



# Division of Economic and Risk Analysis

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# Leveraging Data and Analytics at the SEC to Assess Risk

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# Building a Risk Assessment Tool

I. Understand market: Have experts

II. Develop quantitative measures of behaviors and outcomes:  
data from forms, filings, news, and other market sources

III. Build a model: Estimate using historical data

IV. Apply output and assess outcomes

V. Generate feedback: educate experts, update required disclosure, recalibrate model



# Update on Broker-Dealer Risk Assessment

- BD-RA tool fully integrated into OCIE's exam planning processes. Results of model help staff prioritize examinations across 4100 broker-dealers.
  - Model tells OCIE examiners about outlier activities or certain changes over time at the broker-dealer relative to its "peers."
  - Once the inputs causing the change is identified, OCIE examiners are better able to allocate resources, and prioritize and scope exams, which results in higher quality examination targets, significant findings, and more substantive referrals to Enforcement or FINRA.
- Next steps:
  - Operationalize through web-based user interface, so that Commission staff have real time access to analytics as soon as new data is received.
  - Annual calibration of model based on examination results to refine and improve as results from exams are received/incorporated.



# Update on Corporate Issuer Risk Assessment

- The CIRA Dashboard was developed in collaboration with the Enforcement Financial Reporting and Audit (FRAud) Group
- Designed to provide a comprehensive overview of the financial reporting environment of Commission registrants and to assist Enforcement staff in detecting anomalous patterns in financial statements that may warrant additional inquiry.
- CIRA's multiple dashboards enable the ENF staff to compare a specific company to its peers in order to detect abnormal, relative results; focus on particular financial reporting anomalies; and generate lists of companies for further analysis.
- Next Steps:
  - Solicit feedback from ENF FRAud Group on new web-based dashboard.
  - Continue to develop and enhance the analytic offerings within the tool.....DERA is developing additional filters that identify suspicious patterns in the data for further review.
  - Incorporate additional data sources.



# Investment Company Risk Assessment

## Risk Rankings

Analysis of IC Characteristics

Litigation

Returns

Expenses

Flows

Gatekeepers

Text Analytics on Disclosures

Cluster Analysis/Uniqueness

Analysis of IC Activities

Dividend Juicing

Return Gap

Cross-subsidization

Flow-Performance

Ad hoc/Event driven Analysis

Style Drift/Closet Indexing

NAV analysis

Affiliated IPO holdings



# DERA's Text Analytics Initiative

- Natural language processing
  - Using text analytic techniques to identify 'themes' in unstructured narrative disclosures.
  - This is done by applying statistical methods that look at distributions of (root) words in a document in relation to those in other documents
  - Modeling methods like Latent Dirichlet Application (LDA) can be used to identify topics (themes) in disclosure that, once 'trained' on a set of documents, can identify similar themes in other documents.
  - For example, registrant disclosures associated with misconduct can be used as a basis for training to identify similar disclosures in other documents
- DERA has structured 200,000 SEC filings, from 1993 to 2014 and is developing Text Analytic capabilities using this structured data.



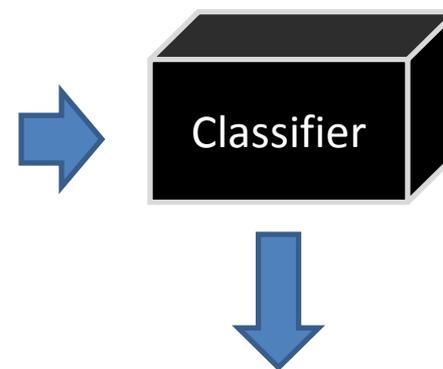
## 7. Discontinued Operations

In accordance with the provisions of ASC 360, *Property, Plant, and Equipment*, we have reclassified the revenues and expenses of properties and businesses sold or held for sale to “income (loss) from discontinued operations” and the related assets and liabilities to “assets related to discontinued operations” and “liabilities related to discontinued operations” for all periods presented in the accompanying consolidated financial statements. The net gains resulting from the sale of the properties below are included in “income (loss) from discontinued operations” on our consolidated statements of income.

On January 6, 2015, we completed the sale of 920 Holyoke Center, a 1.2 million square foot office building in Holyoke, Massachusetts, for \$238,000,000 in cash, which resulted in a net gain of \$52,200,000 that will be recognized in the first quarter of 2012.

On March 31, 2014, the receiver completed the disposition of Periphery Center in Alabama. In connection therewith, the property and related debt were removed from our consolidated balance sheet and we recognized a net gain of \$85,907,000 on the extinguishment of debt.

On January 12, 2011, we sold 110 Oregon Avenue and 127 15<sup>th</sup> Street in Washington, DC, for \$227,000,000 in cash, which resulted in a net gain of \$4,862,000.



Top 5 US GAAP Tags	P
DisposalGroupsIncludingDiscontinuedOperationsDisclosure	99 %
MergersAcquisitionsAndDispositionsDisclosures	0.08 %
OtherIncomeAndOtherExpenseDisclosure	0.0006 %
BusinessDescriptionAndAccountingPolicies	0.0004 %
LoansNotesTradeAndOtherReceivablesExcludingAllowanceForCreditLosses	0.0003 %



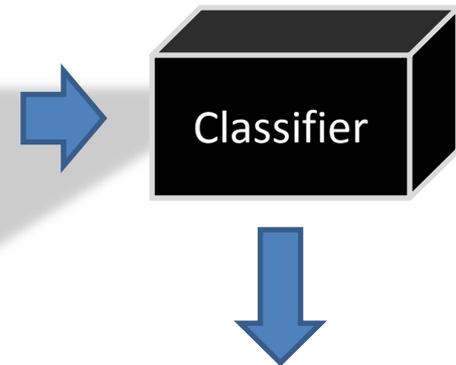
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

11. Shareholders' Equity

The following table sets forth the details of our preferred shares of beneficial interest as of December 31, 2015 and 2014.

Preferred Shares	Balance as of December 31,		Shares Outstanding at December 31,		Per Share Liquidation Preference
	2015	2014	2015	2014	
6.75% Series H: auth. 4,600,000 shares	108,549	108,549	4,500,000	4,500,000	\$ 25.00
6.625% Series I: auth. 12,050,000 shares	262,379	262,379	10,800,000	10,800,000	\$ 25.00
6.875% Series J: auth. 9,850,000 shares	238,842	-	9,850,000	-	\$ 25.00
	<u>\$ 1,021,660</u>	<u>\$ 783,088</u>	<u>42,186,709</u>	<u>32,340,009</u>	

On April 20, 2011, we sold 7,000,000 6.875% Series J Cumulative Redeemable Preferred Shares at a price of \$25.00 per share, in an underwritten public offering pursuant to an effective registration statement. On April 21, 2011, the underwriters exercised their option to purchase an additional 1,050,000 shares to cover over-allotments. On May 5, 2011 and August 5, 2011 we sold additional 800,000 and 1,000,000 shares, respectively, at a price of \$25.00 per share. We retained aggregate net proceeds of \$238,842,000, after underwriters' discounts and issuance costs and contributed the net proceeds to the Operating Partnership in exchange for 9,850,000 Series J Preferred Units (with economic terms that mirror those of the Series J Preferred Shares).



US GAAP Tag	P
StockholdersEquityNoteDisclosure	68.0 %
PreferredStock	25.4 %
ShareholdersEquityAndShareBasedPayments	1.4 %
TreasuryStock	0.7 %
EquityMethodInvestmentsDisclosure	0.3 %

