SESSION THREE
Advanced Credit Analysis

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Approved Issuer List (AIL)

- Within California State Code guidelines:

FIGURE 1

ALLOWABLE INVESTMENT INSTRUMENTS PER STATE GOVERNMENT CODE (AS OF JANUARY 1, 2024)[A] APPLICABLE TO ALL LOCAL AGENCIES[B]

See "Table of Notes for Figure 1" on the next page for footnotes related to this figure.

INVESTMENT TYPE	MAXIMUM MATURITY[C]	MAXIMUM SPECIFIED % OF PORTFOLIO[D]	MINIMUM QUALITY REQUIREMENTS	GOV'T CODE SECTIONS
Local Agency Bonds	5 years	None	None	53601(a)
U.S. Treasury Obligations	5 years	None	None	53601(b)
State Obligations—CA And Others	5 years	None	None	53601(c) 53601(d)
CA Local Agency Obligations	5 years	None	None	53601(e)
U.S Agency Obligations	5 years	None	None	53601(f)
Bankers' Acceptances	180 days	40%[E]	None	53601(g)
Commercial Paper—Non-Pooled Funds[F] (under $100,000,000 of investments)	270 days or less	25% of the agency's money[G]	Highest letter and number rating by an NRSRO[H]	53601(h)(2)(c)
Commercial Paper—Non-Pooled Funds[I] (min. $100,000,000 of investments)	270 days or less	40% of the agency's money[G]	Highest letter and number rating by an NRSRO[H]	53601(h)(2)(c)
Commercial Paper—Pooled Funds[J]	270 days or less	40% of the agency's money[G]	Highest letter and number rating by an NRSRO[H]	53635(a)(1)
Negotiable Certificates of Deposit	5 years	30%[K]	None	53601(i)
Non-negotiable Certificates of Deposit	5 years	None	None	53630 et seq.
Placement Service Deposits	5 years	50%[L]	None	53601.8 and 53635.8
Placement Service Certificates of Deposit	5 years	50%[L]	None	53601.8 and 53635.8
Repurchase Agreements	1 year	None	None	53601(j)
Reverse Repurchase Agreements and Securities Lending Agreements	92 days[M]	20% of the base value of the portfolio	None[N]	53601(j)
Medium-Term Notes[O]	5 years or less	30%	"A" rating category or its equivalent or better	53601(k)
Mutual Funds And Money Market Mutual Funds	N/A	20%[P]	Multiple[Q, R]	53601(l) and 53601.6(b)
Collateralized Bank Deposits[S]	5 years	None	None	53630 et seq. and 53601(n)
Mortgage Pass-Through and Asset-Backed Securities[T]	5 years or less[T]	20%	"AA" rating category or its equivalent or better[T]	53601(o)
County Pooled Investment Funds	N/A	None	None	27133
Joint Powers Authority Pool	N/A	None	Multiple[U]	53601(p)
Local Agency Investment Fund (LAIF)	N/A	None	None	16429.1
Voluntary Investment Program Fund[V]	N/A	None	None	16340
Supranational Obligations[W]	5 years or less	30%	"AA" rating category or its equivalent or better	53601(q)
Public Bank Obligations	5 years	None	None	53601(r), 53635(c) and 57603

Approved Issuer List (AIL)

- Approved by our Investment Advisor (PFM)
- Meets Investment Policy Statement guidelines

Each security on the approved list is monitored based on their earnings reporting frequency and a tearsheet is created.

Company credit ratings are monitored on a daily basis, and any changes are highlighted and noted on the AIL.

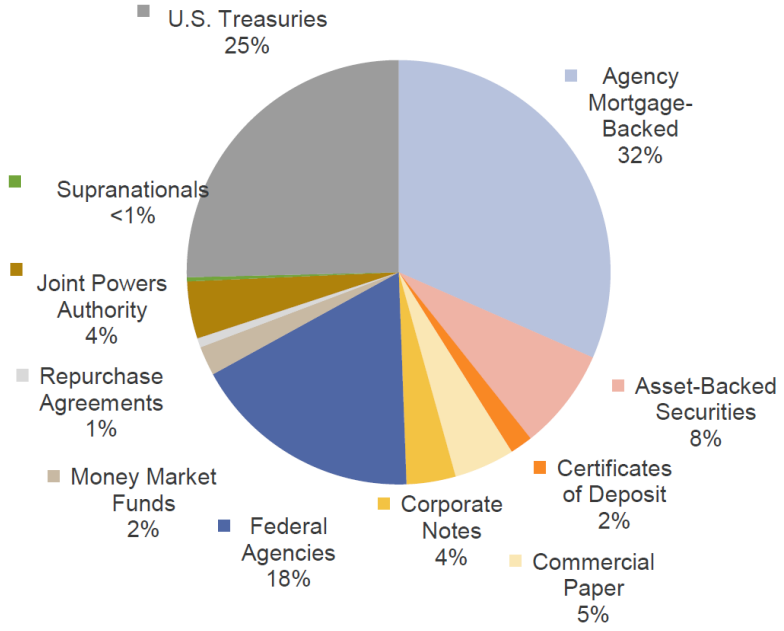
Credit Ratings

	Credit Ratings		
	S&P	Moody's	Fitch
Investment Grade	AAA	Aaa	AAA
	AA	Aa	AA
	A	A	A
	BBB	Baa	BBB
Speculative Grade	BB	Ba	BB
	B	B	B
	CCC	Caa	CCC
	CC	Ca	CC
	C	C	C
	D	D	D

Credit Risk

Portfolio Diversification (as of October 31, 2024)

Sector Distribution



Sector	Market Value
Agency Mortgage-Backed	$4,542,822,051
Asset-Backed Securities	$1,110,604,095
Certificates of Deposit	$249,717,750
Commercial Paper	$663,344,606
Corporate Notes	$539,549,187
Federal Agencies	$2,531,391,172
Money Market Funds	$321,000,000
Repurchase Agreements	$100,000,000
Joint Powers Authority	$626,000,000
Supranationals	$44,951,760
U.S. Treasuries	$3,649,180,825

Exposure (as of October 31, 2024)

Issuer Limit (in millions)	n/a	$1,443.5	$4,330.4	$5,773.8	$2,886.9	n/a	$5,773.8	$4,330.4	n/a	$2,886.9	$721.7	Compliance
Sector	Agency Mortgage-Backed	Asset-Backed Securities	Certificates of Deposit	Commercial Paper	Corporate Notes	Federal Agencies	Repurchase Agreements	Supranationals	U.S. Treasuries	Money Market Funds	Joint Powers Authority	Grand Total
Amazon.com Inc					$100.7							yes
American Express Co		$67.2										yes
Apple Inc					$30.6							yes
Bank of America Corp			$252.0	$98.8								yes
Bank of New York Mellon Corp					$54.8							yes
BMW Vehicle Lease Trust		$68.8										yes
CalTRUST											$10.0	yes
CAMP											$616.0	yes
Cantor Fitzgerald LP							$100.0					yes
Capital One Financial Corp		$50.0										yes
Citigroup Inc		$9.2		$99.4	$10.1							yes
Credit Agricole Group				$88.0								yes
Deere & Co					$69.8							yes
Discover Card Execution Note Trust		$70.1										yes
Federal Farm Credit Banks Funding Corp						$450.9						yes
Federal Home Loan Banks						$1,610.0						yes
Federal Home Loan Mortgage Corp	$4,062.1					$156.8						yes
Federal National Mortgage Association	$120.0					$328.3						yes
Federated Govt Money Market Fund										$158.0		yes
Fidelity Govt Money Market Fund										$161.0		yes
Ford Credit Auto Owner Trust		$32.0										yes
FRESB Multifamily Structured Pass Throu	$376.6											yes
GM Financial Consumer Automobile Receiv		$42.8										yes
Honda Auto Receivables Owner Trust		$107.9										yes
Hyundai Auto Receivables Trust		$101.8										yes
Inter-American Development Bank								$15.4				yes
International Bank for Reconstruction &								$10.1				yes
International Finance Corp								$19.9				yes
John Deere Owner Trust		$124.4										yes
JPMorgan Chase & Co		$65.2		$49.8								yes
Mercedes-Benz Auto Lease Trust		$35.9										yes
Mercedes-Benz Auto Receivables Trust		$65.4										yes
MetLife Inc				$131.1	$71.0							yes
Morgan Stanley Liquid Govt Inst Fund										$1.0		yes
Nestle SA					$5.0							yes
Northern Institutional US Govt Fund										$1.0		yes
Procter & Gamble Co					$10.1							yes
Toyota Auto Receivables Owner Trust		$197.1										yes
Toyota Lease Owner Trust		$23.1										yes
Toyota Motor Corp				$196.3	$81.7							yes
United States Treasury									$3,662.7			yes
Verizon Master Trust		$52.2										yes
Walmart Inc					$20.0							yes
Wells Fargo & Co					$92.4							yes
Grand Total	**$4,558.7**	**$1,113.0**	**$252.0**	**$663.3**	**$546.3**	**$2,546.0**	**$100.0**	**$45.4**	**$3,662.7**	**$321.0**	**$626.0**	**$14,434.5**
% of Portfolio	31.6%	7.7%	1.7%	4.6%	3.8%	17.6%	0.7%	0.3%	25.4%	2.2%	4.3%	
Sector Limit	100%	10%	30%	40%	20%	100%	40%	30%	100%	20%	5%	
Compliance	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	

Preliminary Analysis – New Issuer

- Does the potential issuer issue securities that fit the Treasurer's Statement of Investment Policy (IPS) and meet California Government Code?
  - **Credit Ratings:** Minimum of A-/A3/A- on LT ratings and A-1/P-1/F1 on ST ratings of programs required. Needs to be rated by at least 2 of the rating agencies (S&P/Moody's/Fitch)
  - **Asset Type:** Commercial Paper (CP), Certificate of Deposit (CDs), Medium Term Notes (MTNs), and Asset-Backed Securities (ABS)
  - **Issuance Levels:** Is there market breadth and volume in their debt securities?

Ex.: Google – Higher ratings with limited debt issuance.

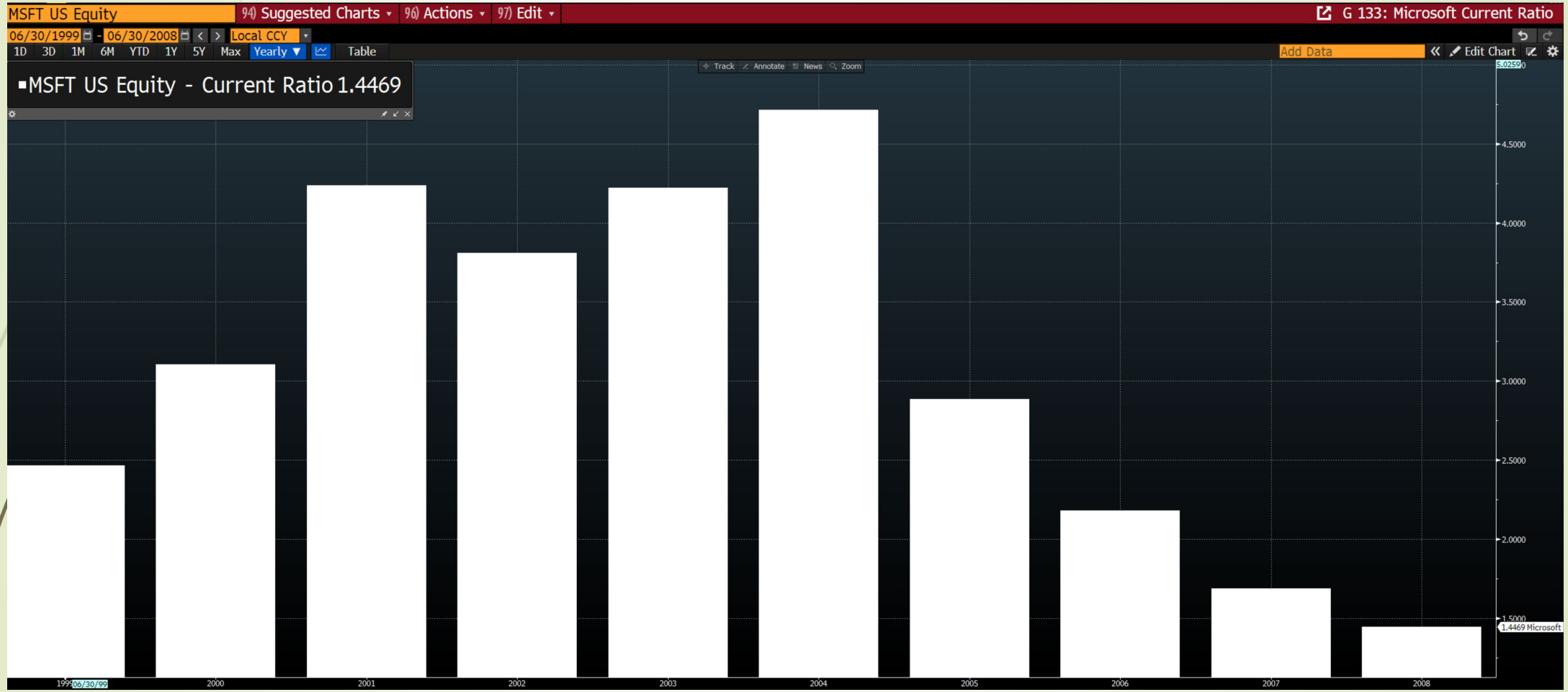
Fundamental Analysis – New Issuer

- **Credit Ratings:** Not fully relied on given that they usually lag fundamental deterioration. A full review and due diligence of company fundamentals are done on a potential issuer
- Mixture of both top-down and bottom-up approach used
- Looking through at least the last 5 years of historical financial data for trends or one-time events
  - **Material events that took place longer than 5 years ago are taken into consideration and stated in the initial report**

  Ex.: Microsoft –

  - In FY 05, Microsoft paid a special one-time dividend worth $37B that took retained earnings from $18.4B to a retained deficit of $12.3B
  - The balance didn't return positive until FY 13. Debt balances have increased but have been well managed since accessing the bond market in 2009

Fundamental Analysis – New Issuer (cont. 2 of 9)



Fundamental Analysis (cont. 3 of 9)

- Issuer Ratings/ Economic Outlook

Company Ticker:	C US
Company Name:	Citigroup Inc
Filing Period:	2024 C1
Largest Region:	United States
Accounting Standard:	US GAAP
Currency:	USD

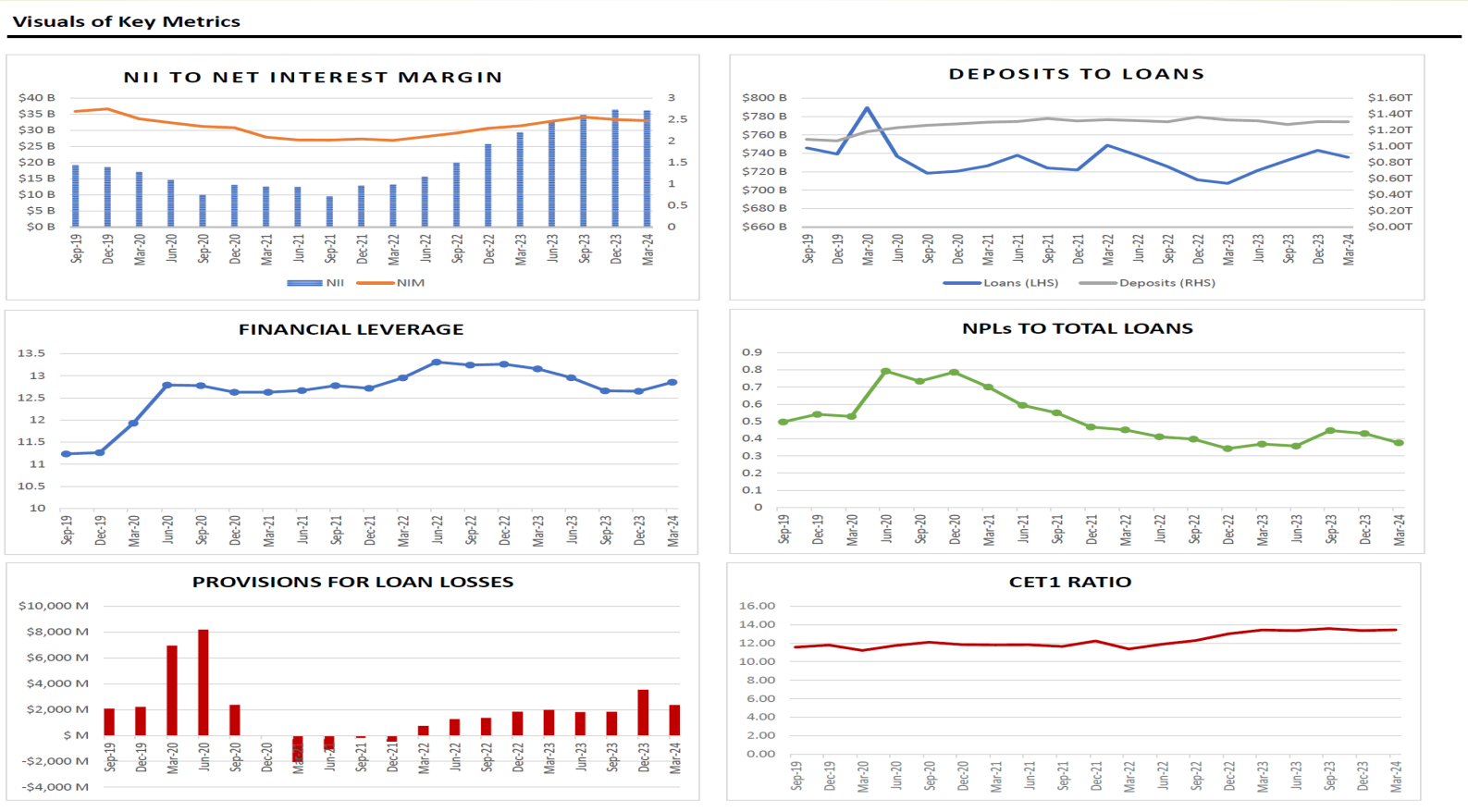
Credit Profile	Short-Term	Since	Long-Term	Outlook
S&P	A-1	2/7/2018	A+	STABLE
Moody's	P-1	12/26/1985	Aa2	NEG
Fitch	F1+	10/30/1998	AA-	STABLE

Economic Update / United States

The US economy recovered after the COVID shock in 2020, after numerous stimulus measures on the fiscal side, and accomodative monetary policy. 2021-2022 was defined by an uneven economic recovery and supply chain issues, and inflation being more entrenched than policy makers had anticipated. The Federal Reserve has raised rates in response to this, coming to the 5.25-5.5% range as of December 2023. The balance sheet is also in the process of being reduced, with rolloffs capp ing out at $95B/month, and recently revised down to $25B/month. Powell surprised the market in December by making a dovish statement that rate cuts were seen later in 2024, causing assets to rally; however strong data at tthe beginning of 2024 led cut expectations to only one or two this year. US Banks passed stress tests in June 2024, with many bank showing they could handle a severe economic decline. The recent May reading of CPI came in at 3.3% YoY, however on a MoM basis came in flat for the month of May. Core PCE came in at 2.6% YoY, slightly lower than the 2.8% readings that came in January and February. The unemployment rate in June reached 4.1% from 3.7% in December, a sign of labor market cooling while wage growth has also cooled as well; opening the doorway to rate cuts at the end of the year. Geopolitical tensions remain in the peripheral view with Russia/Ukraine and Israel/Hamas wars continuing; with fears of tension in China/Taiwan. Current market expectations are for a no landing scenario, however there are schools of thought that think there are upside risks to inflation still, with the opposite side arguing that their may be rapid deflation if the Fed doesn't cut enough. Regional banks are still being monitored given the failure of SVB back in 2023, with a few more backs like New York Community Bank experiencing stress over the quarter, with Moody's downgrading due to exposure to commercial real estate, and ultimately getting an equity injection from the private sector. Commercial real estate stress remains a concern as numerous regional banks are exposed vs. large banks, who have smaller and better managed commercial real estate portfolios. Recent political risks include a Trump victory in November, after Biden's unremarkable debate led to questions regarding his capability due to his age. Trump's policies if re-elected would be inflationary for the environment, leading to a potential bear steepening across the yield curve.

Fundamental Analysis (cont. 4 of 9)

- Industry Analysis



Fundamental Analysis (cont. 5 of 9)

- Peer Comparison

Latest Filing Metrics

Profitability Metrics	C US	JPM US	BAC US	USB US	C US	Peer Avg
Net Interest Income	$ 54,900.00	$ 89,267.00	$ 56,931.00	$ 17,396.00	$ 54,900.00	$ 54,678.80
Net Interest Margin	2.48	2.66	2.00	3.17	2.48	2.56
Market Cap	$127,245M	$593,689M	$323,920M	$62,512M	$127,245M	$246,922M
EBITDA	$ 11,411.00	$ 63,292.00	$ 29,097.00	$ 9,007.00	$ 11,411.00	$ 24,843.60
Annual Revenue	$ 78,462.00	$ 158,104.00	$ 98,581.00	$ 28,013.00	$ 78,462.00	$ 88,324.40
Annual Revenue Growth %	4.15	22.85	3.82	15.83	4.15	10.16
WACC %	5.60	6.88	7.00	7.29	5.60	6.47
Return on Invested Capital to WACC	0.39	0.79	0.38	0.73	0.39	0.53
Goodwill	$ 20,098.00	$ 52,634.00	$ 69,021.00	$ 12,489.00	$ 20,098.00	$ 34,868.00
5Y CDS Spread	51.50	40.50	50.50	-	51.50	48.50
Total Loans	$ 743,277.00	$ 1,323,706.00	$ 1,059,734.00	$ 376,036.00	$ 743,277.00	$ 849,206.00
% of bad loans	0.43	0.52	0.52	0.39	0.43	0.46
Trading Profits	$ 10,809.00	$ 21,280.00	$ 12,732.00	$ (145.00)	$ 10,809.00	$ 11,097.00
Credit Metrics						
Cash Conversion Cycle	-	-	-	-	-	-
Free Cash Flow	$ (79,999.00)	-	-	-	$ (79,999.00)	$ (79,999.00)
Short Term Debt	$ 219,539.00	$ 186,765.00	$ 413,462.00	$ 15,656.00	$ 219,539.00	$ 210,992.20
Long Term Debt	$ 288,865.00	$ 421,993.00	$ 310,039.00	$ 52,509.00	$ 288,865.00	$ 272,454.20
Interest Coverage	-	-	-	-	-	-
Debt to Equity	374.96	251.47	248.08	122.22	374.96	274.34
Liquidity Metrics						
Quick Ratio	-	-	-	-	-	-
Current Ratio	-	-	-	-	-	-
Cash Ratio	-	-	-	-	-	-
Financial Leverage	11.69	11.82	10.90	11.90	11.69	11.60
Cash and Cash Equivalents	$ 606,632.00	$ 1,100,739.00	$ 622,043.00	$ 61,192.00	$ 606,632.00	$ 599,447.60

Fundamental Analysis
(cont. 6 of 9)

Market pricing/trends of credit default swaps (CDS) on the debt of potential issuer

Multinational business – What is the main country of domicile and what other countries does the issuer operate in?

Accounting Standards – US GAAP (Generally Accepted Accounting Principles), IFRS, JP GAAP

Fundamental Analysis (cont. 7 of 9)

- Company Filings:
  - SEC filings – 10K, 10Q, 8K, 6K
  - Press releases
  - Earnings call/transcripts
  - Company presentations
  - Supplementary documents
  - Annual reports
- Secondary sources:
  - CreditSights
  - Grant's Interest Rate Observer
  - Bloomberg Intelligence (BI)
  - Rating agency commentary
  - Analyst opinions
  - Sell-side reports

Fundamental Analysis (cont. 8 of 9)

- Financial Institutions/Banks:
  - Regulatory capital levels – Basel regulations as well as regulations specific to each country
  - Liquidity – Cash levels, liquidity coverage ratio (LCR), High quality liquid assets (HQLA)
  - Leverage – Leverage ratio, amount of bail-in debt securities before capital is hit
  - Asset quality – Impaired loans, delinquencies, provisions, loan loss reserve, underwriting standards
  - Funding – Deposits, wholesale funding, laddering of debt that has been issued
  - Revenue – Does the composition of the revenue stream consist of stable sources such as net interest income or fee income, or is it largely from volatile sources such as trading revenue?
  - **Level and composition of marked to market assets on balance sheet – can the issuer handle a stress event in financial markets if they hold a large amount of marked to market securities?**

Fundamental Analysis (cont. 9 of 9)

- Industrials:
  - Revenue stream stability, accounting recognition of revenue
  - Cash flow – Has operating and free cash flow shown similar trends and stability/growth?
  - Capital Structure – What is the allocation of debt and equity in the capital structure?
  - Management – Has management historically done financial engineering or favored equity holders at the expense of creditors?
  - **Adjusted non-GAAP metrics – Does management try to get investors more focused on non-GAAP metrics when GAAP metrics show opposite trends?**
  - Leverage – How have debt levels historically been managed? How is outstanding debt laddered?
  - Cash balances and liquidity
  - Level of intangible assets on balance sheet
  - Aggressive or conservative accounting changes

Issuer Monitoring

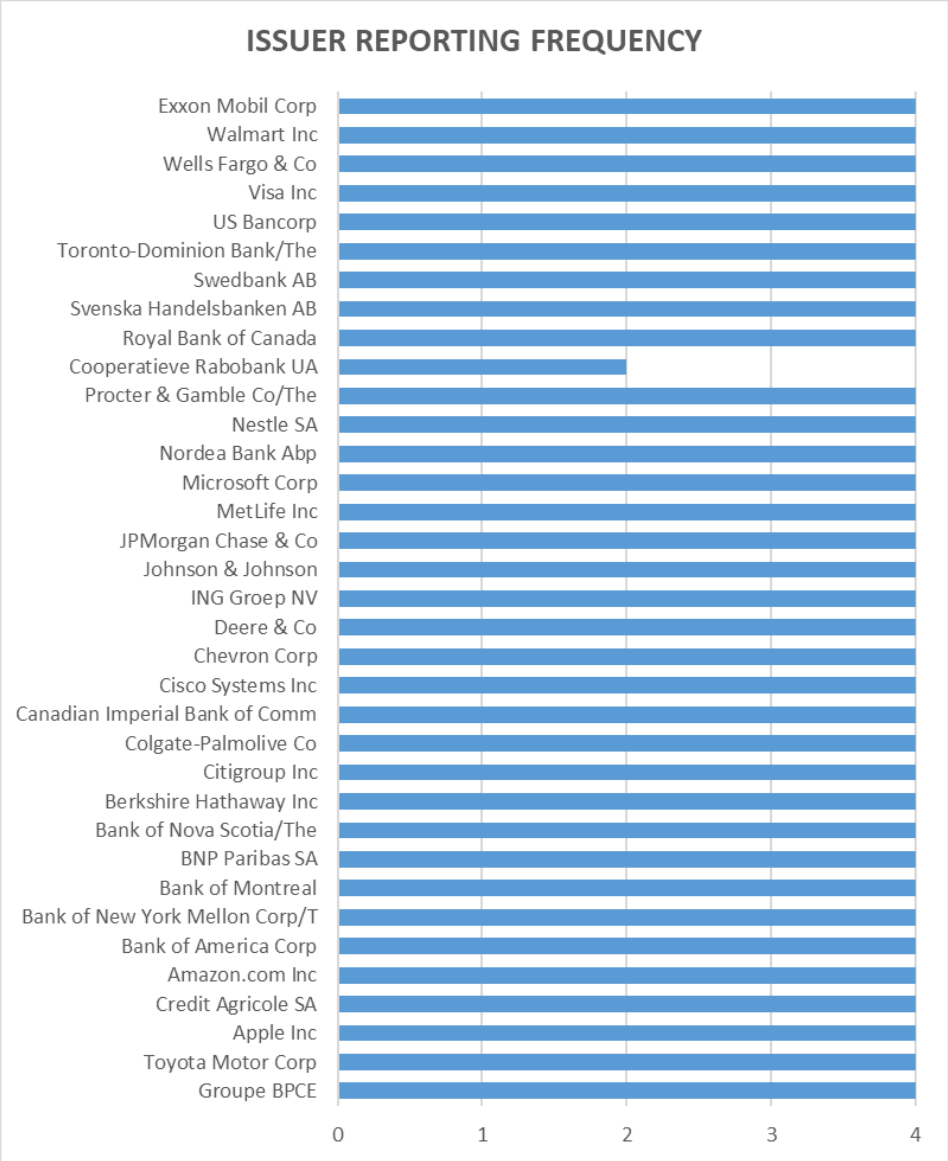
Following the approval of an issuer, the credit team continues to monitor performance and news items:

- News is followed on a daily basis, both at the issuer level and macroeconomic level
- Rating actions/commentary are also monitored daily to ensure issuers remain compliant with IPS and State code
- Issuer reports (tear sheets) are done periodically from the most recent financial release

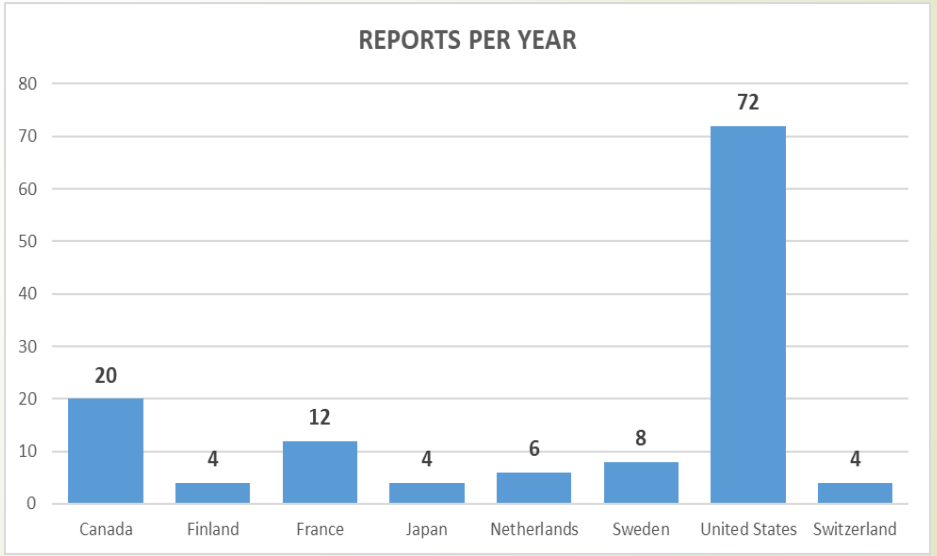
Issuer Monitoring

- Following the approval of an issuer, the credit team monitors performance and financial news:
  - Income statement performance
  - Changes in the balance sheet
  - Accounting changes, regulatory changes that may affect operations, pending litigation items
  - Macroeconomic / industry trends and developments
  - Rating agency commentary or actions
  - Credit team may also hold a meeting on a specific issuer or macroeconomic issue that has come up in the news if deemed material enough
  - Ad hoc meetings are conducted with Investment Advisor (PFM)

Issuer Reporting Frequency



Issuers Country	Report Frequency	Total
Canada	Quarterly	5
Finland	Quarterly	1
France	Quarterly	3
Japan	Quarterly	1
Netherlands	Quarterly	1
	Semi-annually	1
Sweden	Quarterly	2
United States	Quarterly	20
Switzerland	Quarterly	1
Grand Total		35

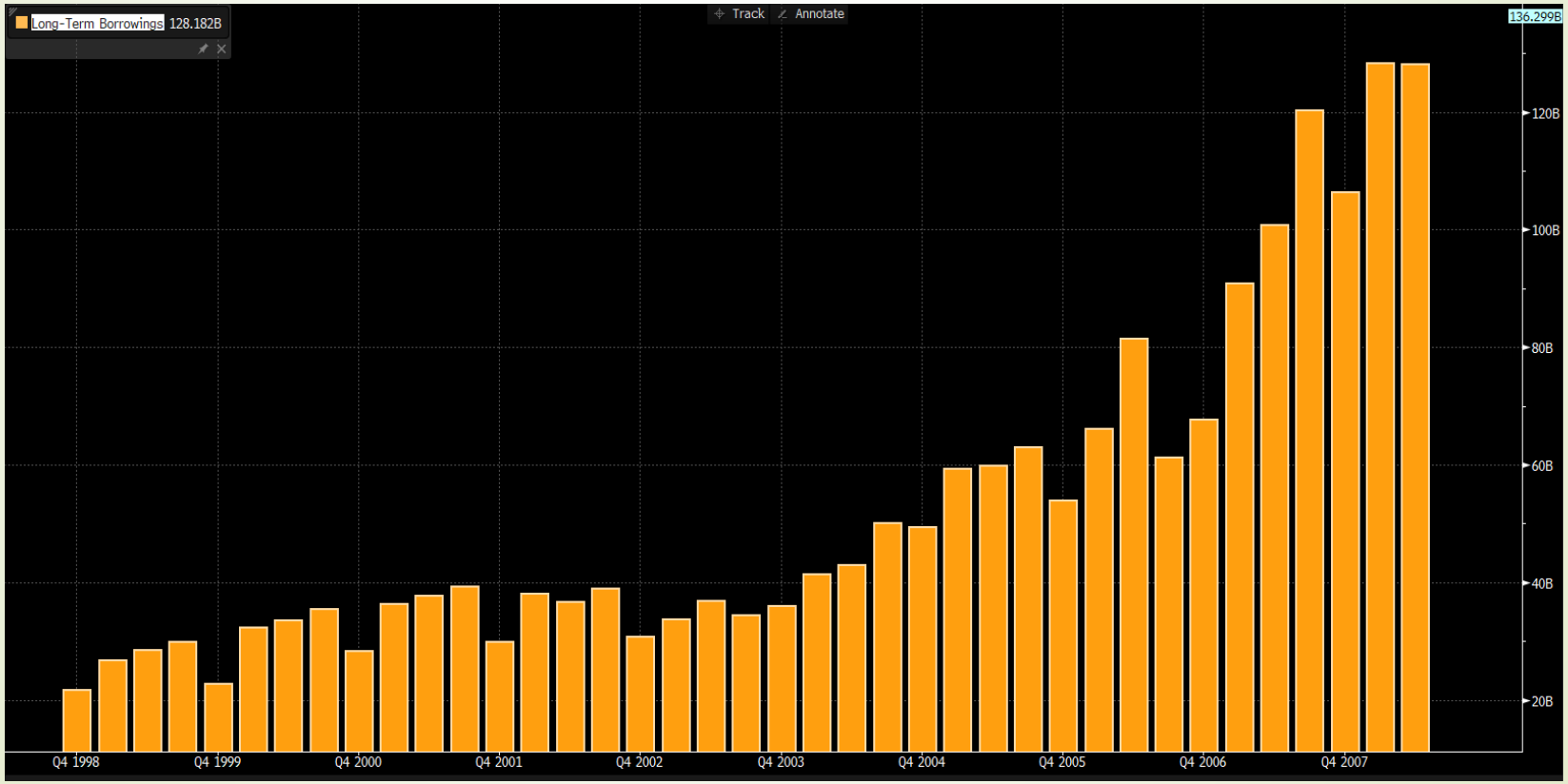


Case Study: Lehman Brothers

- **2008 Financial Crisis**
  - Lehman Brothers
    - Record earnings were reported by the brokerage firms and profitability measures were strong leading up to the financial crisis.
    - **2007:** First signs of credit stress from Bear Stearns hedge funds in June 2007. Due diligence of monitoring news on a daily basis captured Bear Stearns headline news and led to concern about the mortgage-backed securities market. Bear Stearns had to pledge $1.3B to cover losses on hedge funds backed by residential mortgages.
    - During August 2007, credit default swaps (CDS) spiked on Bear Stearns and Lehman Brothers given recent subprime loan losses reported by Bear Stearns. Bear Stearns CDS price move was noted as a concern and was placed on a "Do Not Buy" restriction and Lehman Brothers was placed on "Overnight investments only" due to market losses tied to Bear Stearns' hedge funds. Lehman Brother's CDS price also spiked, leading to restriction placed on the issuer to just overnight purchases.
    - Financial disclosures of the brokerage firms, Bear Stearns and Lehman Brothers revealed higher leverage ratios and retained interest in mortgage-related assets. Higher leverage ratios and retained interests held in concerning mortgage assets was noted in quarterly credit write-ups for Bear Stearns and Lehman Brothers. Footnotes were important pieces within financial reports.

Case Study: Lehman Brothers (cont. 2 of 6)

- Lehman Brother's long-term borrowings increased during 2006 due to higher trading balances and financing needed to accommodate mortgage-backed security transactions. This was a red flag during the 2007 period.



Case Study: Lehman Brothers (cont. 3 of 6)

- Lehman Brother's use of financing collateral is reflected below under collateralized lending agreements. This was an accounting loophole Lehman used to reduce leverage on their balance sheet. This was referred to as, "Repo 105" where Lehman lent securities for cash. The transactions were typically done at quarter end to remove the assets off of the balance sheet since it was deemed a sale.
- FASB's FAS 166 was introduced to better account for financial asset transfers. Companies were required to adopt FAS 166 on January 1, 2010.

NET ASSETS

IN MILLIONS	AT NOVEMBER 30, 2007	2006
Total assets	$ 691,063	$ 503,545
Cash and securities segregated and on deposit for regulatory and other purposes	(12,743)	(6,091)
Collateralized lending agreements	(301,234)	(225,156)
Identifiable intangible assets and goodwill	(4,127)	(3,362)
Net assets	$ 372,959	$ 268,936

Case Study: Lehman Brothers (cont. 4 of 6)

- **Lehman's Level 3 assets increased in % of total assets. Level 3 assets are defined as very illiquid with fair value calculated using estimates or risk-adjusted ranges. This was a concern given market losses reported by brokerage firms during Q406.**

	ASSETS AT FAIR VALUE AS OF NOVEMBER 30, 2007			
IN MILLIONS	LEVEL I	LEVEL II	LEVEL III	TOTAL
Mortgage and asset-backed securities[1]	$ 240	$ 63,672	$ 25,194	$ 89,106
Government and agencies	25,393	15,499	—	40,892
Corporate debt and other	324	50,692	3,082	54,098
Corporate equities	39,336	11,054	8,131	58,521
Commercial paper and other money market instruments	4,000	—	—	4,000
Derivative assets[2]	3,281	35,742	5,572	44,595
	$ 72,574	$176,659	$ 41,979	$291,212

(1) Includes loans transferred to securitization vehicles where such transfers were accounted for as secured financings rather than sales under SFAS 140. The securitization vehicles issued securities that were distributed to investors. We do not consider ourselves to have economic exposure to the underlying assets in those securitization vehicles. The loans are reflected as an asset within Mortgages and asset-backed positions and the proceeds received from the transfer are reflected as a liability within Other secured borrowings. These loans are classified as Level II assets.

(2) Derivative assets are presented on a net basis by level. Inter- and intra-level cash collateral, cross-product and counterparty netting at November 30, 2007 was approximately $38.8 billion.

Case Study: Lehman Brothers (cont. 5 of 6)

- Rating agencies' commentary fluctuated between positive and negative rating actions on brokerage firms during 2007-2008. However, rating downgrades did contribute to restrictions taken by San Bernardino County

  San Bernardino County credit actions taken:

  - On March 14, 2008, Bear Stearns was dropped as an approved issuer (restricted to "Do Not Buy" since August 6, 2007). Lehman Brothers and Merrill Lynch were restricted to "Do Not Buy" on March 14, 2008.
  - Lehman Brothers was removed from Approved Issuer List (AIL) on August 21, 2008, due to concerns about future write-downs on trading and mortgage related assets.
  - Lehman Brothers filed for bankruptcy on September 15, 2008.

Case Study: Lehman Brothers (cont. 6 of 6)

Rating agency actions taken prior to Lehman's bankruptcy.

- On July 9, 2008, Fitch rating affirmation comments: "Lehman continues to demonstrate diversity in its revenues both geographically and by business line, including equity sales and trading and investment banking, an important element in maintaining its ratings."
- On June 13, 2008, Moody's rating review placed on review for downgrade: "Moody's Investors Service has placed on review for possible downgrade the long-term ratings of Lehman Brothers Holdings Inc. Lehman's Prime-1 short-term rating was affirmed. As Moody's noted in its June 9, 2008 press release, Lehman's liquidity management and stand-alone liquidity position remain robust. Lehman ended Q2-08 with a record $45 billion of liquidity available to the holding company, and an additional $150 billion of unencumbered assets, with substantial loan value."

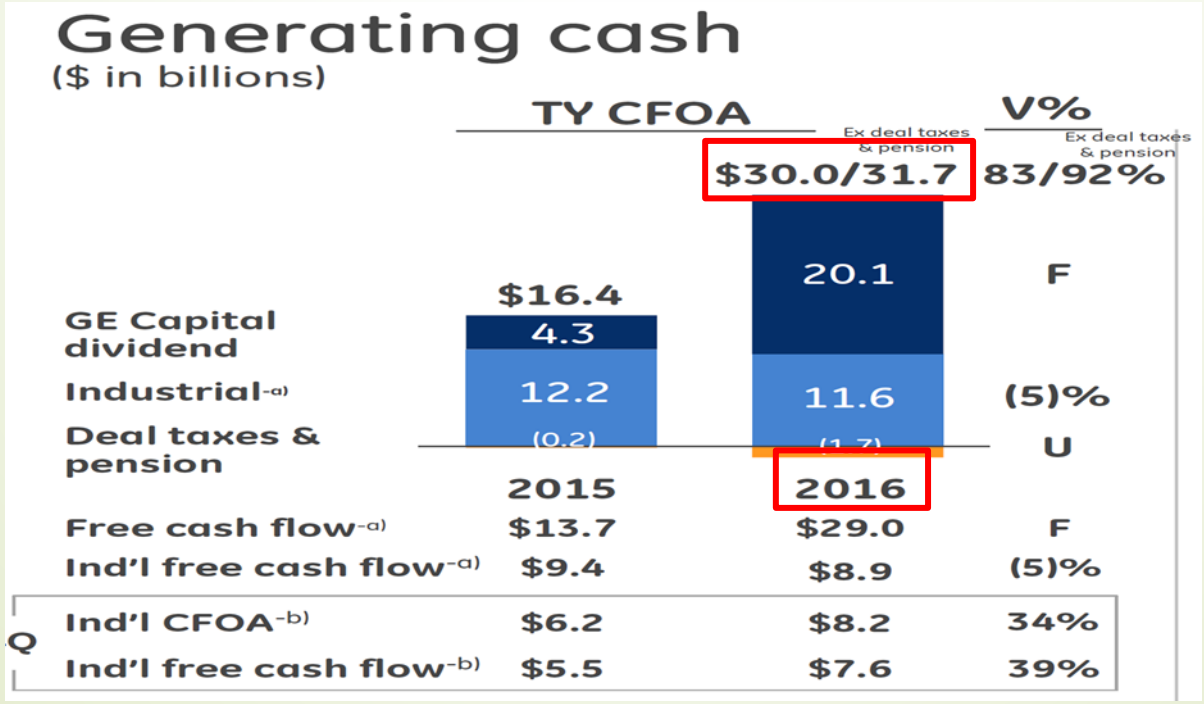
Moody's Senior Unsecured Debt

Rating	Watch	Effective
WR		12/10/2008
C		12/08/2008
B3	*-	09/15/2008
A2	*	09/10/2008
A2		07/17/2008
A1	*-	06/13/2008
A1		10/22/2003
A2	*+	06/24/2003
A2		11/03/2000
A3	*+	09/14/2000
A3		08/05/1999

Up / Down / No Change / Initial

Case Study (GE - 2017)

- If any significant deterioration in company fundamentals is seen in an issuer over a period time, action is taken:
  - GE was placed on hold in Nov. 2017 and eventually removed in early 2018 as fundamental deterioration was seen over time.
    - **GE's CFOA (an adjusted cash flow metric) was presented as growing between 2014-2016; whereas looking at the actual GAAP statement of cash flows between 2014-2016, it showed a decline. No reconciliation between the two was provided by management during this time.**



Case Study: GE - 2017 (cont. 2 of 6)

STATEMENT OF CASH FLOWS

For the years ended December 31 (In millions)	General Electric Company and consolidated affiliates 2016	2015	2014
Cash flows – operating activities			
Net earnings (loss)	$ 8,540	$ (5,795)	$ 15,345
Less net earnings (loss) attributable to noncontrolling interests	(291)	332	112
Net earnings (loss) attributable to the Company	8,831	(6,126)	15,233
(Earnings) loss from discontinued operations	954	7,495	(5,855)
Adjustments to reconcile net earnings attributable to the Company to cash provided from operating activities:			
Depreciation and amortization of property, plant and equipment	4,997	4,847	4,953
Earnings from continuing operations retained by GE Capital	-	-	-
Deferred income taxes	814	383	(882)
Decrease (increase) in GE current receivables	1,514	(52)	(1,913)
Decrease (increase) in inventories	(1,389)	(314)	(872)
Increase (decrease) in accounts payable	1,198	(541)	565
Increase (decrease) in GE progress collections	1,836	(996)	(515)
All other operating activities	(12,655)	7,160	5,318
Cash from (used for) operating activities – continuing operations	6,099	11,856	16,033
Cash from (used for) operating activities – discontinued operations	(6,343)	8,034	11,676
Cash from (used for) operating activities	(244)	19,891	27,709

Case Study: GE - 2017 (cont. 3 of 6)

- If any significant deterioration in company fundamentals is seen in an issuer over a period time, action is taken:
  - GE's pension plan was underfunded with questionable assumptions. The FY16 10-K reported a net pension liability of $36.8B.
  - At the time we figured that this underfunding would cause even more cash in the future to be set aside to cover the liability-leading to questions on how much liquidity was available.

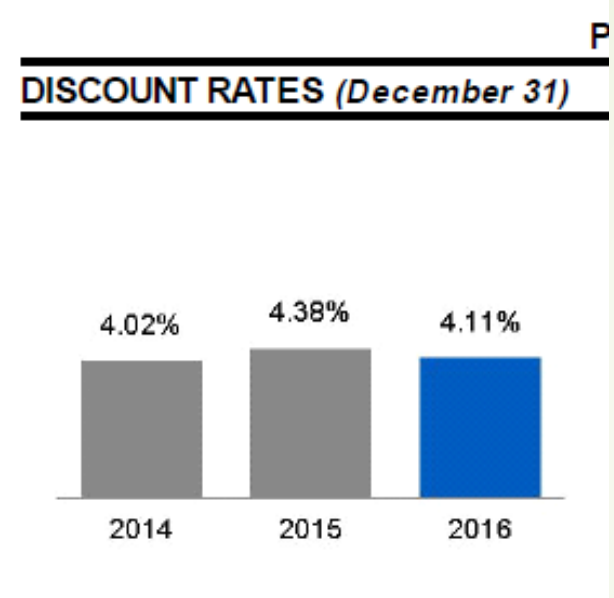
FUNDED STATUS OF PLANS

The table below presents the funded status of our benefit plans. The funded status represents the fair value of plan assets less benefit obligations.

FUNDED STATUS

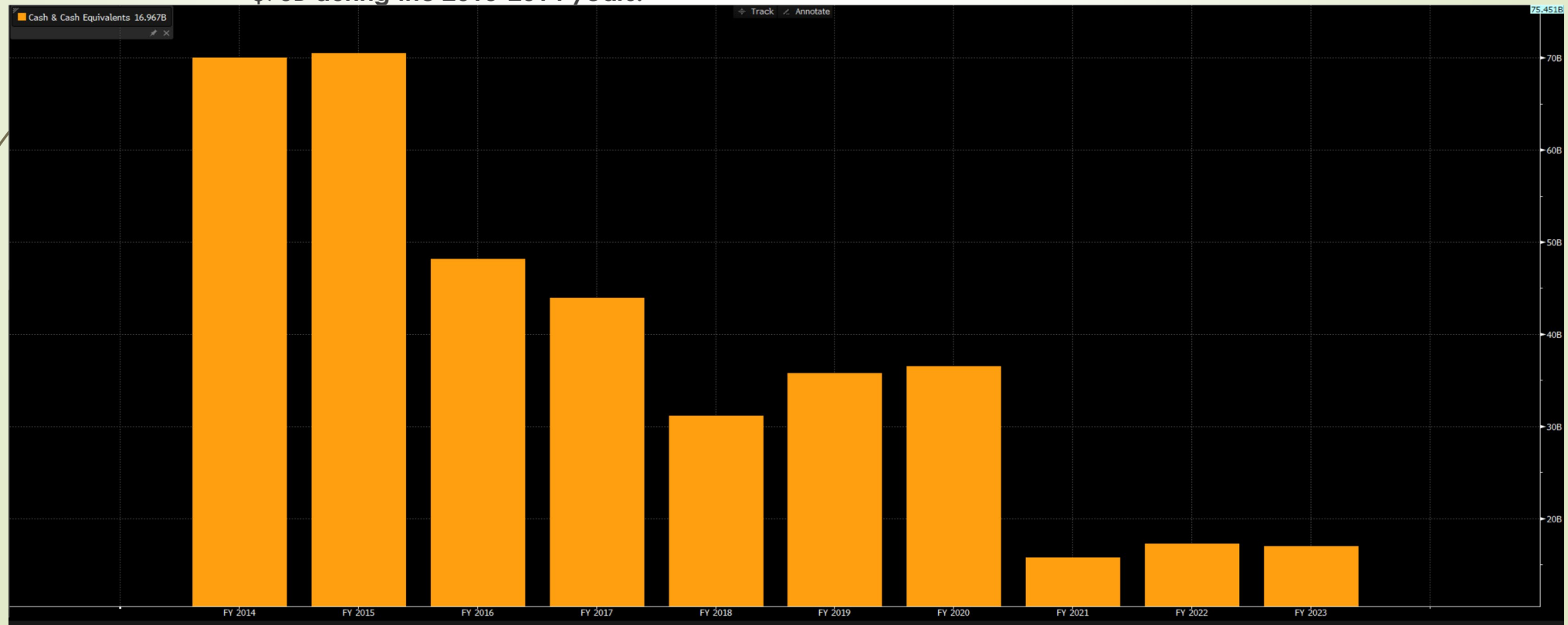
(In billions)		2016		2015
GE Pension Plan	$	(19.1)	$	(16.9)
GE Supplementary Pension Plan		(6.5)		(6.1)
Other pension plans		(5.5)		(4.3)
Principal retiree benefit plans		(5.7)		(6.1)

Case Study: GE – 2017 (cont. 4 of 6)



Case Study: GE – 2017 (cont. 5 of 6)

- Debt levels on an absolute basis dropped due to downsizing GE Capital and other restructuring activities over the last few years.
  - Total debt was reported at $136.4B as of Q317; vs. $300-$320B during 2013-2014.
  - On a ratio level, financial leverage (assets to equity) has only fallen to 4.88 from its peak of 5.6 in 2015.
  - **Liquidity balances showed a downward trend cash balance as during Q317 was at $39.9B. This compares to $70B during the 2013-2014 years.**



Case Study: GE – 2017 (cont. 6 of 6)

- GE's tangible equity (Book value of equity less intangible assets) was underwater during the time. **Tangible equity was $-11.01B as of Q317.** Tangible equity first went negative in Q316.
- Earnings reporting quality at GE was poor; numerous adjustments were constantly made, making overall results and financial health unclear and convoluted. Numerous third-party research called into question the clarity of financial statements.
- Since GE removed the SIFI (Systemically Important Financial Institution) label from their name after downsizing GECC, they immediately stopped reporting regulatory capital and liquidity ratios.
- Questionable management choices-
  - GE acquired a majority stake in oil-field equipment servicer, Baker Hughes that was announced on October 31, 2016, and completed on July 3, 2017. On November 13, 2017, they announced they may consider getting out of Baker Hughes; a little over 4 months after completing the acquisition.

Case Study: Japanese Banks

(US GAAP)

Mitsubishi UFJ Financial Group, Inc. and Subsidiaries

Consolidated Statements of Operations

(in millions of yen)	For the fiscal years ended March 31, 2009	2008
Interest income:		
Loans, including fees	2,558,361	2,790,505
Deposits in other banks	124,832	258,544
Investment securities:		
Interest	309,835	771,763
Dividends	163,492	127,076
Trading account assets	460,534	110,348
Call loans and funds sold	15,010	24,969
Receivables under resale agreements and securities borrowing transactions	263,730	283,606
Total	3,895,794	4,366,811
Interest expense:		
Deposits	736,456	1,093,956
Call money and funds purchased	24,973	45,180
Payables under repurchase agreements and securities lending transactions	349,903	402,077
Due to trust account	6,843	8,014
Other short-term borrowings and trading account liabilities	170,524	206,363
Long-term debt	310,690	331,504
Total	1,599,389	2,087,094
Net interest income	2,296,405	2,279,717
Provision for credit losses	626,947	385,740
Net interest income after provision for credit losses	1,669,458	1,893,977
Non-interest income:		
Fees and commissions	1,188,512	1,317,047
Foreign exchange gains (losses)—net	(206,153)	1,295,933
Trading account profits(losses)—net	(257,807)	398,396
Investment securities losses—net	(658,679)	(1,373,072)
Equity in losses of equity method investees	(60,051)	(34,485)
Gains on sales of loans	6,401	11,789
Other non-interest income	162,876	162,506
Total	175,099	1,778,114
Non-interest expense:		
Salaries and employee benefits	873,371	909,771
Occupancy expenses—net	171,902	173,183
Fees and commission expenses	209,750	218,088
Outsourcing expenses, including data processing	267,790	248,265
Depreciation of premises and equipment	132,121	179,567
Amortization of intangible assets	278,241	252,890
Impairment of intangible assets	126,885	78,679
Insurance premiums, including deposit insurance	113,803	112,444
Minority interest in income (loss) of consolidated subsidiaries	(36,259)	39,400
Communications	62,943	65,286
Taxes and public charges	85,743	83,439
Provision for repayment of excess interest	47,865	2,826
Impairment of goodwill	845,842	893,721
Other non-interest expenses	392,528	402,177
Total	3,572,525	3,659,736
Income (loss) from continuing operations before income tax expense (benefit)	(1,727,968)	12,355
Income tax expense (benefit)	(259,928)	553,045
Loss from continuing operations	(1,468,040)	(540,690)
Loss from discontinued operations—net		(1,746)
Net loss	(1,468,040)	(542,436)
Income allocable to preferred shareholders:		
Cash dividends paid	6,399	6,669
Beneficial conversion feature	9,478	7,909
Income allocable to preferred shareholders of Mitsubishi UFJ NICOS Co., Ltd. :		
Effect of induced conversion of Mitsubishi UFJ NICOS Co.,Ltd. Class 1 stock	7,676	-
Net loss available to common shareholders	(1,491,593)	(557,014)

Case Study: Japanese Banks (cont. 2 of 3)

1. Financial Results

MUFG Consolidated

(in millions of yen)

	For the fiscal year ended		Increase (Decrease)
	March 31, 2010 (A)	March 31, 2009 (B)	(A) - (B)
Gross profits	3,600,424	3,272,895	327,528
Gross profits before credit costs for trust accounts	3,600,424	3,272,904	327,519
Net interest income	2,177,199	1,975,902	201,296
Trust fees	103,872	119,474	(15,602)
Credit costs for trust accounts (1)	-	(9)	9
Net fees and commissions	989,806	970,077	19,729
Net trading profits	259,770	253,056	6,713
Net other business profits	69,775	(45,615)	115,391
Net gains (losses) on debt securities	49,879	80,938	(31,059)
General and administrative expenses	2,084,882	2,083,753	1,128
Amortization of goodwill	32,868	24,618	8,249
Net business profits before credit costs for trust accounts, provision for general allowance for credit losses and amortization of goodwill	1,548,411	1,213,769	334,641
Net business profits before credit costs for trust accounts and provision for general allowance for credit losses	1,515,542	1,189,150	326,391
Provision for general allowance for credit losses (2)	(66,766)	40,342	(107,109)
Net business profits*	1,448,776	1,229,484	219,291
Net non-recurring gains (losses)	(903,079)	(1,146,677)	243,598
Credit costs (3)	(758,455)	(648,791)	(109,663)
Losses on loan write-offs	(439,113)	(411,276)	(27,836)
Provision for specific allowance for credit losses	(294,750)	(226,027)	(68,722)
Other credit costs	(24,592)	(11,487)	(13,104)
Net gains (losses) on equity securities	32,489	(408,780)	441,269
Gains on sales of equity securities	179,331	106,275	73,055
Losses on sales of equity securities	(86,309)	(35,472)	(50,836)
Losses on write-down of equity securities	(60,532)	(479,583)	419,050
Profits (losses) from investments in affiliates	2,614	(38)	2,652
Other non-recurring gains (losses)	(179,727)	(89,066)	(90,660)
Ordinary profits	545,697	82,807	462,889
Net extraordinary gains (losses)	51,035	32,253	18,781
Gains on loans written-off (4)	65,048	38,267	26,781
Losses on impairment of fixed assets	(17,813)	(15,842)	(1,970)
Amortization of goodwill	(27,918)	-	(27,918)
Income before income taxes and others	596,732	115,061	481,671
Income taxes-current	101,063	85,808	15,255
Refund of income taxes	(19,099)	-	(19,099)
Income taxes-deferred	68,995	216,131	(147,135)
Total taxes	150,959	301,939	(150,979)
Minority interests	57,038	70,073	(13,035)
Net income	388,734	(256,952)	645,686

Note:

Case Study: Japanese Banks (cont. 3 of 3)

- Accounting Differences:
  - US GAAP- Impairment tested annually to see if market value lower than book; if it is lower impairment booked.
  - JP GAAP- Goodwill impairment strictly amortized over 20 years regardless of market value of assets.
    - Overall, caused large discrepancy in income statement over FY-end March 31, 2009. Distortion of interpretation between the two accounting methods may have caused analyst to misinterpret what was going on.
  - Other differences to look out between multiple accounting standards:
    - Equity method.
    - Cost accounting (LIFO, FIFO, weighted-average cost).
    - Marked-to-market assets(assets at fair value or available-for-sale; held-to-maturity.
    - Impairment of assets/reversals of impairments if allowed.
    - FX Translation.

Case Study: French Banks – 2017

- If improving fundamentals are seen, extension of tenor on security purchases are considered:
  - EX: French Banks
    - French banks (BNP Paribas, Credit Agricole, and BPCE) were reviewed and a tenor limit extension recommendation was issued to upper management.
    - All three French banks have materially improved earnings quality and transparency in the last few years.
    - Operations remain stable despite domestic retail banking showing low net interest margins.
    - Capital and funding levels have been better managed and improvement has been seen.
    - Legal structures have been simplified.
    - Rating agencies have also noted the improvement and recently upgraded Credit Agricole and BPCE.

Conclusion

- Issuer fundamentals as well as related news is watched on a daily basis.
- Fundamentals are reviewed as frequently as company reports earnings results; majority are quarterly but some issuers report only semi-annually.
- Action is taken in the event of a material deterioration seen in company fundamentals or headline and political risks are seen in the news of an issuer.
- Action may also be taken if forward looking indicators such as the macro-economic horizon (consumer trends, rising unemployment, unsustainable consumer debt levels, bubbles seen in certain asset classes such as real estate, deterioration in the general business outlook, etc.) may have a material impact on future earnings results.

QUESTIONS?

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