reached at +1.415.670.2000.

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Business Group: Financial Market Advisory**Bernard Gordon**

1985

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Brown University, Bachelor of Science (Honors) - Computer Science & Economics (2007)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Bernard Gordon may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Director - Portfolio Management

01/2015 - 12/2015, BlackRock, Vice President - Portfolio Management

09/2010 - 12/2014, BlackRock, Associate - Financial Markets Advisory

07/2007 - 08/2010, Morgan Stanley, Analyst - Interest Rate Strategy

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Ben Leax is the Co-Head of FMA and Head of FMA-Capital Markets and is responsible for overseeing advisory activities of the group, including those of Bernard Gordon. Ben Leax can be reached at +1.212.810.5300.

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Business Group: Financial Market Advisory**Ashwin Laheja**

1976

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

University of Chicago - Graduate School of Business, MBA - Finance (2005)

Massachusetts Institute of Technology, Master of Science - Engineering (1999)

Indian Institute of Technology, Mumbai, Bachelor of Science - Engineering (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Ashwin Laheja may have obtained other than college or university degrees.

Business Experience (preceding five years)

04/2009 - Present, BlackRock, Managing Director - Financial Markets Advisory

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Ben Leax is the Co-Head of FMA and Head of FMA-Capital Markets and is responsible for overseeing advisory activities of the group, including those of Ashwin Laheja. Ben Leax can be reached at +1.212.810.5300.

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Business Group: Financial Market Advisory**Christina Yoo**

1978

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Cornell University, Bachelor of Science - ORIE (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Christina Yoo may have obtained other than college or university degrees.

Business Experience (preceding five years)

12/2008 - Present, BlackRock, Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Ben Leax is the Co-Head of FMA and Head of FMA-Capital Markets and is responsible for overseeing advisory activities of the group, including those of Christina Yoo. Ben Leax can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Christopher Accettella**

1974

60 State Street, Boston, MA 02109 | | Phone 617-357-1200

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Educational Background

Colgate University, Bachelor of Arts - Economics (2007)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Christopher Accettella may have obtained other than college or university degrees.

Business Experience (preceding five years)

09/2005 - Present, BlackRock, Director - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Christopher Accettella is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tony DeSpirito is the Chief Investment Officer for Fundamental US Active Equities and is responsible for overseeing advisory activities of the group, including those of Christopher Accettella. Tony DeSpirito can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Alastair Bishop**

1980

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Educational Background

Nottingham University, Bachelor of Science (Honors) - Economics (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Alastair Bishop may have obtained other than college or university degrees.

Business Experience (preceding five years)

08/2010 - Present, BlackRock, Director - Portfolio Management

08/2009 - 08/2010, Piper Jaffray, Senior Research Analyst

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Alastair Bishop. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Nigel Bolton**

1963

Exchange Place 1, 1 Semple Street, Edinburgh | United Kingdom | Phone

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Educational Background

Nottingham University, Bachelor of Arts (Honors) - Economics (1985)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Nigel Bolton may have obtained other than college or university degrees.

Business Experience (preceding five years)

02/2008 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Nigel Bolton. Richard Kushel can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**James Bristow**

1975

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Educational Background

Oxford University, Master of Arts - PPE (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that James Bristow may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2006 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of James Bristow. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Todd Burnside**

1975

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

New York University (NYU) - Stern School of Business, MBA - Finance and Accounting (2003)

Pennsylvania State University, Bachelor of Science - Finance (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Todd Burnside may have obtained other than college or university degrees.

Business Experience (preceding five years)

09/2008 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tony DeSpirito is the Chief Investment Officer for Fundamental US Active Equities and is responsible for overseeing advisory activities of the group, including those of Todd Burnside. Tony DeSpirito can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Matt Colvin**

1983

16/F Champion Tower, 3 Garden Road, Hong Kong | Phone 852 3903 2800

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Educational Background

Emory University, Business Studies - Finance (2006)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Matt Colvin may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Director - Portfolio Management

07/2006 - 12/2015, BlackRock, Vice President - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Belinda Boa is the Head of Active Investments for Asia Pacific & CIO of Emerging Markets, Fundamental Active Equity and is responsible for overseeing advisory activities of the group, including those of Matt Colvin. Belinda Boa can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Michael Constantis**

1980

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Michael Constantis that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of London - University College, Bachelor of Science - Economics (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Michael Constantis may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2005 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Michael Constantis. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Tony DeSpirito**

1968

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Harvard Law School, Juris Doctorate - Law (1993)

University of Pennsylvania - Wharton School of Business, Bachelor of Science - Economics with concentration in finance (1990)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Tony DeSpirito may have obtained other than college or university degrees.

Business Experience (preceding five years)

08/2014 - Present, BlackRock, Managing Director

09/1996 - 06/2014, Pzena Investment Management, Managing Principal, Portfolio Manager, Executive Vice President

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Tony DeSpirito. Richard Kushel can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Ricardo Fernandez**

1986

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Northwestern University, Bachelor of Science - Electrical Engineering, Honors (2008)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Ricardo Fernandez may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2018 - Present, BlackRock, Director - Portfolio Management

02/2008 - 12/2017, BlackRock, Vice President - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Ricardo Fernandez. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Gordon Fraser**

1983

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Cambridge University, Master of Philosophy - Economics (2006)

Cambridge University, Bachelor of Arts - Economics (2005)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Gordon Fraser may have obtained other than college or university degrees.

Business Experience (preceding five years)

03/2006 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Belinda Boa is the Head of Active Investments for Asia Pacific & CIO of Emerging Markets, Fundamental Active Equity and is responsible for overseeing advisory activities of the group, including those of Gordon Fraser. Belinda Boa can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Stefan Gries**

1977

Exchange Place 1, 1 Semple Street, Edinburgh | United Kingdom | Phone

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Educational Background

Chartered Securities Institute, Candidate Certificate - Chartered Financial Analyst (2009)

University of St. Andrews, Master of Arts - Economics & Spanish (2005)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Stefan Gries may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2008 - Present, BlackRock, Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Stefan Gries. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Brian Hall**

1977

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Bristol University, BSC - Economics with study in continental Europe (1999)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Brian Hall may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Managing Director - Portfolio Management

08/2007 - 12/2015, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Brian Hall. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Evy Hambro**

1972

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Newcastle University, Bachelor of Science - Marketing (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Evy Hambro may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2004 - Present, BlackRock, Managing Director - Joint Chief Investment Officer

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Evy Hambro. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Alister Hibbert**

1970

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Bristol University, BSC - Economics (1992)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Alister Hibbert may have obtained other than college or university degrees.

Business Experience (preceding five years)

08/2010 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Alister Hibbert. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Tom Holl**

1984

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Tom Holl that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Cambridge University, Bachelor of Arts (Honors) - Land Economy (2006)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Tom Holl may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Director - Portfolio Management

06/2006 - 12/2015, BlackRock, Vice President

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Tom Holl. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Simon Hunter**

1985

Exchange Place 1, 1 Semple Street, Edinburgh | United Kingdom | Phone

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Educational Background

Oxford University, Bachelor of Arts - Politics, Philosophy, Economics (2006)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Simon Hunter may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Director - Portfolio Management

04/2010 - 12/2015, BlackRock, Vice President - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

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Business Group: Fundamental Equity**Lawrence Kemp**

1957

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

University of Chicago - Graduate School of Business, Master of Business Administration - Finance (1987)
Stanford University, Bachelor of Arts - International Relations (1980)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Lawrence Kemp may have obtained other than college or university degrees.

Business Experience (preceding five years)

11/2012 - Present, BlackRock, Managing Director

04/2004 - 11/2012, UBS Growth Investors, Head of Large Growth Equities

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tony DeSpirito is the Chief Investment Officer for Fundamental US Active Equities and is responsible for overseeing advisory activities of the group, including those of Lawrence Kemp. Tony DeSpirito can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Tony Kim**

1967

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

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Educational Background

Columbia Business School, Master of Business Administration - Finance (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Tony Kim may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2013 - Present, BlackRock, Portfolio Manager

06/2006 - 06/2013, Aristan Partners, Senior Analyst

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Tony Kim. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Carrie King**

1963

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

New York University (NYU) - Stern School of Business, MBA - Finance (1990)

Boston University - School of Management, Bachelor of Science - Finance (1985)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Carrie King may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/1993 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tony DeSpirito is the Chief Investment Officer for Fundamental US Active Equities and is responsible for overseeing advisory activities of the group, including those of Carrie King. Tony DeSpirito can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Kyle McClements**

1971

60 State Street, Boston, MA 02109 | | Phone 617-357-1200

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Educational Background

University of Rochester - Simon Graduate School of Business Administration, Master of Business Administration - Finance & Accounting (1998)

University of Pennsylvania, Bachelor of Arts - Economics & Political Science (1993)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Kyle McClements may have obtained other than college or university degrees.

Business Experience (preceding five years)

04/2004 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Kyle McClements is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tony DeSpirito is the Chief Investment Officer for Fundamental US Active Equities and is responsible for overseeing advisory activities of the group, including those of Kyle McClements. Tony DeSpirito can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Simon McGeough**

1977

Exchange Place 1, 1 Semple Street, Edinburgh | United Kingdom | Phone

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Educational Background

Tennessee Technological University, Master of Business Administration - M.B.A (2001)

Aberdeen University, Bachelor of Engineering (Honors) - Mechanical Engineering (1999)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Simon McGeough may have obtained other than college or university degrees.

Business Experience (preceding five years)

03/2002 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Simon McGeough. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Vasco Moreno**

1970

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Educational Background

New York University (NYU) - Stern School of Business, Bachelor of Science - Finance (1993)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Vasco Moreno may have obtained other than college or university degrees.

Business Experience (preceding five years)

03/2015 - Present, BlackRock, Director - Portfolio Management

10/2013 - 03/2015, UBS O'Connor Ltd - PM/Analyst

06/2004 - 09/2013, Keefe, Bruyette & Woods Ltd - CEO/Director of European Research

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

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Business Group: Fundamental Equity**Phil Ruvinsky**

1967

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Educational Background

Columbia Business School, MBA - MBA (2002)

University of Michigan - Law School, Juris Doctorate - Law (1994)

University of Texas System - Austin, Bachelor of Arts - Economics (1990)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Phil Ruvinsky may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2013 - Present, BlackRock, Director

06/2010 - 01/2013, Sureview Capital, Sector Head

01/2003 - 06/2010, UBS Global Asset Management, Executive Director, Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tony DeSpirito is the Chief Investment Officer for Fundamental US Active Equities and is responsible for overseeing advisory activities of the group, including those of Phil Ruvinsky. Tony DeSpirito can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Hiroki Takayama**

1973

Marunouchi Tower Main, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-8217 | Japan |
Phone 81 3 6703 4100

This brochure supplement provides information about Hiroki Takayama that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

International Christian University, Bachelor of Arts - Sociology (1996)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Hiroki Takayama may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2015 - Present, BlackRock, Director

10/2004 - 12/2014, BlackRock, Vice President

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Belinda Boa is the Head of Active Investments for Asia Pacific & CIO of Emerging Markets, Fundamental Active Equity and is responsible for overseeing advisory activities of the group, including those of Hiroki Takayama. Belinda Boa can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Franco Tapia**

1978

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Educational Background

Wharton School, University of Pennsylvania, Master of Business Administration (MBA) - Real Estate (2006)
Harvard University, Undergraduate Degree - Economics (2000)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Franco Tapia may have obtained other than college or university degrees.

Business Experience (preceding five years)

09/2016 - Present, BlackRock, Managing Director - Portfolio Management

06/2006 - 07/2016, Pzena Investment Management, Principal - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tony DeSpirito is the Chief Investment Officer for Fundamental US Active Equities and is responsible for overseeing advisory activities of the group, including those of Franco Tapia. Tony DeSpirito can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**David Tovey**

1976

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Warwick University, Bachelor of Science - Economics (1998)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that David Tovey may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2006 - Present, BlackRock, Director - Portfolio Management Group

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of David Tovey. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Samuel Vecht**

1977

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Educational Background

London School of Economics, Bachelor of Science - International Relations and History (2000)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Samuel Vecht may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2000 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Belinda Boa is the Head of Active Investments for Asia Pacific & CIO of Emerging Markets, Fundamental Active Equity and is responsible for overseeing advisory activities of the group, including those of Samuel Vecht. Belinda Boa can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Andrew Wheatley Hubbard**

1984

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Educational Background

Cambridge University, Master of Engineering - Engineering (2007)

Cambridge University, Bachelor of Arts - Engineering (2006)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Andrew Wheatley Hubbard may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Director - Portfolio Management

07/2007 - 12/2015, BlackRock, Vice President - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Andrew Wheatley Hubbard. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Gareth Williams**

1983

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Bristol University, Bachelor of Science - Economics and Mathematics (2005)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Gareth Williams may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2005 - Present, BlackRock, Director - Portfolio Management Group

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Gareth Williams. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**Joseph Wolfe**

1974

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

Ohio State University, Master of Arts - Economics (2000)

Kent State University, Master of Arts - Economics (1999)

Slippery Rock University of Pennsylvania, Bachelor of Science - Economics (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Joseph Wolfe may have obtained other than college or university degrees.

Business Experience (preceding five years)

04/2012 - Present, BlackRock, Director - Portfolio Management

04/2005 - 03/2012 Northern Trust Global Investments, SVP - Director of Quantitative Research

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tony DeSpirito is the Chief Investment Officer for Fundamental US Active Equities and is responsible for overseeing advisory activities of the group, including those of Joseph Wolfe. Tony DeSpirito can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Erin Xie**

1968

60 State Street, Boston, MA 02109 | | Phone 617-357-1200

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Educational Background

Massachusetts Institute of Technology - Sloan School of Management, Master of Business Administration - General (1999)

University of California System - Los Angeles, Doctorate / PhD - Biochemistry (1993)

Beijing University, Bachelor of Science - Chemistry (1988)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Erin Xie may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, Blackrock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Erin Xie. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Fundamental Equity**David Zhao**

1981

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Northwestern University, Associate's Degree - Economics (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that David Zhao may have obtained other than college or university degrees.

Business Experience (preceding five years)

04/2016 - Present, BlackRock, Managing Director - Portfolio Management

09/2006 - 03/2016, Pzena Investment Management, Principal - Research Analyst

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tony DeSpirito is the Chief Investment Officer for Fundamental US Active Equities and is responsible for overseeing advisory activities of the group, including those of David Zhao. Tony DeSpirito can be reached at +1.212.810.5300.

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Business Group: Fundamental Equity**Andreas Zoellinger**

1974

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Munich, European University in Munich, Diplom-Betriebswirt - Business Administration (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Andreas Zoellinger may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2015 - Present, BlackRock, Managing Director

06/2001 - 12/2014, BlackRock, Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Nigel Bolton is the Co-Chief Investment Officer of BlackRock's Fundamental Equity Group and Head of BlackRock's Fundamental European Equity and is responsible for overseeing advisory activities of the group, including those of Andreas Zoellinger. Nigel Bolton can be reached at +44.207.743.3000.

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Business Group: Global Fixed Income**David Antonelli**

1979

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Georgetown University - McDonough School of Business, Bachelor of Business Administration - Finance/Accounting, Minor: Computer Science (2002)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that David Antonelli may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2012 - Present, BlackRock, Director - Portfolio Management

07/2006 - 12/2011, BlackRock, Vice President - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of David Antonelli. Rick Rieder can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Michel Aubenas**

1976

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Paris-Dauphine University, Master of Finance - Banking and Finance (1999)

Paris-Dauphine University, Master of Science - Applied Economics (1998)

Paris-Dauphine University, Bachelor of Science - Applied Mathematics (1998)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Michel Aubenas may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Managing Director - Portfolio Management

06/2012 - 12/2015 BlackRock, Director - Portfolio Management

07/2010 - 04/2012, BNPP IP/FFTW, Senior Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Michel Aubenas. Richard Kushel can be reached at +1.212.810.5300.

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55 East 52nd Street | New York, NY 10055 | +1.212.810.5300

Business Group: Global Fixed Income**Sacha Bacro**

1972

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Sacha Bacro that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Bowdoin College, Bachelor of Arts - Mathematics/Economics (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Sacha Bacro may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/1995 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Sacha Bacro is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Sacha Bacro is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Sacha Bacro. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Walter Baily**

1970

Marunouchi Trust Tower Main, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-8217 | Japan |
Phone 81 3 6703 4100

This brochure supplement provides information about Walter Baily that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Massachusetts Institute of Technology, Doctorate / PhD - Economics (1995)

Princeton University, Bachelor of Arts (Honors) - Economics (1991)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Walter Baily may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2015 - Present, BlackRock, Managing Director - Portfolio Management

11/2008 - 12/2014, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Belinda Boa is the Head of Active Investments for Asia Pacific & CIO of Emerging Markets, Fundamental Active Equity and is responsible for overseeing advisory activities of the group, including those of Walter Baily. Belinda Boa can be reached at +852.3903.2800.

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Business Group: Global Fixed Income**Stephan Bassas**

1970

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

ESDES, MBA - Finance (1993)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Stephan Bassas may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2012 - Present, BlackRock, Managing Director - Portfolio Management

01/2000 -12/2011, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Stephan Bassas. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Simon Blundell**

1976

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Simon Blundell that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

No applicable degree from a college or university.

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Simon Blundell may have obtained other than college or university degrees.

Business Experience (preceding five years)

09/2011 - Present, BlackRock, Managing Director - Portfolio Management

10/2009 - 08/2011, Aviva Investors, Head of Institutional Credit

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Simon Blundell. Richard Kushel can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**John Burger**

1962

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Cornell University, BSC - Business Economics (1985)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that John Burger may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of John Burger. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**David Chesney**

1967

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Saint Peter's College, Bachelor of Science - Economics (1989)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that David Chesney may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

David Chesney is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of David Chesney. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**David Clayton**

1967

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

Dalhousie University, Juris Doctor - Law (1994)

Dalhousie University, Master of Business Administration (MBA) - Business Administration (1994)

University of Western Ontario, Undergraduate Degree - Economics (1990)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that David Clayton may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2017 - Present, BlackRock, Managing Director - Portfolio Management

01/2012 - 12/2016, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of David Clayton. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Adam Cohen**

1975

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Oxford University, Bachelor of Arts (Honors) - Physics (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Adam Cohen may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2012 - Present, BlackRock, Managing Director

10/2000 - 12/2011, BlackRock, Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Adam Cohen. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Peter Day**

1972

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

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Educational Background

Reading University, Bachelor of Arts - Business Economics (1993)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Peter Day may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/1999 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tom Parker is the Chief Investment Officer of Systematic Fixed Income and is responsible for overseeing advisory activities of the group, including those of Peter Day. Tom Parker can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Akiva Dickstein**

1968

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Princeton University, Master of Arts - Physics (1993)

Yale University, Bachelor of Arts - Economics (1990)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Akiva Dickstein may have obtained other than college or university degrees.

Business Experience (preceding five years)

03/2009 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Akiva Dickstein. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Peter Gailliot**

1979

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Duke University, Bachelor of Arts - Economics (2002)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Peter Gailliot may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Managing Director - Portfolio Management

01/2015 - 12/2016, BlackRock, Director - Portfolio Management

01/2009 - 12/2014, BlackRock, Vice President - PMG FIG

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Peter Gailliot. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**John Gallagher**

1973

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

St Michaels College, Bachelor of Science - Business Administration (1995)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that John Gallagher may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of John Gallagher. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Dan Garzarella**

1986

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

University of Pennsylvania - Wharton School of Business, Bachelor of Science - Finance (2009)

University of Pennsylvania, Bachelor of Science - Systems Engineering (2009)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Dan Garzarella may have obtained other than college or university degrees.

Business Experience (preceding five years)

09/2009 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of Dan Garzarella. Peter Hayes can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Jack Hattem**

1977

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

University of Pennsylvania, Bachelor of Arts - Economics (2000)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Jack Hattem may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2000 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Jack Hattem. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Peter Hayes**

1959

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

College of the Holy Cross, Bachelor of Science - Economics (1981)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Peter Hayes may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/1987 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Peter Hayes. Richard Kushel can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Ibrahim Incoglu**

1974

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

University of Tulsa, The, MBA - Finance (1999)

Bogazici Univeristy, Bachelor of Science - Civil Engineering (1998)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Ibrahim Incoglu may have obtained other than college or university degrees.

Business Experience (preceding five years)

08/2009 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Ibrahim Incoglu. Rick Rieder can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Ted Jaeckel**

1959

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

Hamilton College, Bachelor of Arts - History (1981)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Ted Jaeckel may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2006 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of Ted Jaeckel. Peter Hayes can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Michael Kalinoski**

1970

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

Marquette University, Bachelor of Science - accounting (1992)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Michael Kalinoski may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2009 - Present, BlackRock, Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of Michael Kalinoski. Peter Hayes can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Russ Koesterich**

1967

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

Columbia University, Master of Business Administration - Capital Markets (1995)

Boston College, Juris Doctorate - Securities Lending (1990)

Brandeis University, Bachelor of Arts - History (1987)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Russ Koesterich may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2017 - Present, BlackRock, Managing Director - Portfolio Management

03/2016 - 01/2017, BlackRock, Head Asset Allocation Global Allocation Fund

11/2012 - 03/2016, BlackRock, Global Chief Strategist

10/2010 - 11/2012, BlackRock, Global Chief Strategist iShares

Disciplinary Information

Not Applicable

Other Business Activities

Russ Koesterich is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Russ Koesterich. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Matthew Kraeger**

1978

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Syracuse University, Bachelor of Science - Finance (2000)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Matthew Kraeger may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2015 - Present, BlackRock, Managing Director - Portfolio Management

06/2000 - 12/2014, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Matthew Kraeger. Rick Rieder can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Michael Krautzberger**

1970

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Michael Krautzberger that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Hagen, Diplom-Volkswirt - Economics (2006)

European Business School, Bachelors Degree - Business Administration and Computer Science (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Michael Krautzberger may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2005 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Michael Krautzberger. Richard Kushel can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Samir Lakhani**

1979

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Harvard Business School, MBA - Business (2006)

University of Pennsylvania, Bachelor of Engineering - Systems / Telecom (2001)

University of Pennsylvania, Bachelor of Science - Finance (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Samir Lakhani may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2009 - Present, BlackRock, Managing Director - PMG

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Samir Lakhani. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Dong Chan Lee**

1973

Twenty Anson, 20 Anson Road, #18-01, Singapore 79912 | Singapore | Phone 65 6411-3000

This brochure supplement provides information about Dong Chan Lee that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

HanYang University, Bachelor of Business Administration - Finance (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Dong Chan Lee may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2008 - Present, BlackRock, Director - Portfolio Management

03/2001 - 12/2007, Prudential Asset Management, Senior Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Belinda Boa is the Head of Active Investments for Asia Pacific & CIO of Emerging Markets, Fundamental Active Equity and is responsible for overseeing advisory activities of the group, including those of Dong Chan Lee. Belinda Boa can be reached at +852.3903.2800.

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Business Group: Global Fixed Income**Scott MacLellan, CFA, CMT**

1973

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Dalhousie University, Bachelor of Arts - Economics and International Development (2007)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Scott MacLellan, CFA, CMT may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2008 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Scott MacLellan, CFA, CMT. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Kevin Maloney**

1989

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

Drexel University, Bachelor of Science - Finance (2011)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Kevin Maloney may have obtained other than college or university degrees.

Business Experience (preceding five years)

04/2016 - Present, BlackRock, Director - Portfolio Management

04/2011 - 04/2016, BlackRock, Research Analyst

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of Kevin Maloney. Peter Hayes can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**James Mauro**

1970

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

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Educational Background

Boston University - School of Management, Master of Business Administration - Finance (2000)

Saint Michael's College, Bachelor of Science - Business (1992)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that James Mauro may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2015 - Present, BlackRock, Managing Director, Portfolio Management

12/2010 - 12/2014, Blackrock, Director

01/1993 - 11/2010, State Street Global Advisors, Vice President

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Alex Claringbull is the Global Head of Indexed Fixed Income & LDI and is responsible for overseeing advisory activities of the group, including those of James Mauro. Alex Claringbull can be reached at +44.207.743.3000.

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Business Group: Global Fixed Income**Bob Miller**

1962

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Educational Background

Davidson College, Bachelor of Arts - Economics (1984)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Bob Miller may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2011 - Present, BlackRock, Managing Director

07/2007 - 12/2009, Round Table Investment Management, Partner - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Bob Miller. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Walter O'Connor**

1961

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Additional information about Walter O'Connor is available on the SEC's website at www.adviserinfo.sec.gov.

Educational Background

University of Notre Dame, Bachelor of Business Administration - Finance/Philosophy (1984)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Walter O'Connor may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, BlackRock, Managing Director - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Walter O'Connor is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Walter O'Connor is a registered investment adviser of a BlackRock entity that is a registered investment adviser under the Investment Advisers Act of 1940.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of Walter O'Connor. Peter Hayes can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Tom Parker**

1958

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

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Educational Background

University of Chicago, Master Degree - Finance/Intl. Busines (1985)

University of California System - Berkeley, Bachelors Degree - Business - General (1980)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Tom Parker may have obtained other than college or university degrees.

Business Experience (preceding five years)

02/2001 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Tom Parker. Richard Kushel can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Michael Perilli**

1985

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

The College of New Jersey, Bachelor of Science - Accountancy (2007)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Michael Perilli may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2014 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Ted Jaeckel is the Co-Head of the Municipal Funds team within the Municipal Fixed Income business and is responsible for overseeing advisory activities of the group, including those of Michael Perilli. Ted Jaeckel can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Jermaine Pierre**

1972

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Educational Background

Columbia Business School, Master of Business Administration - Finance (2000)

Howard University, Bachelor of Business Administration - Finance (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Jermaine Pierre may have obtained other than college or university degrees.

Business Experience (preceding five years)

08/2007 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Jermaine Pierre is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Jermaine Pierre is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Jermaine Pierre. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**James Pruskowski**

1972

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

Fairleigh Dickinson University, Bachelor of Business Administration - Finance (1995)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that James Pruskowski may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/1996 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of James Pruskowski. Peter Hayes can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Scott Radell**

1968

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

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Educational Background

University of San Diego, Bachelors Degree - Quantitative Economics (1992)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Scott Radell may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2003 - Present, BlackRock, Managing Director - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Alex Claringbull is the Global Head of Indexed Fixed Income & LDI and is responsible for overseeing advisory activities of the group, including those of Scott Radell. Alex Claringbull can be reached at +44.207.743.3000.

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Business Group: Global Fixed Income**Rick Rieder**

1961

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

University of Pennsylvania - Wharton School of Business, Master of Business Administration - Finance (1987)
Emory University - Goizueta Business School, Bachelor of Business Administration - Finance (1983)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Rick Rieder may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2009 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Rick Rieder is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Rick Rieder is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Rick Rieder. Richard Kushel can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Lauritz Ringdal**

1970

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Lauritz Ringdal that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

London Business School, Master of Business Administration - Business Admin (1999)

Georgetown University, Bachelor of Science - International Affairs (1993)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Lauritz Ringdal may have obtained other than college or university degrees.

Business Experience (preceding five years)

08/2005 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Tom Parker is the Chief Investment Officer of Systematic Fixed Income and is responsible for overseeing advisory activities of the group, including those of Lauritz Ringdal. Tom Parker can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**David Rogal**

1983

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

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Educational Background

Cornell University, Bachelor of Arts - Economics; Biology (genetics) (2006)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that David Rogal may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2006 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of David Rogal. Rick Rieder can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Christian Romaglino**

1976

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

Lehigh University, Undergraduate Degree - Industrial Engineering (1999)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Christian Romaglino may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2017 - Present, BlackRock, Director - Portfolio Management

04/2016 - 06/2017, Brown Brothers Harriman, Senior Vice President - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of Christian Romaglino. Peter Hayes can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Kevin Schiatta**

1955

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

State University of New York System - Albany, Bachelor of Science - Accounting (1977)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Kevin Schiatta may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2006 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of Kevin Schiatta. Peter Hayes can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Neeraj Seth**

1973

Twenty Anson, 20 Anson Road, #18-01, Singapore 79912 | Singapore | Phone 65 6411-3000

This brochure supplement provides information about Neeraj Seth that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Indiana University - Kelley School of Business, Master of Business Administration - Finance (2001)

Delhi University, Bachelor of Engineering - Mechanical Engineering (1995)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Neeraj Seth may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2009 - Present, BlackRock, Managing Director - PMG

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Belinda Boa is the Head of Active Investments for Asia Pacific & CIO of Emerging Markets, Fundamental Active Equity and is responsible for overseeing advisory activities of the group, including those of Neeraj Seth. Belinda Boa can be reached at +852.3903.2800.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Marie Sheehan**

1960

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

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Educational Background

University of North Carolina System - Chapel Hill, Bachelor of Arts - International Studies (1982)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Marie Sheehan may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2009 - Present, BlackRock, Managing Director - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of Marie Sheehan. Peter Hayes can be reached at +1.212.810.5300.

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Business Group: Global Fixed Income**Ron Sion**

1978

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Ron Sion that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Pennsylvania - Wharton School of Business, Bachelor of Science (Honors) - Finance (1999)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Ron Sion may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2011 - Present, BlackRock, Managing Director - Portfolio Management

01/2007 - 01/2011, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Ron Sion. Rick Rieder can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Phillip Soccio**

1978

1 University Square Drive, Princeton, NJ 08540-6455 | | Phone 609-853-5600

This brochure supplement provides information about Phillip Soccio that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Wilmington University, Bachelor of Science - Finance (2001)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Phillip Soccio may have obtained other than college or university degrees.

Business Experience (preceding five years)

04/1998 - Present, BlackRock, Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Peter Hayes is the Chief Investment Officer and Head of the Municipal Bond Group as well as Global Head of Financial Institutions Group Investments Business and is responsible for overseeing advisory activities of the group, including those of Phillip Soccio. Peter Hayes can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Stuart Spodek**

1971

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Stuart Spodek that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Princeton University, Bachelor of Science - Civil Engineering & Operations Research (1993)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Stuart Spodek may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2006 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Rick Rieder is the Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team and is responsible for overseeing advisory activities of the group, including those of Stuart Spodek. Rick Rieder can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Sid Swaminathan**

1981

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Sid Swaminathan that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - Berkeley, Master Degree - Financial Engineering (2005)

University of Illinois, Bachelors Degree - Computer Engineering (2003)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Sid Swaminathan may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2011 - Present, BlackRock, Director - Portfolio Management

12/2009 - 12/2010, BlackRock, Vice President - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Alex Claringbull is the Global Head of Indexed Fixed Income & LDI and is responsible for overseeing advisory activities of the group, including those of Sid Swaminathan. Alex Claringbull can be reached at +44.207.743.3000.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Sergio Trigo Paz**

1968

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Sergio Trigo Paz that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Paris, Universite Paris 1 Pantheon-Sorbonne, Master of Finance - Capital Markets Finance (1993)

Paris, Universite Paris 1 Pantheon-Sorbonne, Master of Business Administration - Management (1993)

Paris, Universite Paris 1 Pantheon-Sorbonne, Bachelor of Economics - Econometry (1992)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Sergio Trigo Paz may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2012 - Present, BlackRock, Managing Director,

09/2009 - 03/2012, BNPP IP / FFTW, CIO, EM Fixed Income

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Sergio Trigo Paz. Richard Kushel can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Global Fixed Income**Karen Uyehara**

1972

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Karen Uyehara that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of Southern California (USC) - Marshall School of Business, Master of Business Administration - Finance & Investments (2002)

University of California System - San Diego, Bachelor of Arts - Economics & History (1995)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Karen Uyehara may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2010 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Alex Claringbull is the Global Head of Indexed Fixed Income & LDI and is responsible for overseeing advisory activities of the group, including those of Karen Uyehara. Alex Claringbull can be reached at +44.207.743.3000.

BlackRock Alternatives Management, LLC

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Business Group: Multi-Asset Strategies & Solutions**Thomas Becker**

1981

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Thomas Becker that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - Berkeley, Doctorate / PhD - Economics (2010)

Massachusetts Institute of Technology, Bachelor of Science - Economics (2003)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Thomas Becker may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2010 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Philip Green is the Head of Global Tactical Asset Allocation and is responsible for overseeing advisory activities of the group, including those of Thomas Becker. Philip Green can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Multi-Asset Strategies & Solutions**Jason Byrom**

1968

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Jason Byrom that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

London City University, Master of Science - Mathematical Trading & Finance (1998)

London City University, Bachelor of Science - Control, Instrumentation & Systems Engineering (1990)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Jason Byrom may have obtained other than college or university degrees.

Business Experience (preceding five years)

08/1998 - Present, BlackRock, Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Adam Ryan is the Head of Multi-Asset Diversified Strategies and is responsible for overseeing advisory activities of the group, including those of Jason Byrom. Adam Ryan can be reached at +44.207.743.3000.

BlackRock Alternatives Management, LLC

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Business Group: Multi-Asset Strategies & Solutions**Justin Christofel**

1982

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Justin Christofel that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Yale University, Bachelor of Arts - Economics and Mathematics (2005)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Justin Christofel may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2016 - Present, BlackRock, Managing Director - Portfolio Management

08/2007 - 12/2015, BlackRock, Director - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Justin Christofel is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Michael Fredericks is the Head of Income Investing for the Blackrock Multi-Asset Strategies & Solutions and is responsible for overseeing advisory activities of the group, including those of Justin Christofel. Michael Fredericks can be reached at +1.212.810.5300.

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Business Group: Multi-Asset Strategies & Solutions**Michael Fredericks**

1969

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Michael Fredericks that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - San Diego, Master Degree - International Affairs (1997)

University of California System - Berkeley, Bachelor of Arts - Economics (1991)

University of California System - Berkeley, Bachelor of Arts - History (1991)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Michael Fredericks may have obtained other than college or university degrees.

Business Experience (preceding five years)

04/2011 - Present, BlackRock, Managing Director

11/2006 - 03/2011, JP Morgan Asset Management , Executive Director - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Michael Fredericks is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Michael Fredericks. Richard Kushel can be reached at +1.212.810.5300.

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Business Group: Multi-Asset Strategies & Solutions**Michael Gates**

1973

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Michael Gates that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - Davis, Master Degree - Economics (1998)

University of California System - Davis, Bachelors Degree - Environmental Toxicology (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Michael Gates may have obtained other than college or university degrees.

Business Experience (preceding five years)

1/2018 - Present, BlackRock, Managing Director

12/2012 - 12/2017, BlackRock, Director, Multi-Asset Strategies

07/2011 - 12/2012, BlackRock, Director, iShares

01/2010 - 07/2011, BlackRock, Director, Global Trading

12/2004 - 12/2009, BlackRock, Principal, Global Index and Market Groups

Disciplinary Information

Not Applicable

Other Business Activities

Michael Gates is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Richard Wolfe is the Chief Investment Officer and Head of Private Investors and is responsible for overseeing advisory activities of the group, including those of Michael Gates. Richard Wolfe can be reached at +1.609.282.2000.

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Business Group: Multi-Asset Strategies & Solutions**Philip Green**

1963

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Philip Green that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

New York University (NYU) - Stern School of Business, Master of Business Administration - Finance (1992)
University of Pennsylvania - Wharton School of Business, Bachelor of Science - Economics (1985)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Philip Green may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/1999 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Philip Green. Richard Kushel can be reached at +1.212.810.5300.

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Business Group: Multi-Asset Strategies & Solutions**Philip Hodges**

1980

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Philip Hodges that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Oxford University, Doctorate / PhD - Physical Chemistry (2007)

Oxford University, Master Degree - Chemistry (2002)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Philip Hodges may have obtained other than college or university degrees.

Business Experience (preceding five years)

12/2009 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Ked Hogan is the Head of Investments for BlackRock's Factor-Based Strategies and is responsible for overseeing advisory activities of the group, including those of Philip Hodges. Ked Hogan can be reached at +1.415.670.2000.

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Business Group: Multi-Asset Strategies & Solutions**Ked Hogan**

1959

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Ked Hogan that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Arizona State University, Doctorate / PhD - Economics (1990)

Arizona State University, Bachelors Degree - Economics (1982)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Ked Hogan may have obtained other than college or university degrees.

Business Experience (preceding five years)

12/2009 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Ked Hogan is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Andrew Ang is the Head of BlackRock Systematic Wealth Solutions and Head of the Factor-Based Strategies Group and is responsible for overseeing advisory activities of the group, including those of Ked Hogan. Andrew Ang can be reached at +1.212.810.5300.

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Business Group: Multi-Asset Strategies & Solutions**Michael Pensky**

1986

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Michael Pensky that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California - Berkeley - Haas School of Business, Master Degree - Financial Engineering (2012)

University of Florida, Bachelors Degree - Mathematics (2008)

University of Florida - Warrington College of Business, Bachelors Degree - Finance (2008)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Michael Pensky may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2018 - Present, BlackRock, Director - Portfolio Management

01/2016 - 12/2017, BlackRock, Vice President - Portfolio Management

08/2012 - 12/2015, BlackRock, Associate

04/2012 - 07/2012, Morgan Stanley, Associate

08/2008 - 02/2011, SunTrust Robinson Humphrey, Analyst

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Philip Green is the Head of Global Tactical Asset Allocation and is responsible for overseeing advisory activities of the group, including those of Michael Pensky. Philip Green can be reached at +1.212.810.5300.

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Business Group: Multi-Asset Strategies & Solutions**Adam Ryan**

1969

Drapers Gardens, 12 Throgmorton Avenue, London EC2N 2DL | Phone 44-20-7743-3000

This brochure supplement provides information about Adam Ryan that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Cambridge University, Bachelor of Arts - Engineering (1991)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Adam Ryan may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/1999 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Richard Kushel is the Head of the Portfolio Management Group and is responsible for overseeing advisory activities of the group, including those of Adam Ryan. Richard Kushel can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Multi-Asset Strategies & Solutions**Alex Shingler**

1974

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about Alex Shingler that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Princeton University, Bachelor of Arts (Honors) - Philosophy (1997)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Alex Shingler may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2009 - Present, BlackRock, Managing Director - Portfolio Manager

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Michael Fredericks is the Head of Income Investing for the Blackrock Multi-Asset Strategies & Solutions and is responsible for overseeing advisory activities of the group, including those of Alex Shingler. Michael Fredericks can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Multi-Asset Strategies & Solutions**John Sulski**

1968

55 East 52nd Street, New York, NY 10055 | | Phone 212-810-5300

This brochure supplement provides information about John Sulski that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - Berkeley, Master Degree - Financial Engineering (2004)

Johns Hopkins University, Master Degree - Int'l Relations/Economics (1997)

Dartmouth College, Bachelors Degree - Computer Engineering (1990)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that John Sulski may have obtained other than college or university degrees.

Business Experience (preceding five years)

10/2007 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Ryan Marshall is the Co-Head of Multi-Asset Strategies & Solutions and is responsible for overseeing advisory activities of the group, including those of John Sulski. Ryan Marshall can be reached at +1.212.810.5300.

BlackRock Alternatives Management, LLC

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Business Group: Systematic Active Equity**Ali Almufti**

1982

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Ali Almufti that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

University of California System - San Diego, Bachelors Degree - Economics (2004)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Ali Almufti may have obtained other than college or university degrees.

Business Experience (preceding five years)

05/2006 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Travis Cooke is the Head of North American strategies within BlackRock's Systematic Active Equity team and is responsible for overseeing advisory activities of the group, including those of Ali Almufti. Travis Cooke can be reached at +1.415.670.2000.

BlackRock Alternatives Management, LLC

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Business Group: Systematic Active Equity**Daniel Blumhardt**

1971

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Daniel Blumhardt that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

Michigan State University, Bachelor of Arts - Finance (1994)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Daniel Blumhardt may have obtained other than college or university degrees.

Business Experience (preceding five years)

03/2008 - Present, BlackRock, Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Daniel Blumhardt is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Jeff Shen is the Co-CIO and Co-Head of Systematic Active Equity and is responsible for overseeing advisory activities of the group, including those of Daniel Blumhardt. Jeff Shen can be reached at +1.415.670.2000.

BlackRock Alternatives Management, LLC

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Business Group: Systematic Active Equity**Travis Cooke**

1976

400 Howard Street, San Francisco, CA 94105 | | Phone 415-670-2000

This brochure supplement provides information about Travis Cooke that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

London Business School, Master of Finance - Finance (2008)

University of California System - Santa Barbara, Bachelors Degree - Business Economics (1998)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Travis Cooke may have obtained other than college or university degrees.

Business Experience (preceding five years)

01/2006 - Present, Blackrock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Travis Cooke is an associated person of a BlackRock entity that is a registered commodity trading adviser under the Commodities Exchange Act.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts.

BlackRock investment management personnel are subject to supervision by the business group. Raffaele Savi is the Global Head of BlackRock Systematic and Co-CIO and Co-Head of Systematic Active Equity and is responsible for overseeing advisory activities of the group, including those of Travis Cooke. Raffaele Savi can be reached at +1.415.670.2000.

BlackRock Alternatives Management, LLC

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Business Group: Systematic Active Equity**Kevin Franklin**

1978

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This brochure supplement provides information about Kevin Franklin that supplements the BlackRock Alternatives Management, LLC brochure. You should have received a copy of the BlackRock Alternatives Management, LLC brochure. Please contact your relationship manager if you did not receive it or if you have any questions about the contents of that brochure or this supplement.

Educational Background

California Institute of Technology, Bachelor of Science - Physics & History (2000)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Kevin Franklin may have obtained other than college or university degrees.

Business Experience (preceding five years)

07/2010 - Present, BlackRock, Managing Director

07/2009 - 06/2010, Marble Asset Management, Partner

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

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BlackRock investment management personnel are subject to supervision by the business group. Raffaele Savi is the Global Head of BlackRock Systematic and Co-CIO and Co-Head of Systematic Active Equity and is responsible for overseeing advisory activities of the group, including those of Kevin Franklin. Raffaele Savi can be reached at +1.415.670.2000.

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Business Group: Systematic Active Equity**Richard Mathieson**

1974

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Educational Background

Glasgow University, Bachelors Degree - Accounting & Finance (1996)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Richard Mathieson may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2012 - Present, BlackRock, Managing Director - Portfolio Management

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Kevin Franklin is the Head of Global Equity Strategies, Scientific Active Equity and is responsible for overseeing advisory activities of the group, including those of Richard Mathieson. Kevin Franklin can be reached at +1.415.670.2000.

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Business Group: Systematic Active Equity**Gerardo Rodriguez**

1972

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Educational Background

Stanford University, Master of Science - Engineering Economic Systems and Operations Research (1999)
Universidad de las Americas-Puebla, Bachelor of Science - Economics (1996)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Gerardo Rodriguez may have obtained other than college or university degrees.

Business Experience (preceding five years)

04/2013 - Present, BlackRock, Managing Director - Portfolio Manager
01/2011 - 12/2012, Mexican Ministry of Finance, Undersecretary of Finance
01/2005 - 12/2010, Mexican Ministry of Finance, Director General for Public Credit

Disciplinary Information

Not Applicable

Other Business Activities

Not Applicable

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Jeff Shen is the Co-CIO and Co-Head of Systematic Active Equity and is responsible for overseeing advisory activities of the group, including those of Gerardo Rodriguez. Jeff Shen can be reached at +1.415.670.2000.

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Business Group: Systematic Active Equity**Jeff Shen**

1970

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Educational Background

New York University, Doctorate / PhD - Finance/Intl. Busines (2000)

University of Michigan, Master Degree - Economics (1995)

Hobart and William Smith Colleges, Bachelors Degree - Economics (1993)

Educational Background in this brochure supplement does not reflect professional qualifications or post secondary education that Jeff Shen may have obtained other than college or university degrees.

Business Experience (preceding five years)

06/2004 - Present, BlackRock, Managing Director

Disciplinary Information

Not Applicable

Other Business Activities

Jeff Shen is a registered representative of a BlackRock entity that is a broker-dealer registered under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

Additional Compensation

Not Applicable

Supervision

The BlackRock Advisers monitor the advisory services provided to clients by, amongst other things, periodically reviewing client accounts and providing reports to clients regarding their accounts. BlackRock investment management personnel are subject to supervision by the business group. Raffaele Savi is the Global Head of BlackRock Systematic and Co-CIO and Co-Head of Systematic Active Equity and is responsible for overseeing advisory activities of the group, including those of Jeff Shen. Raffaele Savi can be reached at +1.415.670.2000.