

The background features a dark blue gradient with a series of curved, glowing lines that create a sense of depth and movement, resembling a tunnel or a stylized architectural structure.

# INFOSYS

MALARKEY CAPITAL MANAGEMENT  
DECEMBER 4<sup>th</sup>, 2016

# Overview

## INFOSYS (INFY)

Headquarters: Bengaluru, India

Technology Services and Consulting Industry

Market Cap: \$33 Billion

Return on Equity & Return on Capital: >20%

Price/Earnings Ratio: 15.7x

Price/Owners Earnings Ratio: 17.2x

PEG Ratio: 1.14

# History

1981

**Founded in India with only \$250**

1987

**Opened first international office in Boston**

1993

**Initial Public Offering**

1995

**Introduced E-Business practice**

1996

**Creates the Infosys Foundation**

1997

**Accomplishes CMM Level 4**

1998

**Starts Enterprise Solutions practice**

1999

**Reaches \$100 Million in revenue | Accomplishes CMM Level 5 | Infosys Business Consulting Services**

2000

**Reaches \$200 Million in revenue | Launches Finacle, the universal banking solution**

# History Continued

- 2001** Reaches \$400 Million in revenues
- 2002** Reaches \$500 Million in revenues | Founding CEO steps down and becomes Chairman and Chief Mentor
- 2004** Reaches \$1 Billion in revenues | Infosys Consulting is launched
- 2006** Celebrates 25 years | Reaches \$2 Billion in annual revenues
- 2007** COO takes over as CEO | Quarterly revenues surpass \$1 billion
- 2010** Reaches \$5 Billion in revenues
- 2011** New CEO announced
- 2014** New CEO announced
- 2015** Acquired 3 businesses: Noah Consulting LLC, Skava and Panaya

# Key Acquisitions

March 2015 – Infosys buys U.S. based Panaya, Inc. for \$225 Million

- Technology automation for large scale enterprises
- Customers include: Coca-Cola, Walmart, Sony, Mercedes Benz and more

June 2015 – Infosys buys U.S. based Kallidus, Inc. for \$100 Million

- Provider of digital experiences for E-commerce and in store-shopping
- Customers include: Macy's, Kohl's, Bloomingdale's

August 2015 – Infosys transfers Finacle™ to EdgeVerve

- Better product offering and breadth of knowledge
- Serves 17% of all banks worldwide

November 2015 – Infosys Buys Noah Consulting, LLC for \$70 Million

- Consulting services for oil and gas industry



# Business



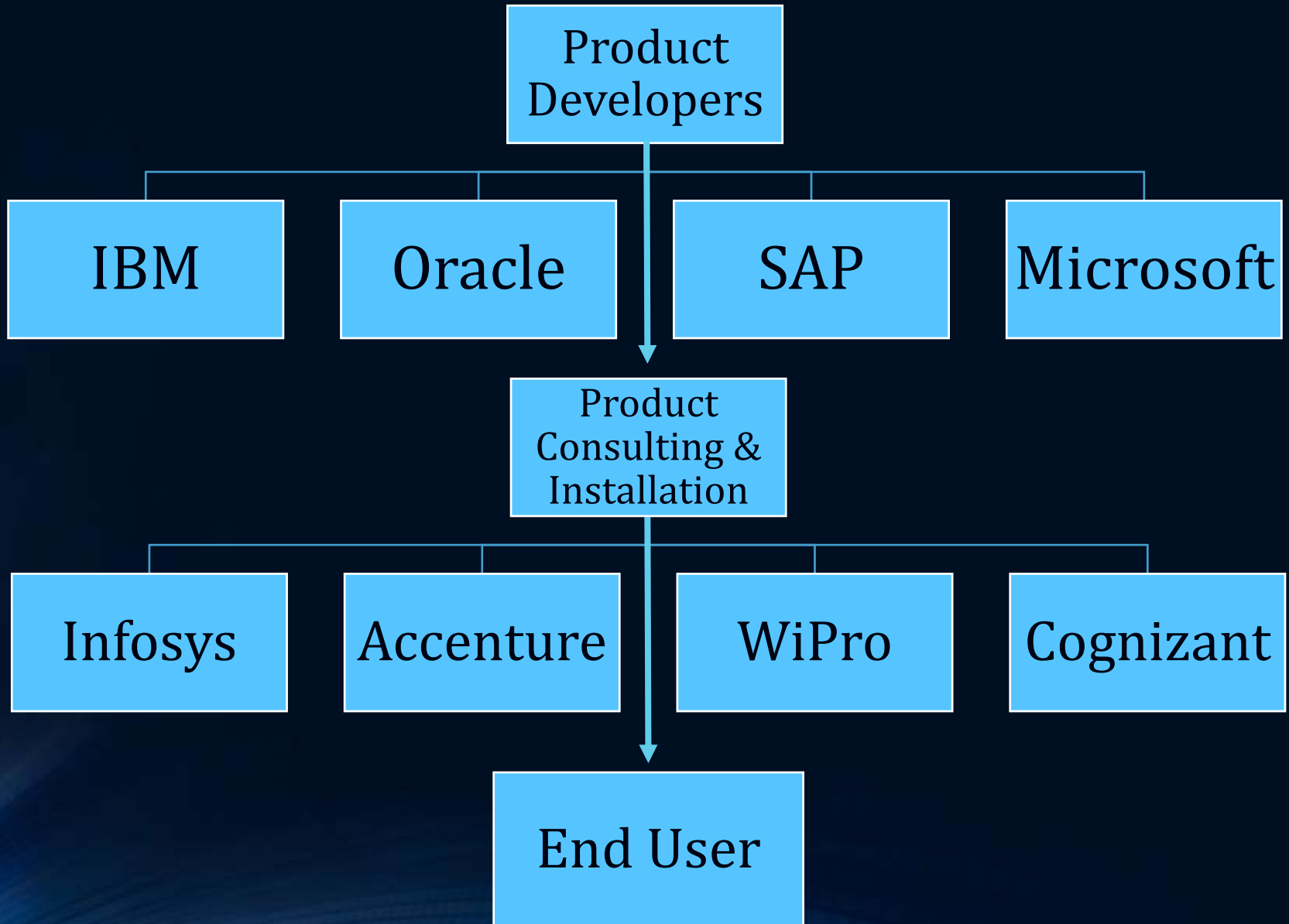
# What Do We Do?

Global provider of consulting, technology and next-generation services

- Engineering
- Application Development
- Knowledge Management
- Business Process Management
- Outsourcing Services

Design, Test, Analyze, Advise and Treat Business Solutions

# Business Model





# Revenue Recognition



40%  
Fixed Price  
Fixed-timeframe  
60%  
Time-and-material

# Business Segments

Financial Services and Insurance (FSI)

Manufacturing and Hi-Tech (MFG & HI-TECH)

Energy & utilities, Communications and Services (ECS)

Retail, Consumer packaged goods and Logistics (RCL)

Life Sciences and Healthcare (LSH)

# Business Segments – Revenue per Segment

**Financial  
Services &  
Insurance**

**33%**

**Manufacturing  
& Hi-Tech**

**22%**

**Energy &  
Utilities,  
Communication  
and Services**

**20%**

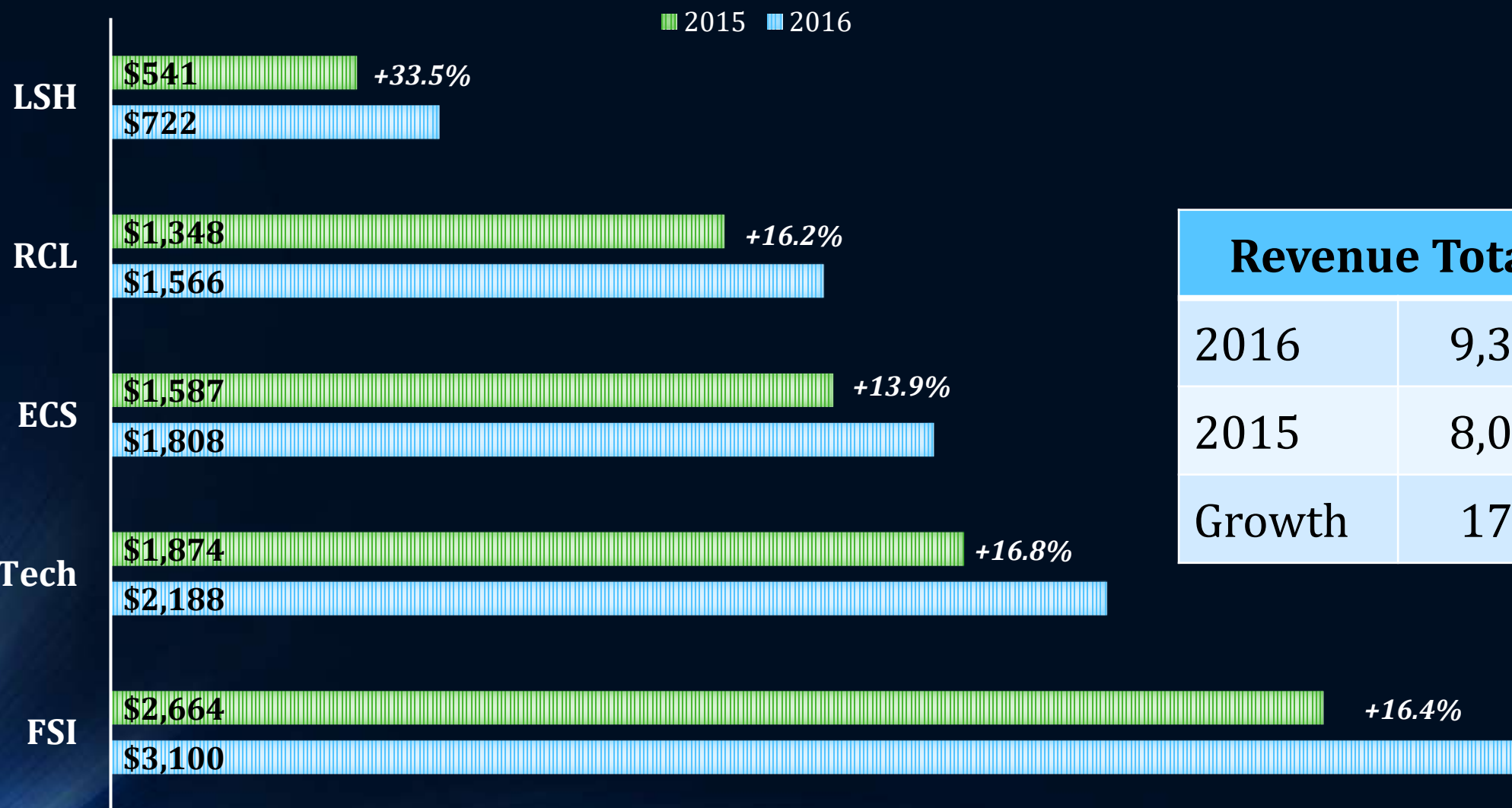
**Retail,  
Consumer  
packaged goods  
and Logistics**

**18%**

**Life Sciences  
and  
Healthcare**

**7%**

# Business Segments – YoY Revenue Performance



Revenue Totals	
2016	9,385
2015	8,015
Growth	17%

LSH – Life Sciences and Healthcare

RCL – Retail, Consumer goods

ECS – Energy & utilities, Communication and Services

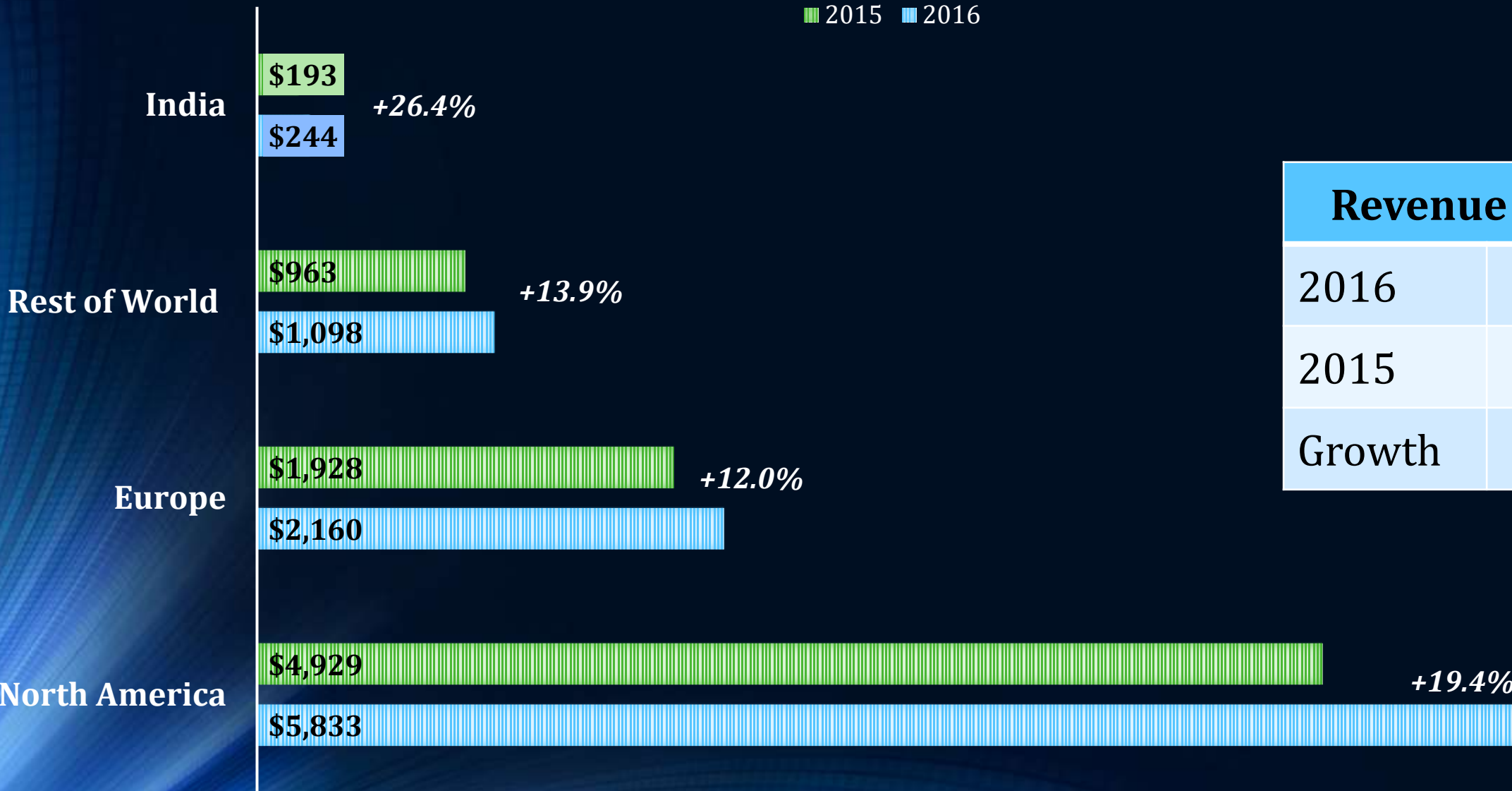
FSI – Financial Services and Insurance

# Business Segments – Revenue by Geography



# Business Segments – YoY Revenue Performance

■ 2015 ■ 2016



Revenue Totals	
2016	9,385
2015	8,015
Growth	17%

# Client Base

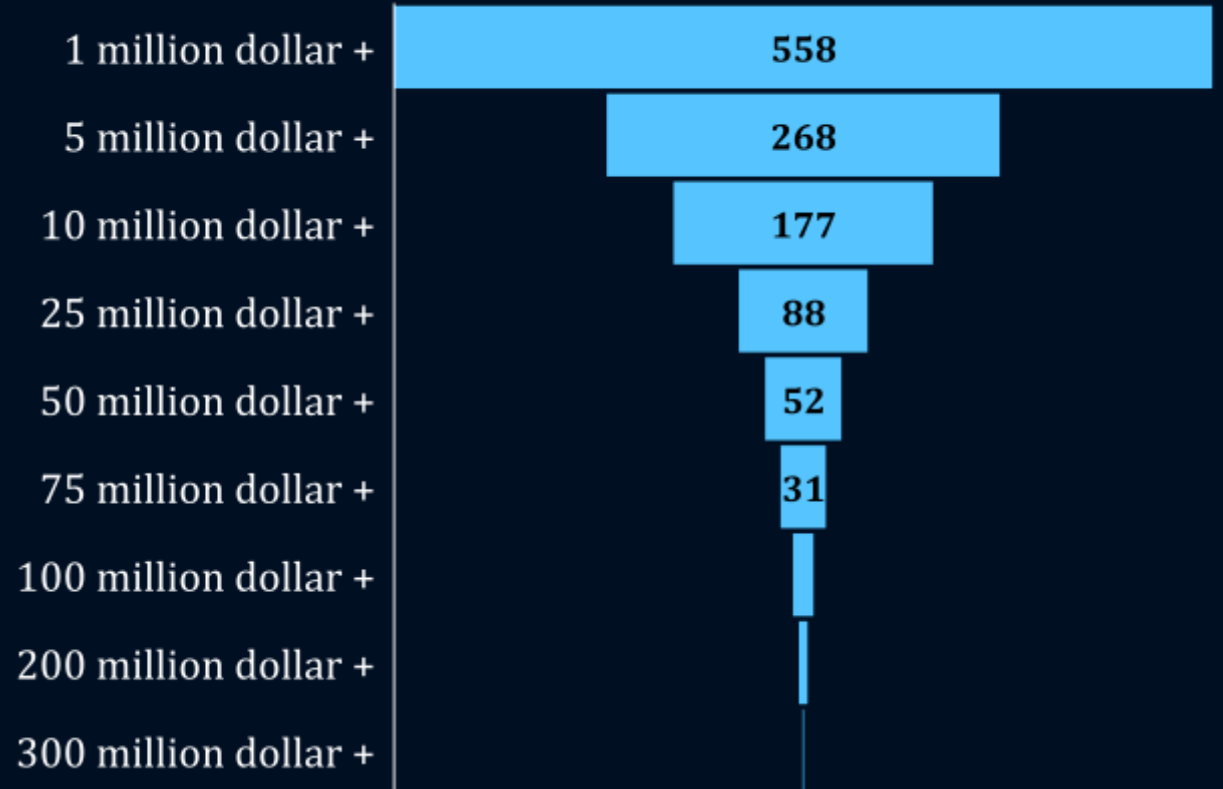
Total client base at FY2016 was 1,136

- Added 325 new clients
- Loss of Royal Bank of Scotland contract

97% of revenues are from repeat business

- Top Client contributed 3.6% of revenues
  - Bank of America
- Top 5 Clients contributed 13.8%
- Top 10 Clients contributed 22.5%

Number of Clients by Size



# Corporate Governance



Dr. Vishal Sikka, *Chief Executive Officer*

- Joined Infosys in 2014 as the first non-founding Officer
- 12 years at SAP software firm on Executive Board (5 as the CTO)
- Bachelor's of Computer Science from Syracuse University
- Ph.D. in Computer Sciences from Stanford University

Pravin Rao, *Chief Operating Officer*

- Joined Infosys in 1986
- Oversees global operations
- Has held over 5 leadership roles within Infosys



## Combined Goal:

- Revenues of \$20+ Billion by 2020
- \$16.5B in traditional outsourcing
- \$1.5B from acquisitions
- \$2B in newer areas of technology



# Employees

As of March, 2016

- 194,044 employees
- Added 17,857 new hires
- India, United States, United Kingdom, Australia and China

## Education and Training

- 6 months of training (IBM takes 3 months)
- 1,400 videos covering various curriculum

# Economic Moat

## High Customer Switching Costs

- *97% of revenues are from repeat business*
- *Continually adding 200+ clients per year*



# Risk Factors

Industry Transition

Pricing Pressure

Operating Costs

- Rising H1B visa costs in the U.S.
- Increased wages in India

BREXIT

Currency Exchange Rates



# Growth Opportunities

## AI platform Mana

- Reduced operating costs through automation
- 2,387 employees worth of work

## Citigroup Contract

- TBA March 2018, \$2.5 Billion potential contract
- Back office administrative operations

## Continued Acquisitions

- Cost advantages

## Government Contracts

# Qualitative Analysis

	Result
Commodity or Sustained Competitive Advantage?	Sustained Competitive Advantage
Easily Explainable?	No*
Unionized?	No
Heavy Capital Infusion and R&D?	No
Obsolete Services?	Yes
Chronic One - Time Write Offs?	No
Make a Competitor With a Billion Dollars?	Yes*

# Interpretation of Financial Statements

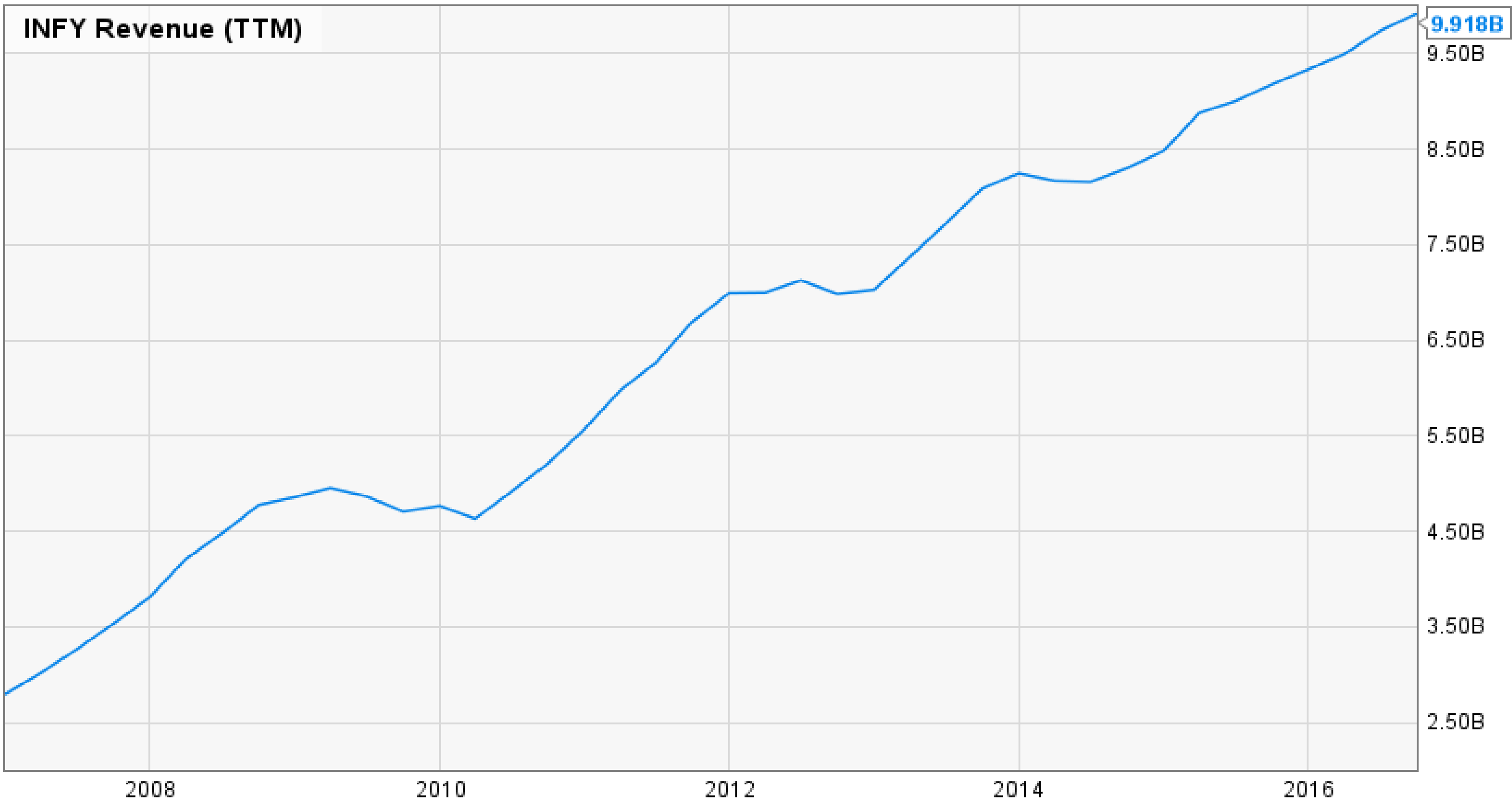
# Interpretation of Financial Statements

<u>TTM</u>	Value	Low Threshold	Pass?
Gross Profit Margin	37.4%	$\geq 20\%$	YES
%SGA of OP	49.5%	$\leq 80\%$	YES
%R&D of GP	3.1%	$\leq 10\%$	YES
%Depreciation of OP	9.2%	$\leq 10\%$	YES
Interest % of OP	N/A	$\leq 15\%$	YES
Net Profit Margin	21.28%	$\geq 10\%$	YES
Current Ratio	3.98	$\geq 1$	YES
Obligation Ratio	0	< 5 years	YES
Adj. Debt to Shareholder Equity	0.22	< 0.8	YES
Return on Equity	23.07	$\geq 15\%$	YES
Dividend Payout Ratio	50%	$\leq 60\%$	YES
Preferred Stock	None	None	YES
Capital Expenditures	20%	$\leq 25\%$	YES
Net Income Trend	Increasing	Increasing	YES
Retained Earnings Trend	Increasing	Increasing	YES

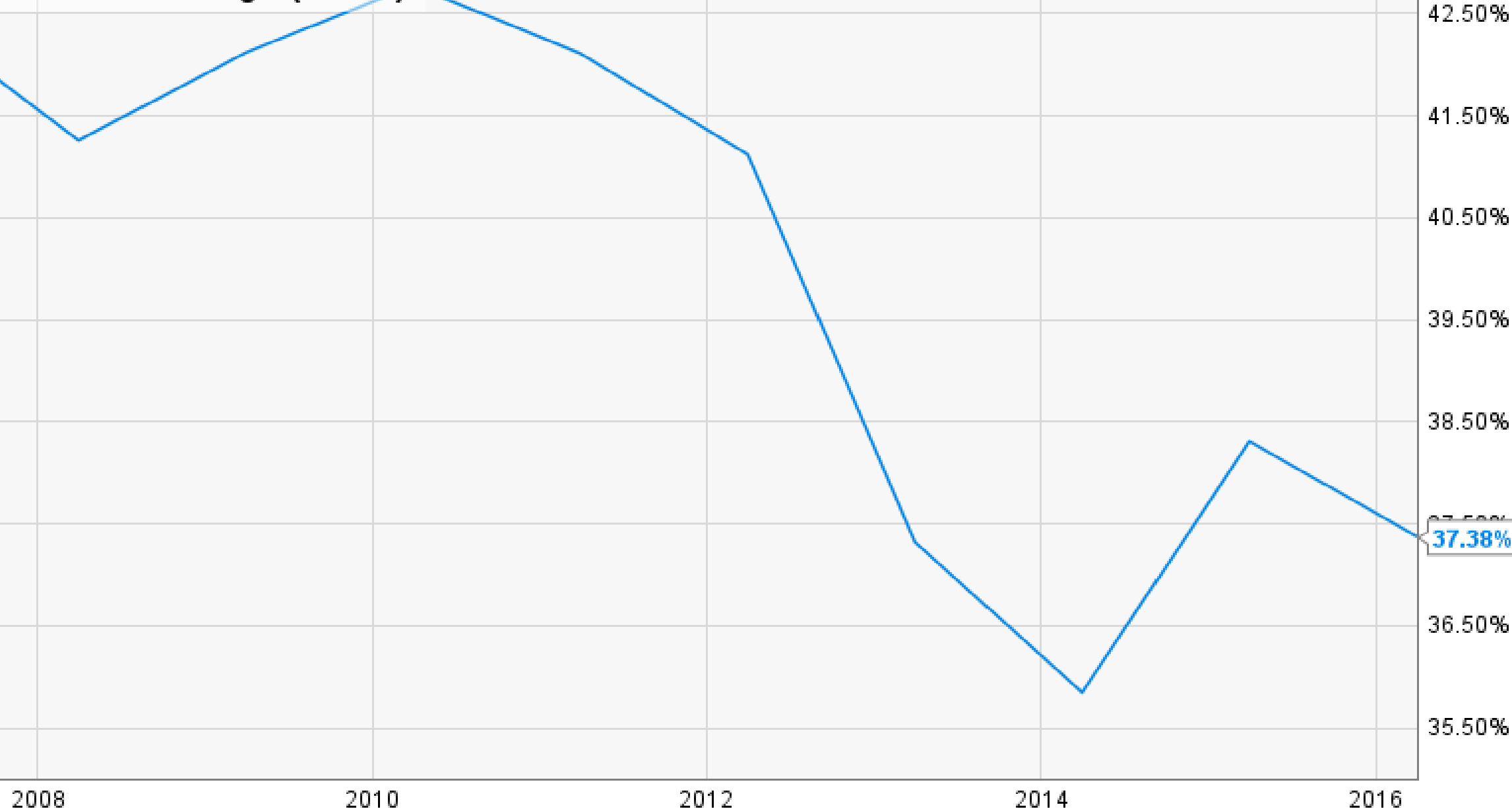
# IOFS Graphs



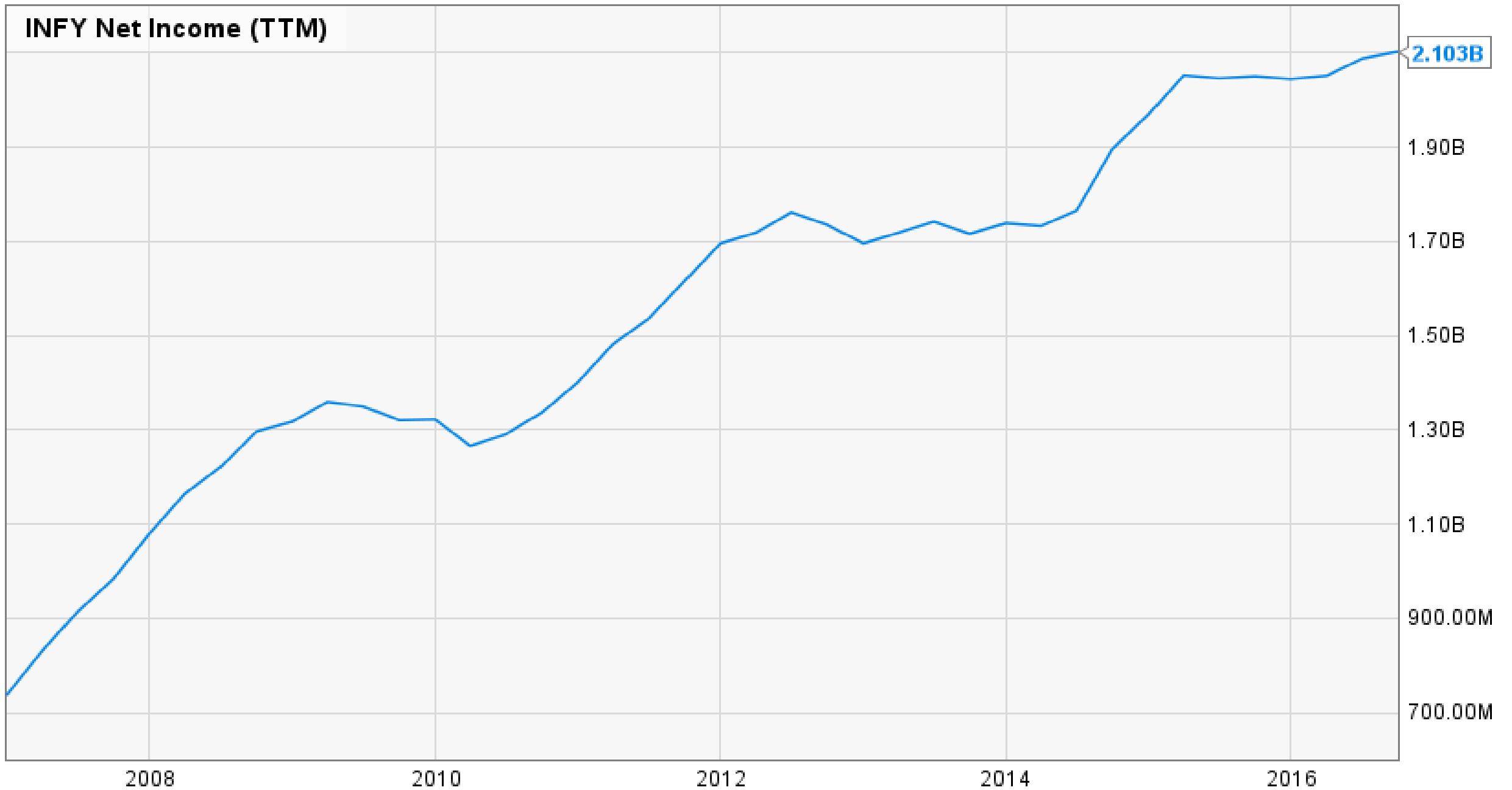
# INFY Revenue (TTM)



# INFY Gross Profit Margin (Annual)



# INFY Net Income (TTM)



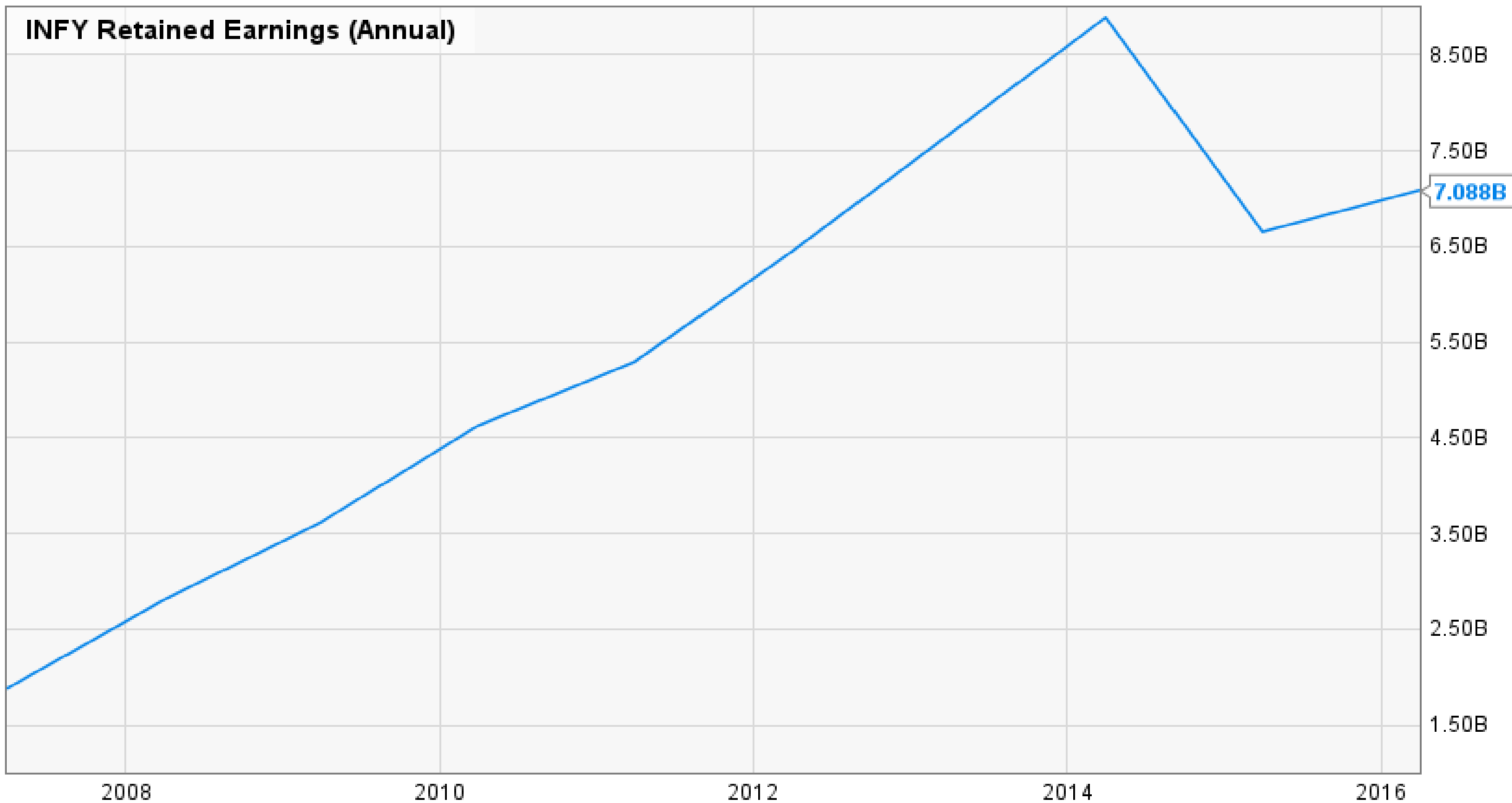
# INFY Profit Margin (TTM)



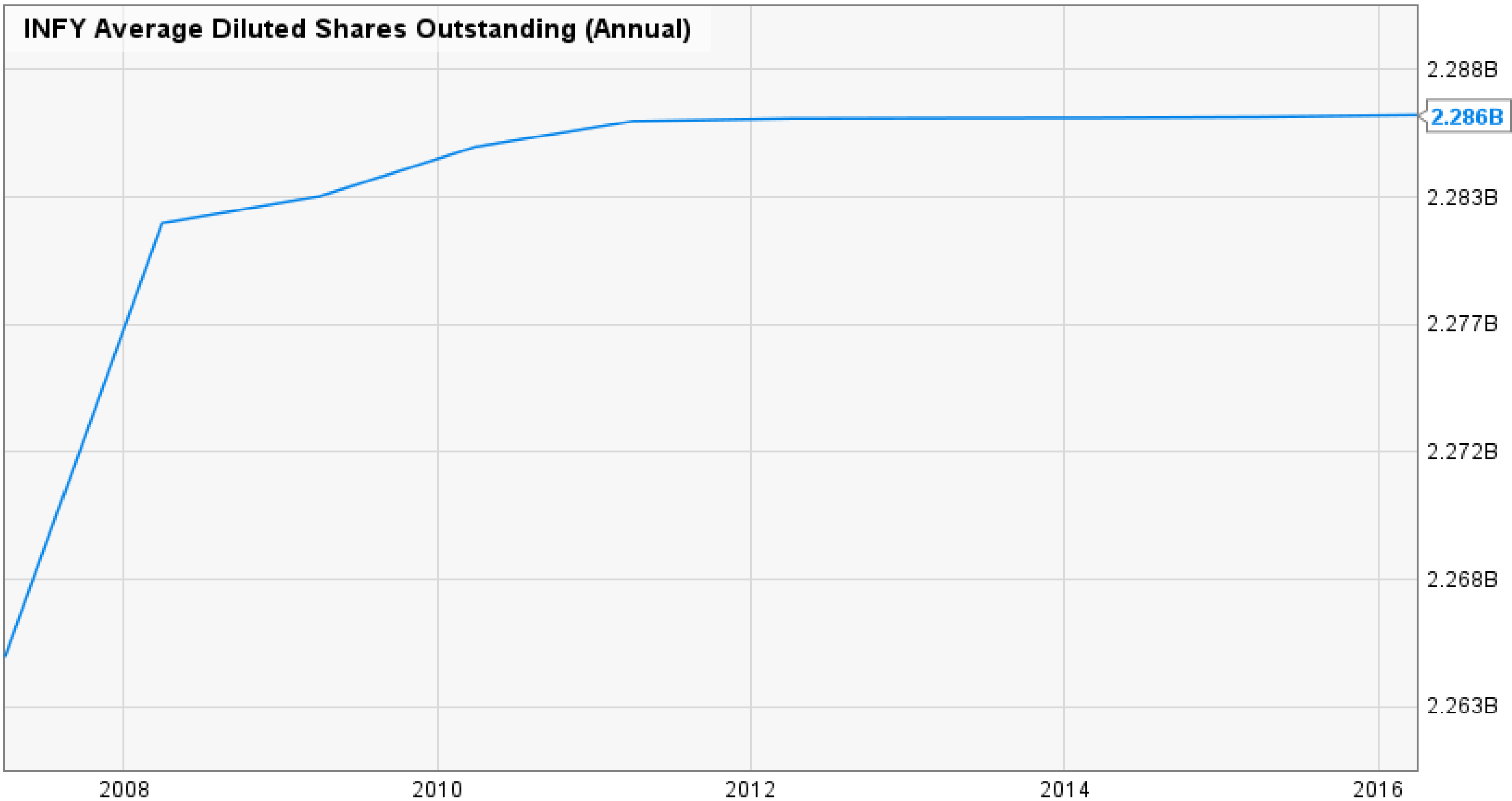
# INFY Return on Equity (TTM)



# INFY Retained Earnings (Annual)



# INFY Average Diluted Shares Outstanding (Annual)



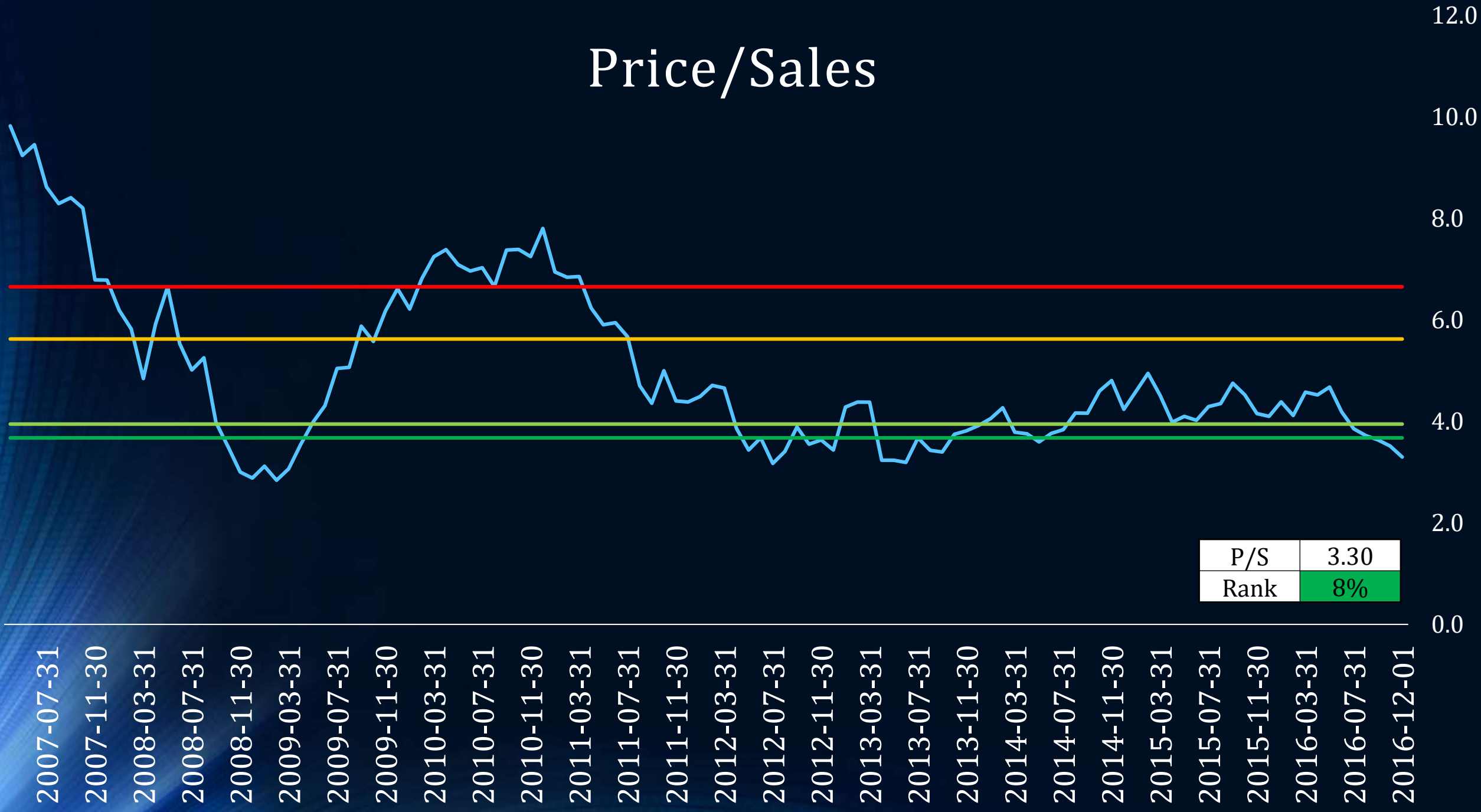
# Historical Trends

Metric	Result
Sales Per Share	Increasing
Cash Flows Per share	Consistent
Dividends Declared per Share	Increasing
Book Value per Share	Increasing
Revenues (Sales)	Increasing
Gross Profit Margin	Decreasing
Operating Profit Margin	Decreasing
Net Profit	Increasing
Net Profit Margin	Decreasing
Working Capital	Increasing
Shareholder's Equity	Increasing
Return on Equity	Decreasing
Common Shares Outstanding	Consistent
Long - Term Debt	None
LT Debt Payable in 5 years	Yes
All Dividends to Net Profit under 60%	Yes

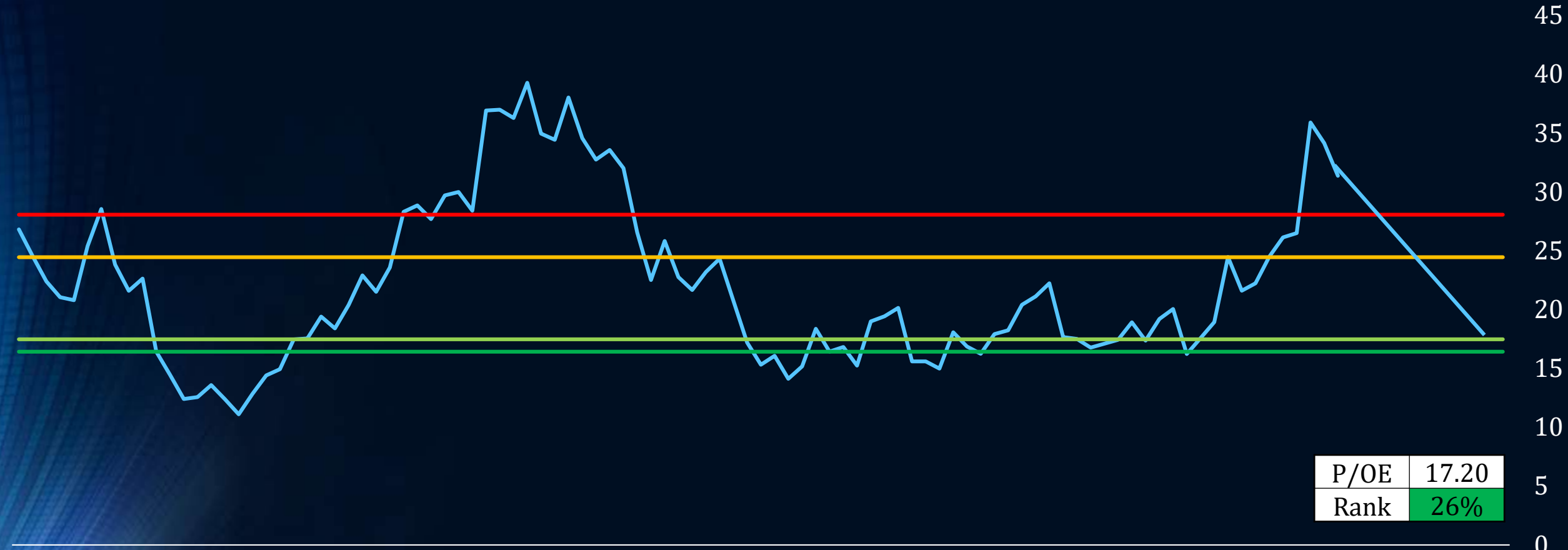


# Value Bands

# Price/Sales



# Price/Owner's Earnings



2007-11-30  
2008-02-29  
2008-05-31  
2008-08-31  
2008-11-30  
2009-02-28  
2009-05-31  
2009-08-31  
2009-11-30  
2010-02-28  
2010-05-31  
2010-08-31  
2010-11-30  
2011-02-28  
2011-05-31  
2011-08-31  
2011-11-30  
2012-02-29  
2012-05-31  
2012-08-31  
2012-11-30  
2013-02-28  
2013-05-31  
2013-08-31  
2013-11-30  
2014-02-28  
2014-05-31  
2014-08-31  
2014-11-30  
2015-02-28  
2015-05-31  
2015-08-31  
2015-11-30  
2016-02-29  
2016-05-31  
2016-08-31  
2016-12-01

# Price/Earnings less Cash



2007-11-30  
2008-02-29  
2008-05-31  
2008-08-31  
2008-11-30  
2009-02-28  
2009-05-31  
2009-08-31  
2009-11-30  
2010-02-28  
2010-05-31  
2010-08-31  
2010-11-30  
2011-02-28  
2011-05-31  
2011-08-31  
2011-11-30  
2012-02-29  
2012-05-31  
2012-08-31  
2012-11-30  
2013-02-28  
2013-05-31  
2013-08-31  
2013-11-30  
2014-02-28  
2014-05-31  
2014-08-31  
2014-11-30  
2015-02-28  
2015-05-31  
2015-08-31  
2015-11-30  
2016-02-29  
2016-05-31  
2016-08-31  
2016-12-01

P/E - \$	12.74
Rank	15%

# Price/Earnings



2007-11-30  
2008-02-29  
2008-05-31  
2008-08-31  
2008-11-30  
2009-02-28  
2009-05-31  
2009-08-31  
2009-11-30  
2010-02-28  
2010-05-31  
2010-08-31  
2010-11-30  
2011-02-28  
2011-05-31  
2011-08-31  
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2014-08-31  
2014-11-30  
2015-02-28  
2015-05-31  
2015-08-31  
2015-11-30  
2016-02-29  
2016-05-31  
2016-08-31  
2016-12-01

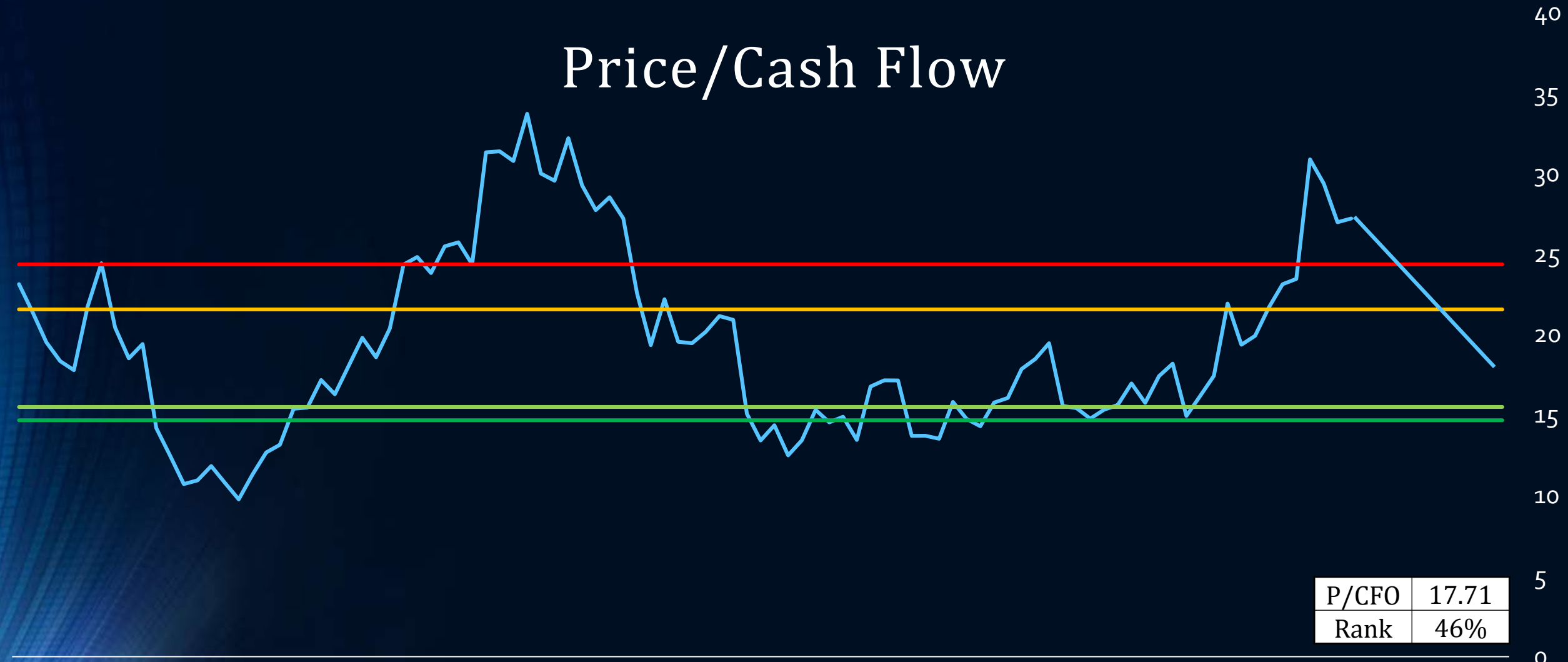
# Price/Book



P/B	3.37
Rank	3%

2007-11-30  
2008-02-29  
2008-05-31  
2008-08-31  
2008-11-30  
2009-02-28  
2009-05-31  
2009-08-31  
2009-11-30  
2010-02-28  
2010-05-31  
2010-08-31  
2010-11-30  
2011-02-28  
2011-05-31  
2011-08-31  
2011-11-30  
2012-02-29  
2012-05-31  
2012-08-31  
2012-11-30  
2013-02-28  
2013-05-31  
2013-08-31  
2013-11-30  
2014-02-28  
2014-05-31  
2014-08-31  
2014-11-30  
2015-02-28  
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2015-08-31  
2015-11-30  
2016-02-29  
2016-05-31  
2016-08-31  
2016-12-01

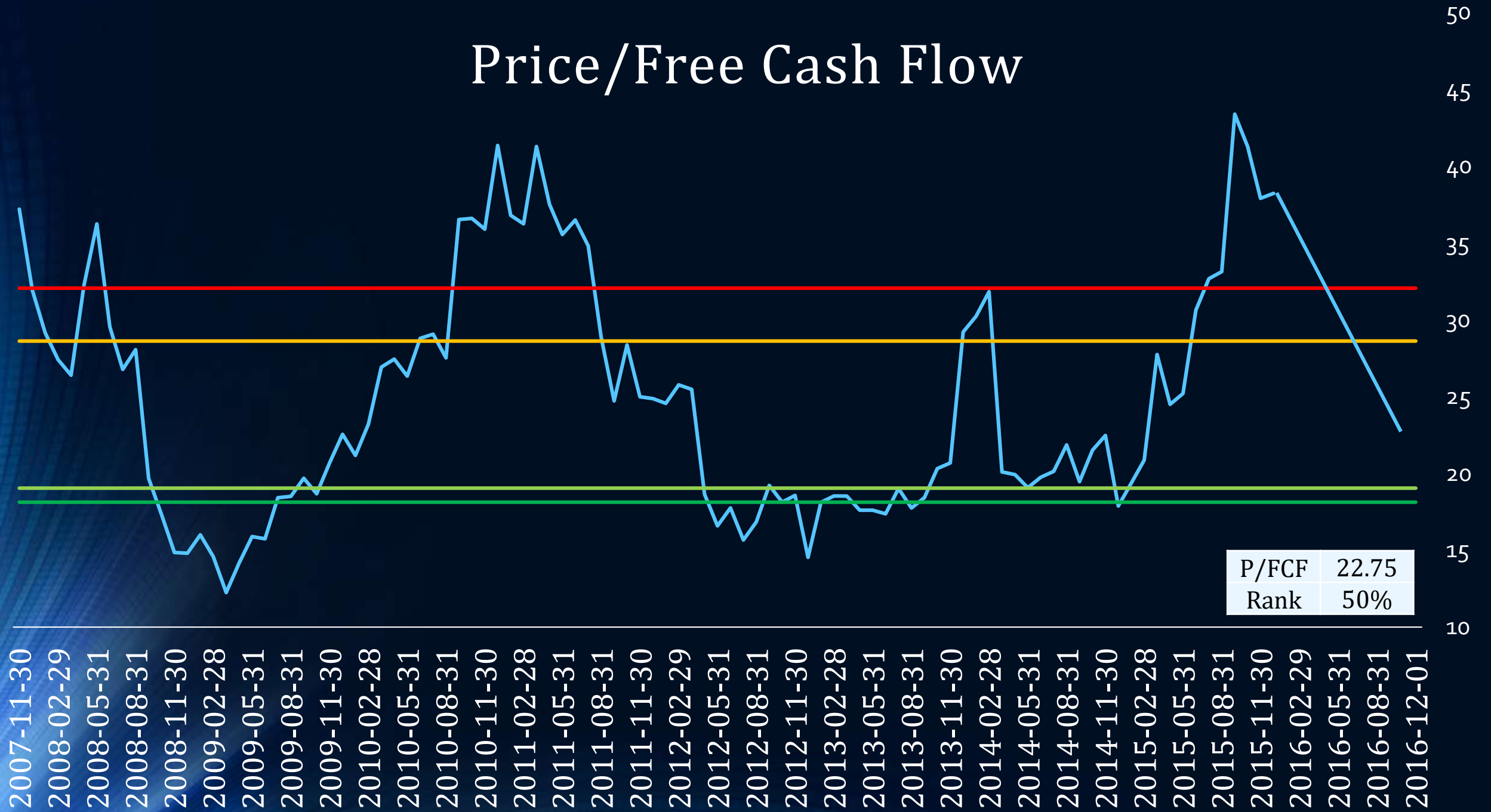
# Price/Cash Flow



P/CFO	17.71
Rank	46%

2007-11-30  
2008-02-29  
2008-05-31  
2008-08-31  
2008-11-30  
2009-02-28  
2009-05-31  
2009-08-31  
2009-11-30  
2010-02-28  
2010-05-31  
2010-08-31  
2010-11-30  
2011-02-28  
2011-05-31  
2011-08-31  
2011-11-30  
2012-02-29  
2012-05-31  
2012-08-31  
2012-11-30  
2013-02-28  
2013-05-31  
2013-08-31  
2013-11-30  
2014-02-28  
2014-05-31  
2014-08-31  
2014-11-30  
2015-02-28  
2015-05-31  
2015-08-31  
2015-11-30  
2016-02-29  
2016-05-31  
2016-08-31  
2016-12-01

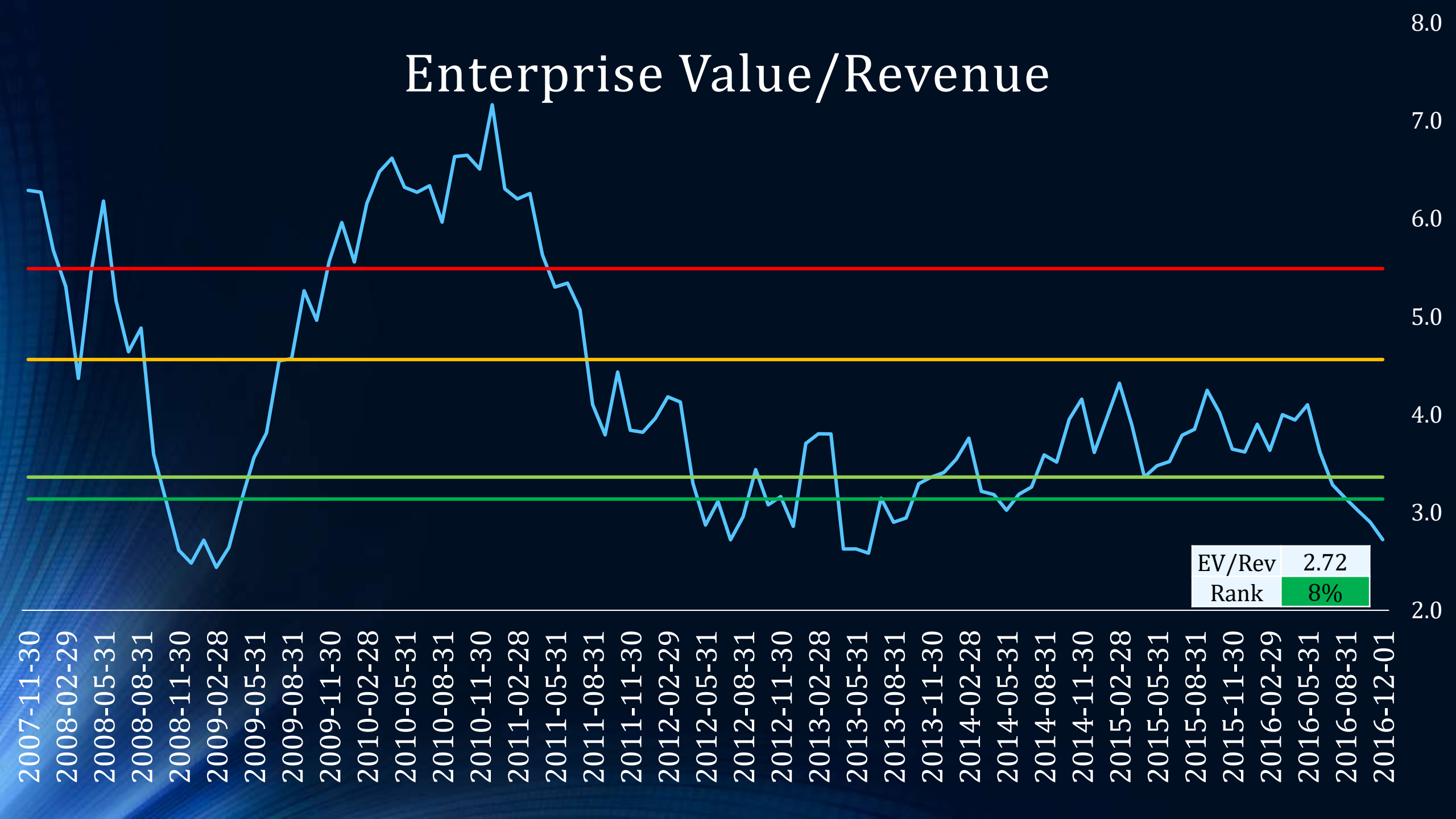
# Price/Free Cash Flow



P/FCF	22.75
Rank	50%



# Enterprise Value/Revenue



# Enterprise Value/Earnings Before Interest and Taxes

30  
25  
20  
15  
10  
5



2007-11-30  
2008-02-29  
2008-05-31  
2008-08-31  
2008-11-30  
2009-02-28  
2009-05-31  
2009-08-31  
2009-11-30  
2010-02-28  
2010-05-31  
2010-08-31  
2010-11-30  
2011-02-28  
2011-05-31  
2011-08-31  
2011-11-30  
2012-02-29  
2012-05-31  
2012-08-31  
2012-11-30  
2013-02-28  
2013-05-31  
2013-08-31  
2013-11-30  
2014-02-28  
2014-05-31  
2014-08-31  
2014-11-30  
2015-02-28  
2015-05-31  
2015-08-31  
2015-11-30  
2016-02-29  
2016-05-31  
2016-08-31  
2016-12-01

EV/EBIT	9.96
Rank	15%

# Industry Breakdown

# Industry Breakdown

	Infosys	IBM	Accenture	Cognizant
Market Cap (\$mil)	32,710	151,980	79,720	32,840
Revenue (\$mil)	9,644	81,740	3,480	1,242
P/E(ttm)	15.44	13.05	18.25	21.22
P/S	3.29	1.92	2.26	2.49
P/B	3.37	8.93	10.55	3.19
EV/EBIT	10.43	14.33	13.64	12.40
Yield (%)	2.61	3.39	1.95	0
Payout Ratio	52%	38%	35%	0%
ROE (%)	23.06%	78.66%	61.32%	16.31%
Gross Margin	37.78%	49.77%	29.53%	40.08%
Operating Margin	26.10%	16.43%	13.82%	17.21%
Net Margin	21.20%	14.75%	11.82%	11.78%
Obligation Ratio	0	3.76	0	0

# DuPont Analysis

# 5 Year DuPont

	Net Profit Margin	Total Asset Turnover	Financial Leverage Multiplier	Return on Equity
<b>2016</b>	<b>21.60%</b>	<b>0.83</b>	<b>1.22</b>	<b>22.01%</b>
<b>2015</b>	<b>23.11%</b>	<b>0.84</b>	<b>1.21</b>	<b>23.40%</b>
<b>2014</b>	<b>21.22%</b>	<b>0.87</b>	<b>1.20</b>	<b>22.07%</b>
<b>2013</b>	<b>23.31%</b>	<b>0.87</b>	<b>1.16</b>	<b>23.52%</b>
<b>2012</b>	<b>24.53%</b>	<b>0.93</b>	<b>1.15</b>	<b>26.09%</b>

# DuPont Competition

	Net Profit Margin	Total Asset Turnover	Financial Leverage Multiplier	Return on Equity
<b>Infosys Ltd</b>	<b>21.60%</b>	<b>0.83</b>	<b>1.22</b>	<b>22.01%</b>
<b>Cognizant Technology Solutions Corp.</b>	<b>11.77%</b>	<b>0.97</b>	<b>1.33</b>	<b>15.17%</b>
<b>International Business Machines Corp.</b>	<b>14.75%</b>	<b>0.69</b>	<b>6.80</b>	<b>69.57%</b>
<b>Accenture PLC</b>	<b>11.82%</b>	<b>1.69</b>	<b>2.73</b>	<b>54.43%</b>

# Conscious Investor



# 3 Year

	2010	2011	2012	2013	2014	2015	2016	Years	Growth Rate	Stability Rate
EPS (\$)	0.58	0.66	0.75	0.76	0.77	0.88	0.90	3	8.47%	98.02%
SPS (\$)	2.10	2.63	3.05	3.24	3.59	3.79	4.14	3	7.32%	99.58%

# 3 Year – Expected Rate of Return

	Price	EPS (\$)	P/E Ratio	Growth Rate	Payout	Rate of Return
Default	\$14.50	\$0.93	18.43	8.47%	32.40%	10.23%
Safety	\$14.50	\$0.93	13.33	5.82%	30.30%	5.06%

**Cut P/E by 27.67%**  
**Cut Growth by 31.29%**  
**Cut Payout by 6.48%**

# 7 Year

	2010	2011	2012	2013	2014	2015	2016	Years	Growth Rate	Stability Rate
<b>EPS (\$)</b>	<b>0.58</b>	<b>0.66</b>	<b>0.75</b>	<b>0.76</b>	<b>0.77</b>	<b>0.88</b>	<b>0.90</b>	<b>7</b>	<b>7.26%</b>	<b>96.99%</b>
<b>SPS (\$)</b>	<b>2.10</b>	<b>2.63</b>	<b>3.05</b>	<b>3.24</b>	<b>3.59</b>	<b>3.79</b>	<b>4.14</b>	<b>7</b>	<b>10.87%</b>	<b>96.17%</b>

# 7 Year – Expected Rate of Return

	Price	EPS (\$)	P/E Ratio	Growth Rate	Payout	Rate of Return
<b>Default</b>	<b>\$14.50</b>	<b>\$0.93</b>	<b>18.43</b>	<b>7.26%</b>	<b>32.40%</b>	<b>9.10%</b>
<b>Safety</b>	<b>\$14.50</b>	<b>\$0.93</b>	<b>13.33</b>	<b>5.83%</b>	<b>30.30%</b>	<b>5.07%</b>

**Cut P/E by 27.67%**  
**Cut Growth by 19.70%**  
**Cut Payout by 6.48%**

# 7 Year – “Kill It”

	<b>Price</b>	<b>EPS (\$)</b>	<b>P/E Ratio</b>	<b>Growth Rate</b>	<b>Payout</b>	<b>Rate of Return</b>
<b>Default</b>	<b>\$14.50</b>	<b>\$0.93</b>	<b>18.43</b>	<b>7.26%</b>	<b>32.40%</b>	<b>9.10%</b>
<b>Safety</b>	<b>\$14.50</b>	<b>\$0.93</b>	<b>13.33</b>	<b>5.83%</b>	<b>30.30%</b>	<b>5.07%</b>
<b>Kill It</b>	<b>\$14.50</b>	<b>\$0.93</b>	<b>12.56</b>	<b>5.83%</b>	<b>0.00%</b>	<b>2.97%</b>

**Cut P/E by 5.78%**  
**Cut Payout 100%**

# 7 Year – “Kill It Again”

	Price	EPS (\$)	P/E Ratio	Growth Rate	Payout	Rate of Return
Default	\$14.50	\$0.93	18.43	7.26%	32.40%	9.10%
Safety	\$14.50	\$0.93	13.33	5.83%	30.30%	5.07%
Kill It	\$14.50	\$0.93	12.56	5.83%	0.00%	2.97%
Kill It Again	\$14.50	\$0.93	11.33	3.20%	0.00%	0.00%

Cut P/E by 15%  
Cut Growth by 45.11%  
Cut Payout 100%

# Discounted Cash Flow

# Discounted Cash Flow - Default

Earnings Per Share ⓘ :

\$ 0.93

Growth Rate In the Next ⓘ :

10 Years: 16.7 %

Terminal Growth Rate ⓘ :

4 %

Years of Terminal Growth ⓘ :

10

Discount Rate ⓘ :

12 %

Business Predictability ⓘ :



Save Parameters



DCF

Reverse DCF NEW

**Fair Value ⓘ :**

**\$ 21.29**

Tangible Book Value ⓘ :

\$ 3.91

Add to Fair Value

Growth Value ⓘ :

\$ 11.74

Terminal Value ⓘ :

\$ 9.55

Stock Price:

\$ 14.48

Margin Of Safety:

**32%**



# Discounted Cash Flow - Modified

Earnings Per Share ⓘ : \$ 0.93

Growth Rate In the Next ⓘ : 10 Years: **11** %

Terminal Growth Rate ⓘ : 4 %

Years of Terminal Growth ⓘ : 10

Discount Rate ⓘ : **10** %

Business Predictability ⓘ : 

Save Parameters



DCF **Reverse DCF** NEW

**Fair Value** ⓘ : **\$ 17.35**

Tangible Book Value ⓘ : \$ 3.91

Add to Fair Value

Growth Value ⓘ : \$ 9.78


Terminal Value ⓘ : \$ 7.58


Stock Price: \$ 14.48


Margin Of Safety: **17%**


ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '13-'15 to '19-'21
Revenues	24.5%	13.5%	9.0%
"Cash Flow"	22.0%	9.5%	11.0%
Earnings	22.5%	9.5%	11.0%
Dividends	27.5%	12.0%	17.5%
Book Value	26.0%	16.0%	10.0%


# Reverse Discounted Cash Flow




Earnings Per Share  : \$

Growth Rate In the Next  :  Years

Terminal Growth Rate  :  %

Years of Terminal Growth  :

Discount Rate  :  %

Business Predictability  :  



DCF Reverse DCF <sup>NEW</sup>

**Growth Rate  :** **8.30%**

Revenue Growth Rate 	<b>19.70%</b> (10y)	<b>18.00%</b> (5y)	<b>14.40%</b> (1y)
EBITDA Growth Rate 	<b>17.30%</b> (10y)	<b>13.60%</b> (5y)	<b>8.70%</b> (1y)
Earnings Growth Rate 	<b>16.70%</b> (10y)	<b>14.80%</b> (5y)	<b>9.00%</b> (1y)
Free Cash Flow Growth Rate 	<b>18.10%</b> (10y)	<b>14.50%</b> (5y)	<b>26.70%</b> (1y)
Book Value Growth Rate 	<b>21.20%</b> (10y)	<b>17.80%</b> (5y)	<b>12.50%</b> (1y)

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '13-'15 to '19-'21
Revenues	24.5%	13.5%	9.0%
"Cash Flow"	22.0%	9.5%	11.0%
Earnings	22.5%	9.5%	11.0%
Dividends	27.5%	12.0%	17.5%
Book Value	26.0%	16.0%	10.0%

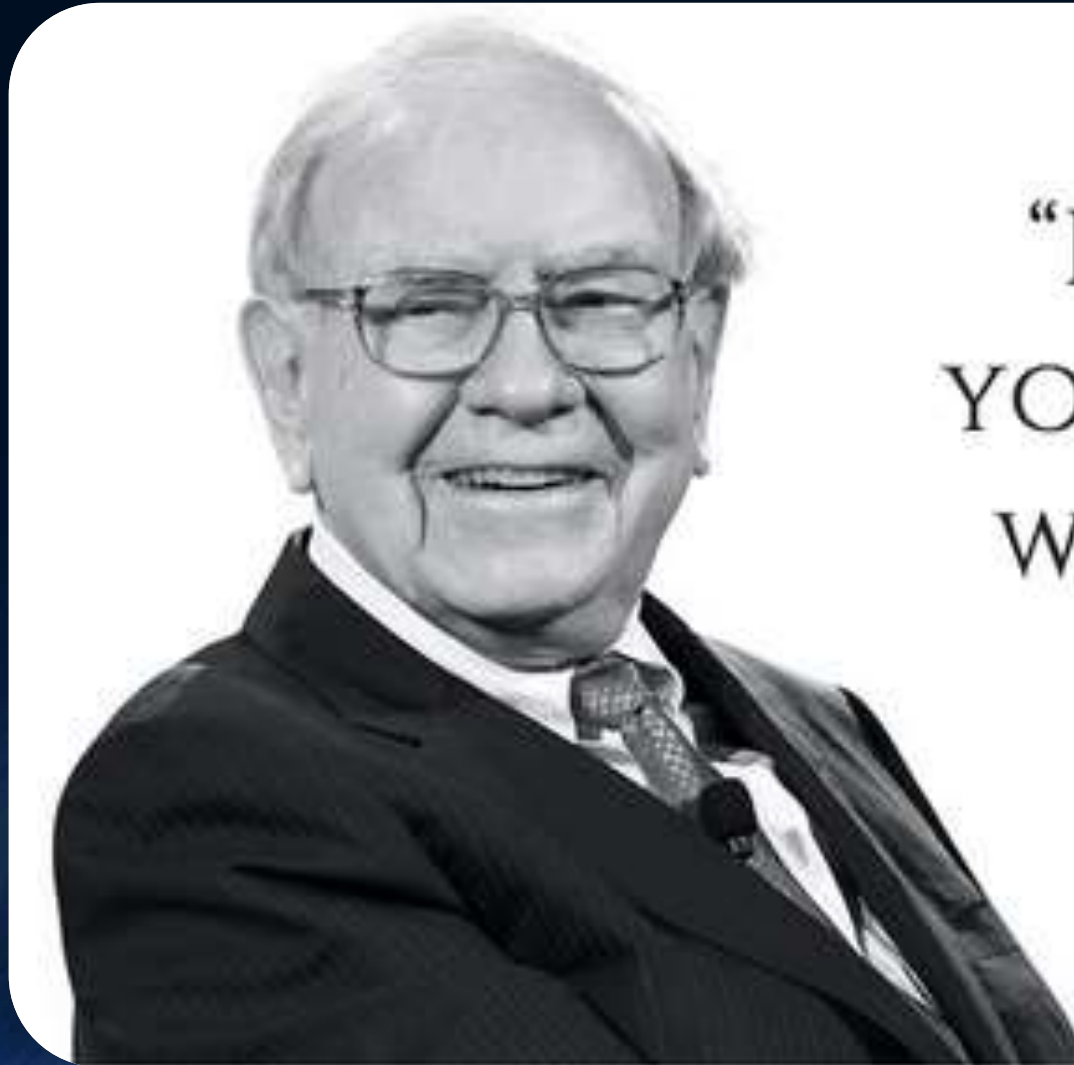
# Intra-Portfolio Valuation

Ticker	Price/Sales
MCK	0.17
WMT	0.46
BBBY	0.58
CHRW	0.83
DG	1.06
PII	1.30
CMI	1.37
AIG	1.39
BRK.B	1.78
IBM	1.95
NSGRY	2.30
PEP	2.36
INFY	3.34
UNP	4.28
QCOM	4.33
ORCL	4.60
MSFT	5.62

Ticker	Price/Earnings
BBBY	9.23
IBM	13.35
WMT	15.48
INFY	15.59
BRK.B	16.70
MCK	16.94
QCOM	17.52
DG	18.34
ORCL	19.31
CMI	19.95
UNP	20.11
CHRW	20.77
PII	21.89
PEP	22.49
NSRGY	23.81
MSFT	29.23
AIG	109.10

Ticker	Price/Book
AIG	0.73
BRK.B	1.44
BBBY	2.65
WMT	2.81
QCOM	3.16
INFY	3.41
CMI	3.44
MCK	3.44
ORCL	3.48
NSRGY	3.59
DG	4.04
UNP	4.12
PII	6.00
MSFT	6.67
CHRW	8.35
IBM	9.08
PEP	11.48

# Valuation



“PRICE IS WHAT  
YOU PAY. VALUE IS  
WHAT YOU GET.”

– WARREN BUFFETT –

	<b>P/S</b>	<b>P/OE</b>	<b>P/E</b>	<b>P/B</b>	<b>P/CFO</b>	<b>P/FCF</b>	
Current Multiple	3.3	17.2	15.4	3.4	17.7	22.8	
20% Rank Multiple	3.68	16.43	15.61	3.99	14.67	18.12	
	X	x	x	x	x	x	
Per Share Figures	4.40	0.83	0.93	4.23	0.81	0.63	
Prices	\$16.92	\$13.66	\$14.52	\$16.87	\$11.85	\$11.42	
Buy Price	Buy Price = \$14.21						Current Price: \$14.31



# Conclusion

Transition Period with good growth potential

Undervalued

High Customer Switching Cost

Recommendation: Market Order

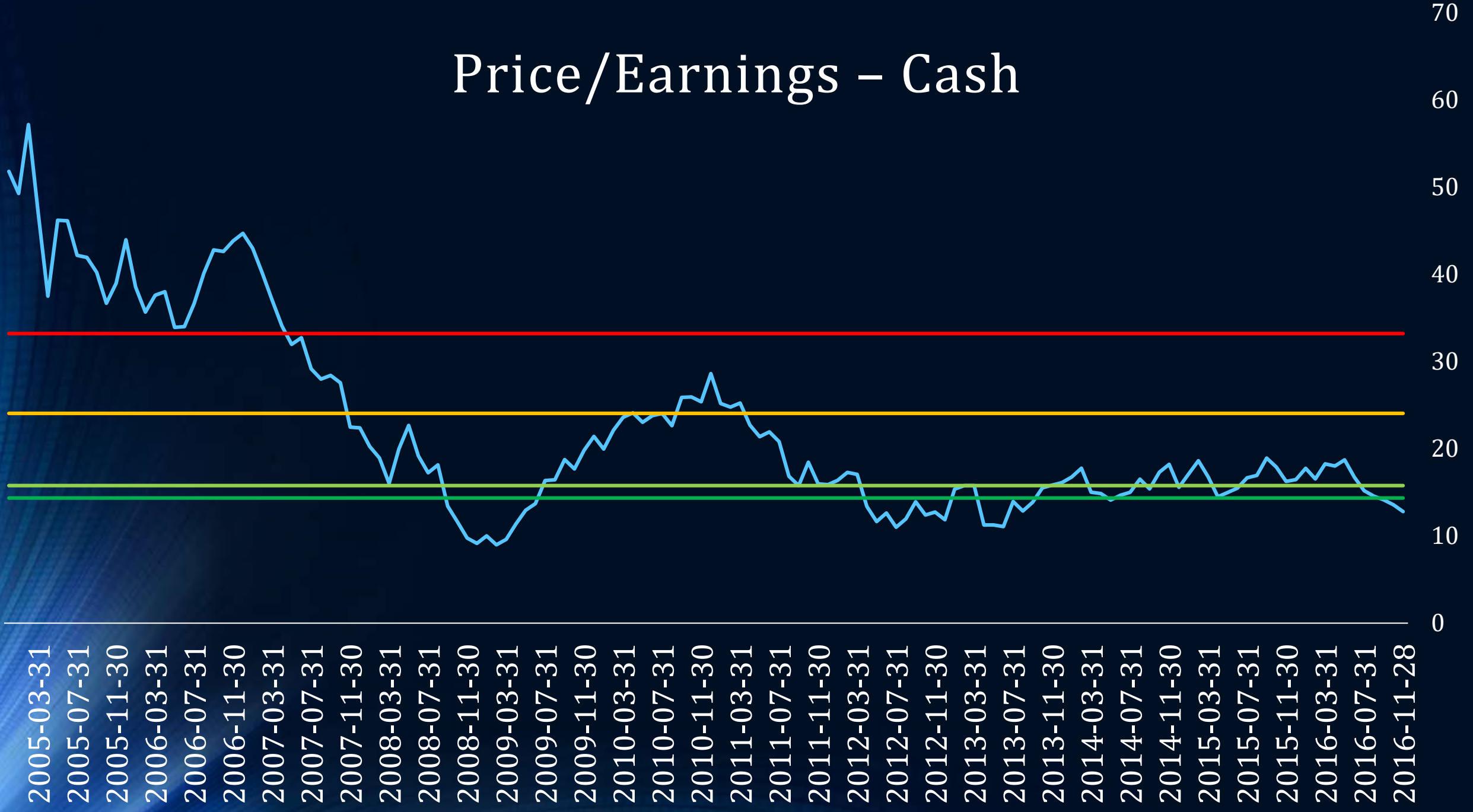
# Recommendation

# Appendix

# Price/Sales



# Price/Earnings – Cash



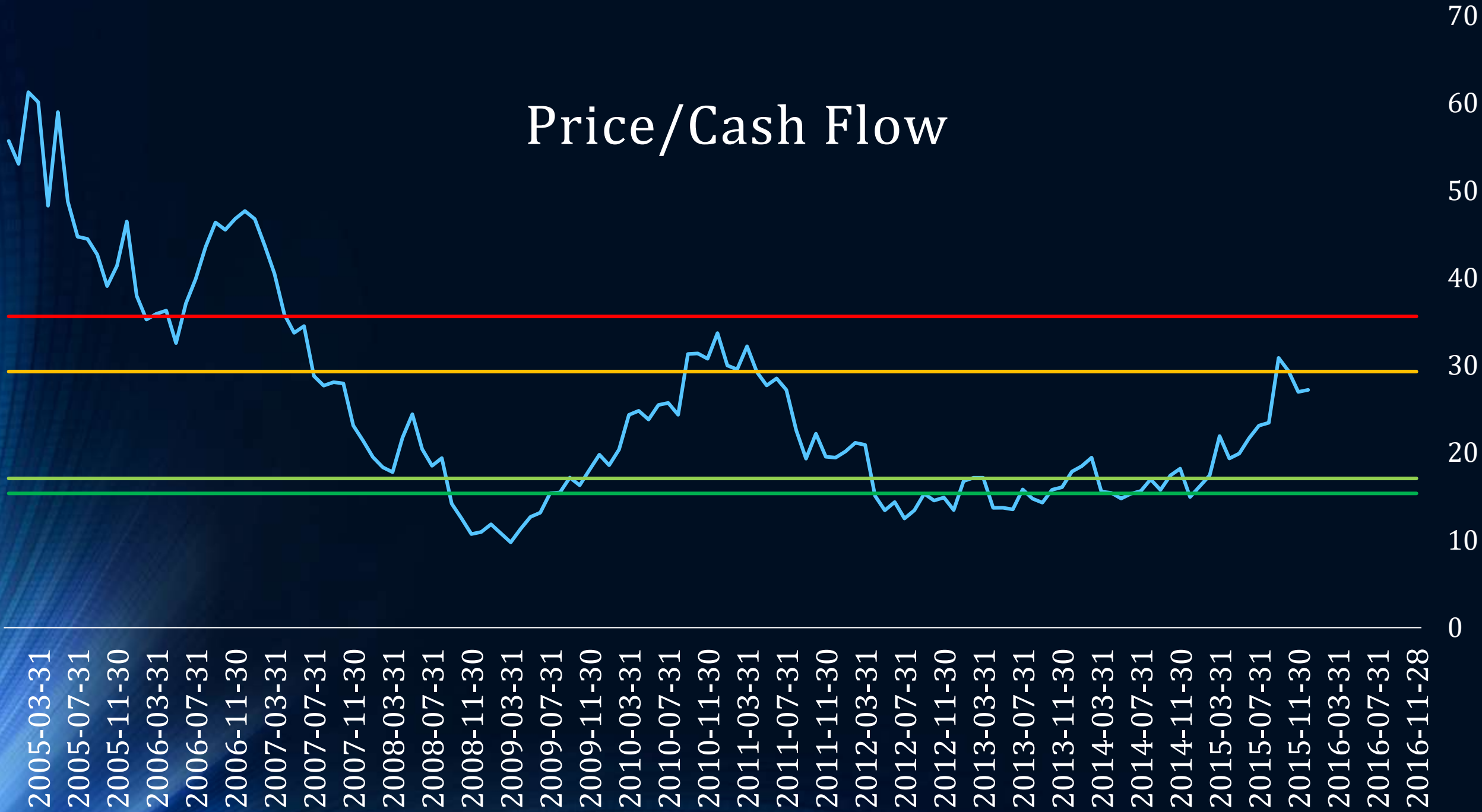
# Price/Earnings



# Price/Book

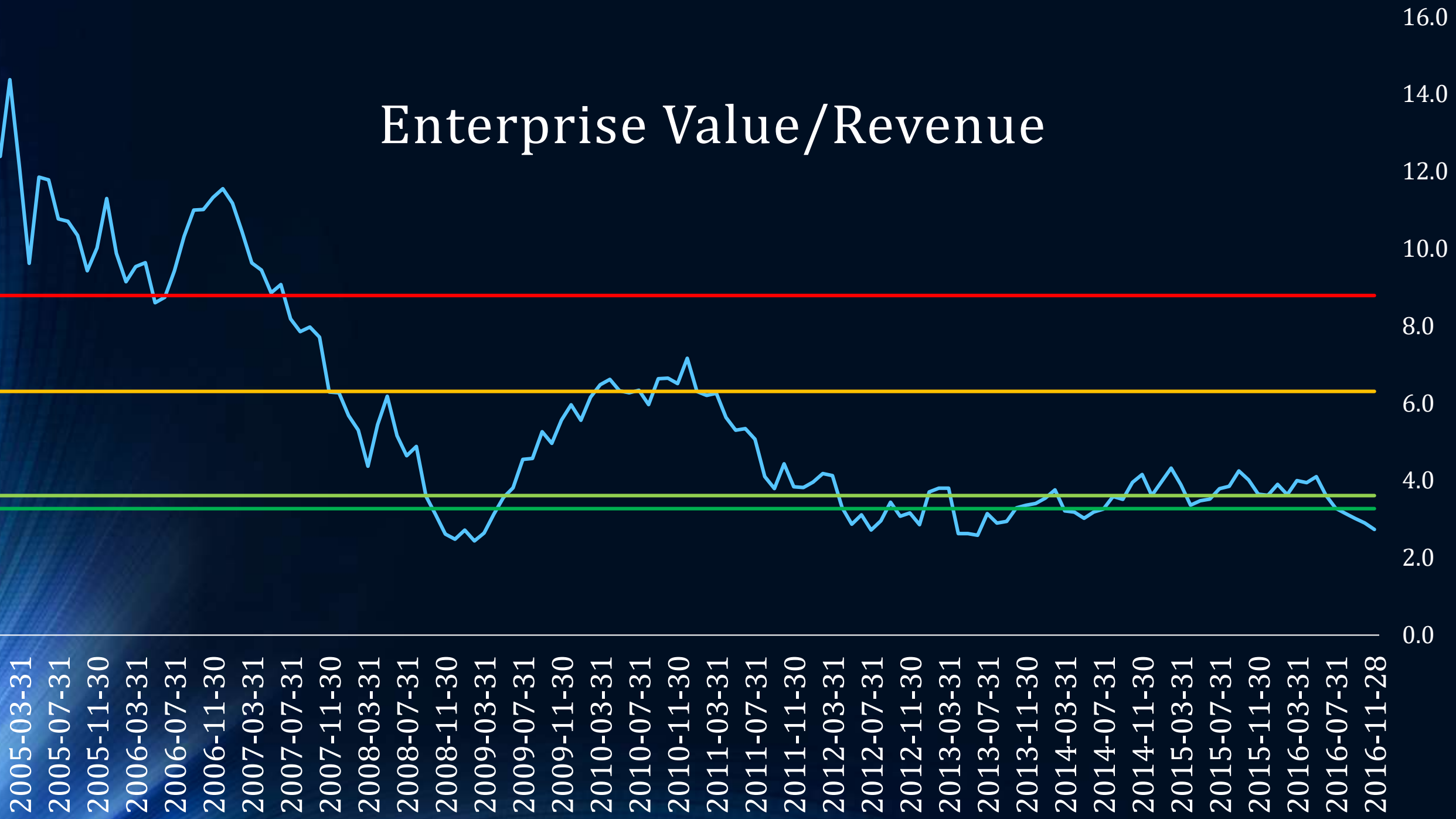


# Price/Cash Flow





# Enterprise Value/Revenue



# Enterprise Value/Earnings Before Interest and Taxes

