Fair Isaac Corporation (FICO)

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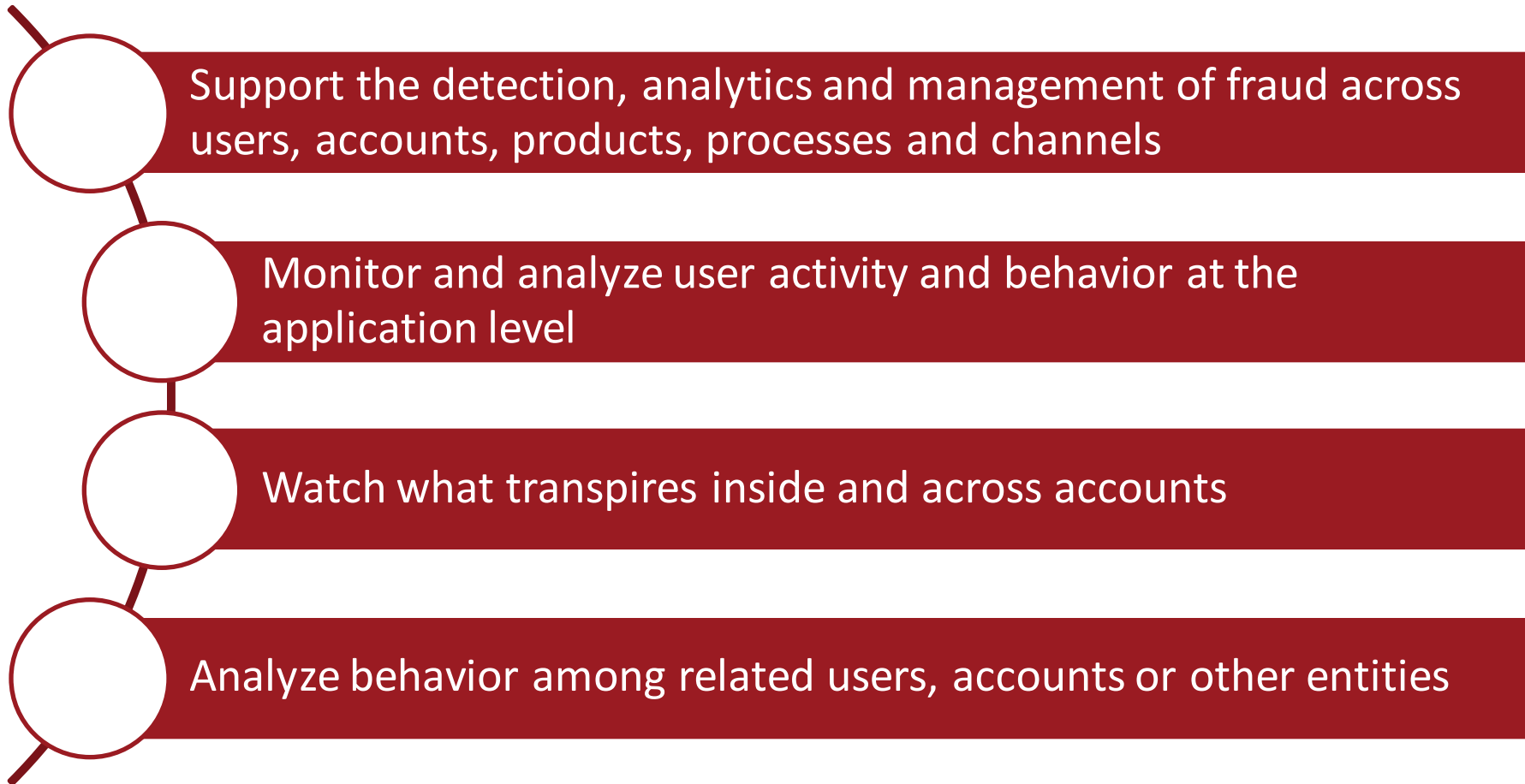
FICO™

BUY

Recommendation Summary	

Company (Ticker)	FICO
Current Trading Price (MM-DD-YYYY)	$ 106.23
Recommendation	**BUY**
Target Price	$ 122.39
Upside Potential	*15.2%*

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Industry Definition

Businesses that develop software to detect fraudulent payments made to clients. The software also protects against fraudulent payments.

Support the detection, analytics and management of fraud across users, accounts, products, processes and channels

Monitor and analyze user activity and behavior at the application level

Watch what transpires inside and across accounts

Analyze behavior among related users, accounts or other entities

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Industry Overview

Life Cycle Stage: Growth

A growth of 30.5% for the past 8 years is a good sign of the future.

Regulation Level: Light

Government struggles to keep up with the rapidly changing industry.

Revenue Volatility: Medium

Uncertainties surrounding contracts and pricing pose risks to revenue.

Globalization: Medium

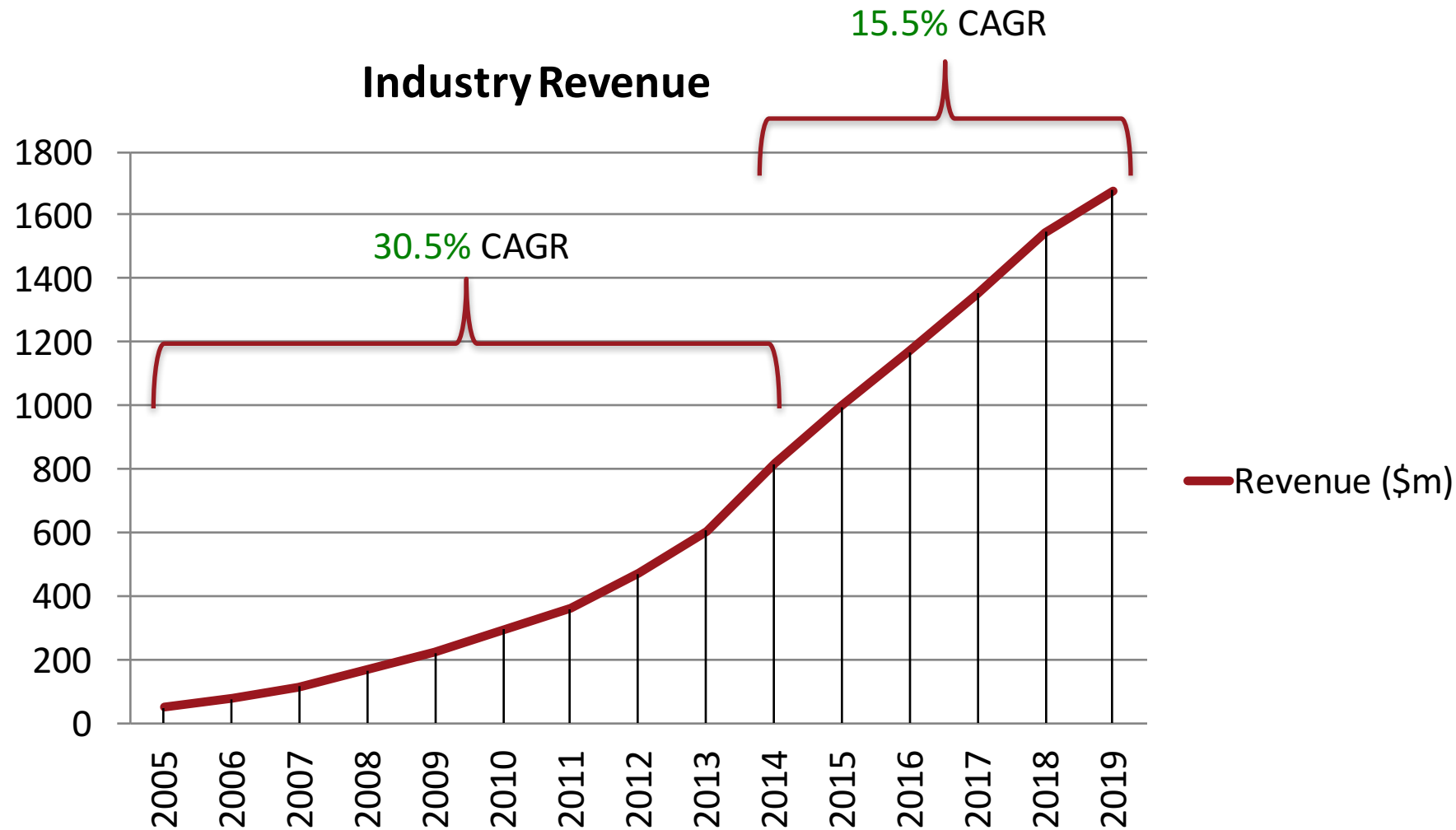China and India are becoming bigger players.

Technology Change: High

The continuing competition between fraudster and firm drives innovation.

Competition Level: High

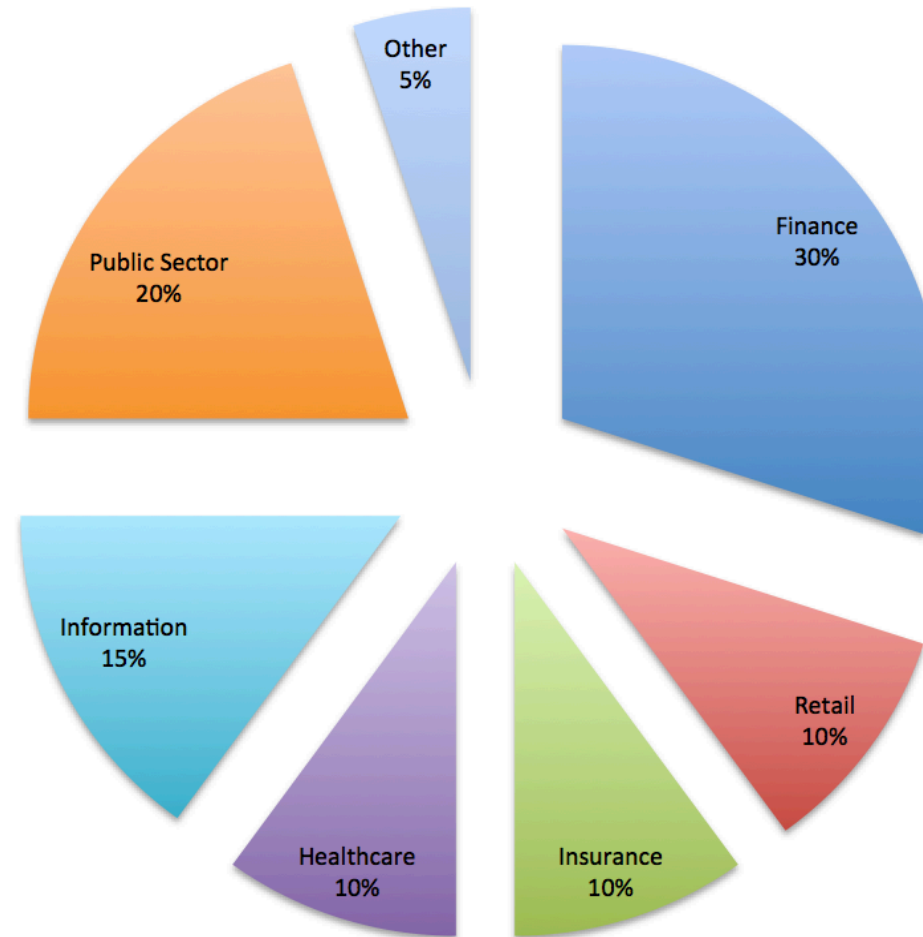Companies of any size can compete for market share.

Industry Overview

Industry Revenue

15.5% CAGR

30.5% CAGR

— Revenue ($m)

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5

Market Segmentation

- The financial sector represents the largest market segment
  – Includes commercial banks, retail banks, and brokerage firms

- Public sector is another large contributor to market revenue
  – Ranges from national security to welfare

- Information sector accounts for the third largest segment of revenue
  – Continued growth as more and more companies move data into digital forms

- Insurance and Healthcare sector widely uses fraud detection software to detect fraudulent claims

Market Segmentation

Other 5%
Finance 30%
Public Sector 20%
Retail 10%
Insurance 10%
Healthcare 10%
Information 15%

Main Competitors

NICE®

Market Cap: $3.72B

FICO™

Market Cap: $2.87B

VERINT®

Market Cap: $3.01B

ACI payment systems

Market Cap: $2.75B

Company Overview

- Use analytics to help businesses automate, improve and connect decisions across their enterprise, an approach we commonly refer to as decision management.

- **Applications**: Pre-configured decision management applications designed for a specific type of business problem or process.

- **Tools:** Composed of analytic and decision management software tools.

- **Scores:** Business-to-business scoring solutions and services, our myFICO® solutions for consumers, and associated professional services
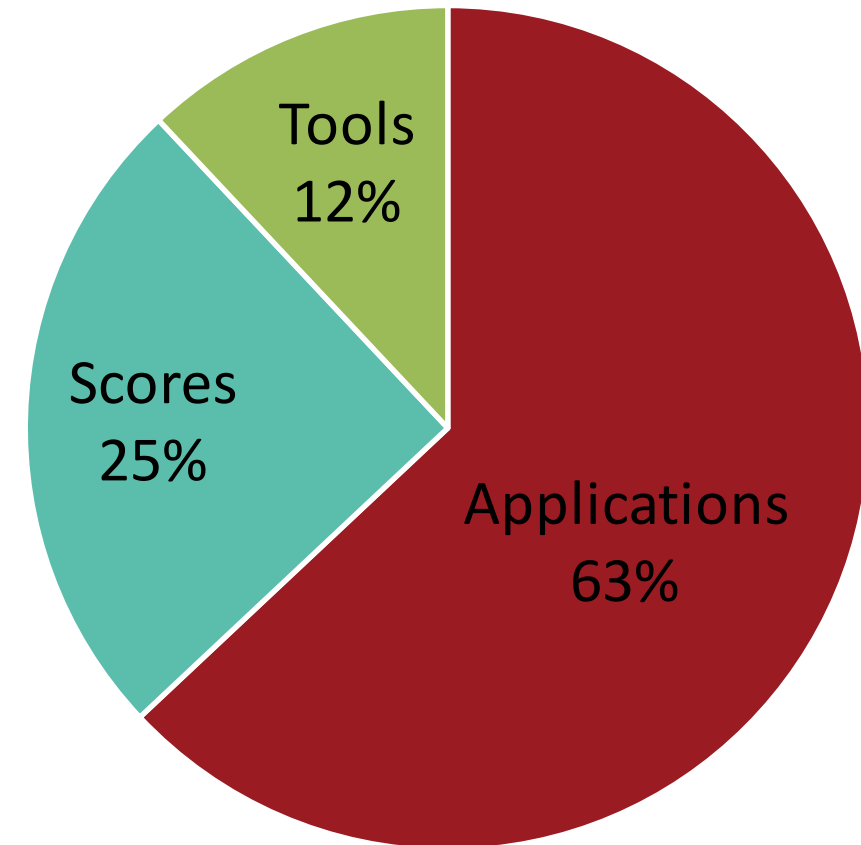
Total E-Commerce Sales Growth

The fraud detection industry will continue to grow as the amount of E-Commerce traffic volume increases.

- As **electronic payment transaction volumes increase** with consumers increasingly using the internet for a diverse range of services, such as online shopping, online trading and online banking, **the risk of theft and fraud over the internet rises.**

- Extremely strong correlation between E-Commerce volume and FICO revenue growth since 2011
  - **R^2 of .96273**
- FICO® Big Data Analyzer
- FICO® Data Management Integration Platform
  - Streaming analytics and real-time distributed processing platform.

FICO Revenue Growth vs. Industry

$y = 0.3542x + 499.32$
$R^2 = 0.96273$
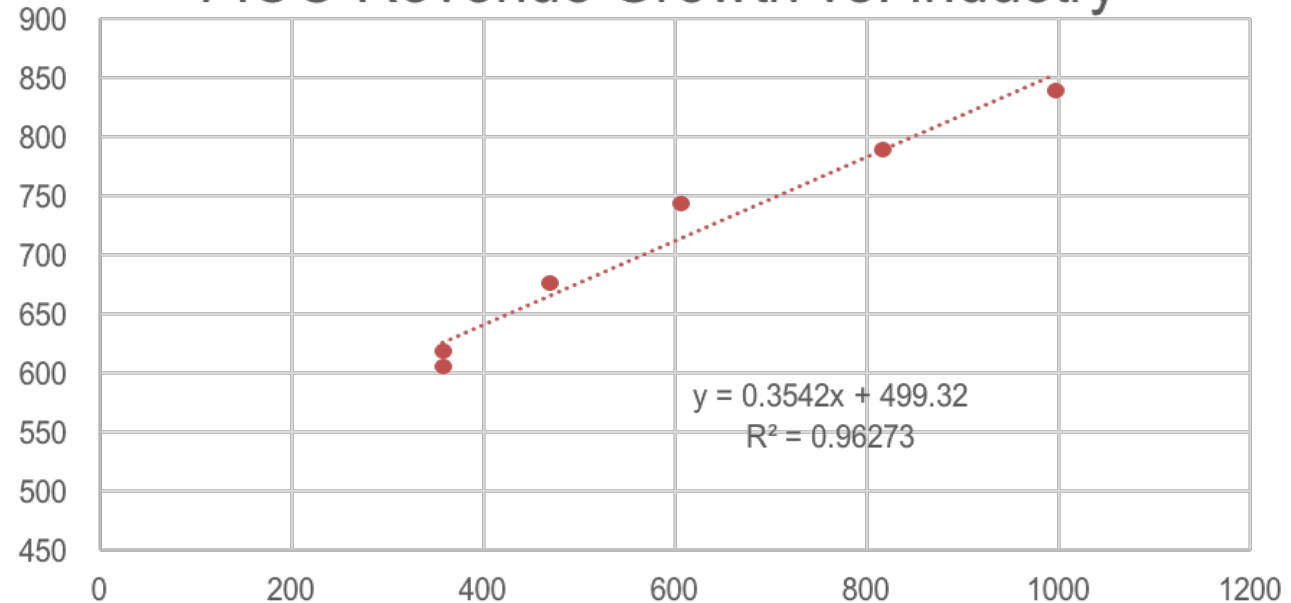
Years	Percent Growth
2006 - 2007	26%
2007 - 2008	10%
2008 - 2009	32%
2009 - 2010	10%
2010 - 2011	26%
2011 - 2012	19%
2012 - 2013	10%

CAGR: 19.06%*

Since 2006

Source: Bloomberg, IBIS World, Yahoo Finance

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Applications Segment Op. Income

A startling slow-down in the company's cash cow segment must be watched closely.

- Growth has slowed from 12.2% in 2013
- $22m Revenue Growth, $31.9m Cost Growth
  - Company is expecting the costs to level off
- Driven by higher salaries and an increase in the cost of professional deliveries
- Partially offset by an increase in sales of higher-margin software products

Applications Growth

5.6%

11.1%

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

— Applications Op Income

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Source: Bloomberg, IBIS World, Yahoo Finance

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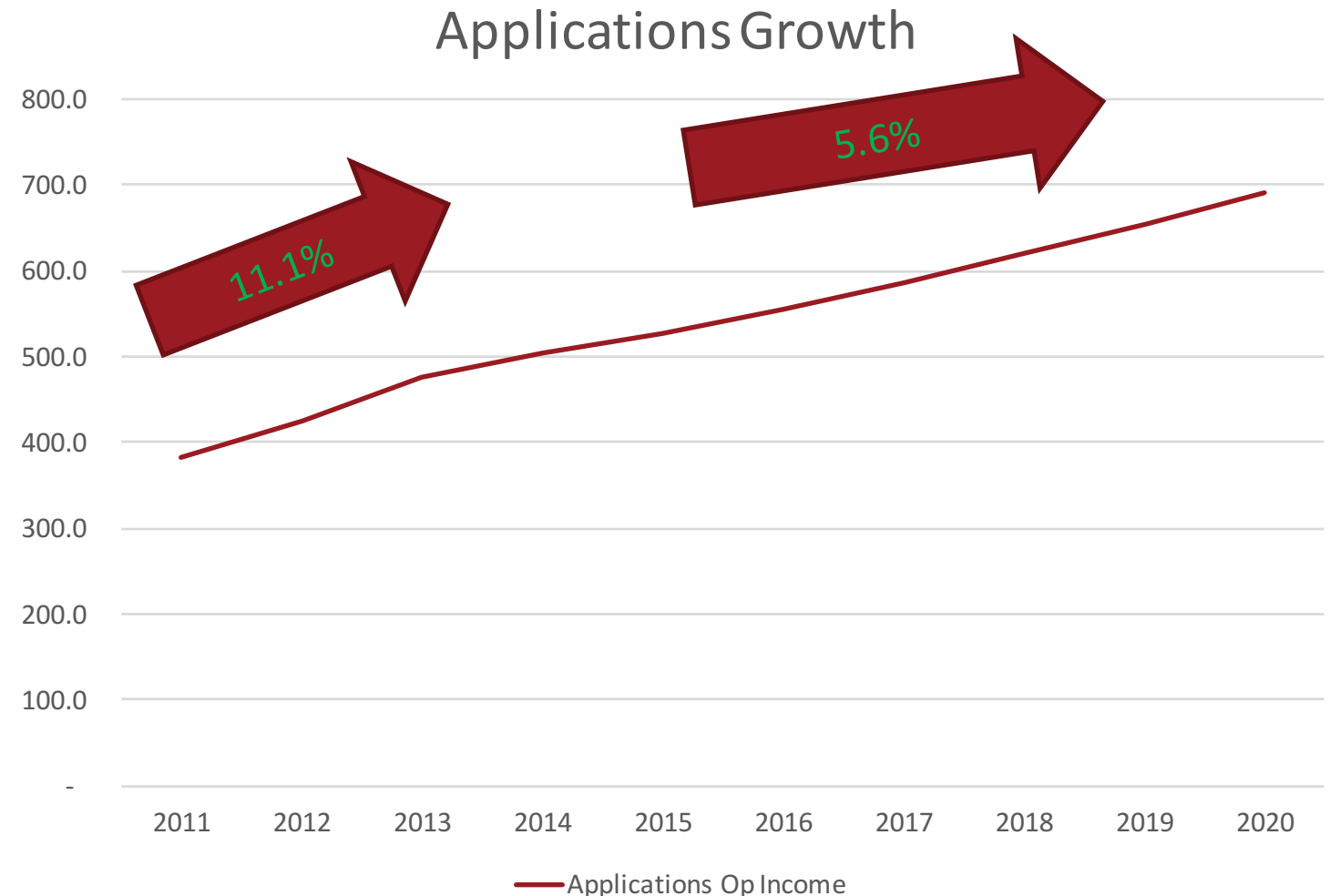
Predictive Modeling

FICO is dominating the predictive modeling industry. The industry expects to grow 27% per year for the next 5 years.

- *Predictive Modeling.* FICO® Model Central
  - Represents underlying relationships in historical data in order to explain the data and make predictions or classifications about future events.
  - Rank-order individuals by likely future performance
  - models that detect the likelihood of a transaction being fraudulent.

- Fraud Detection segment grew $17.3m
- **Currently a $2.74 Billion industry**
- FICO is capturing 81% of the industry
- Predicted industry revenue of $9.2B by 2020
- **27.4%** growth per year for 5 years

Predictive Modeling Industry

FICO 19%

Competitiors 81%

Source: Bloomberg, IBIS World, Yahoo Finance
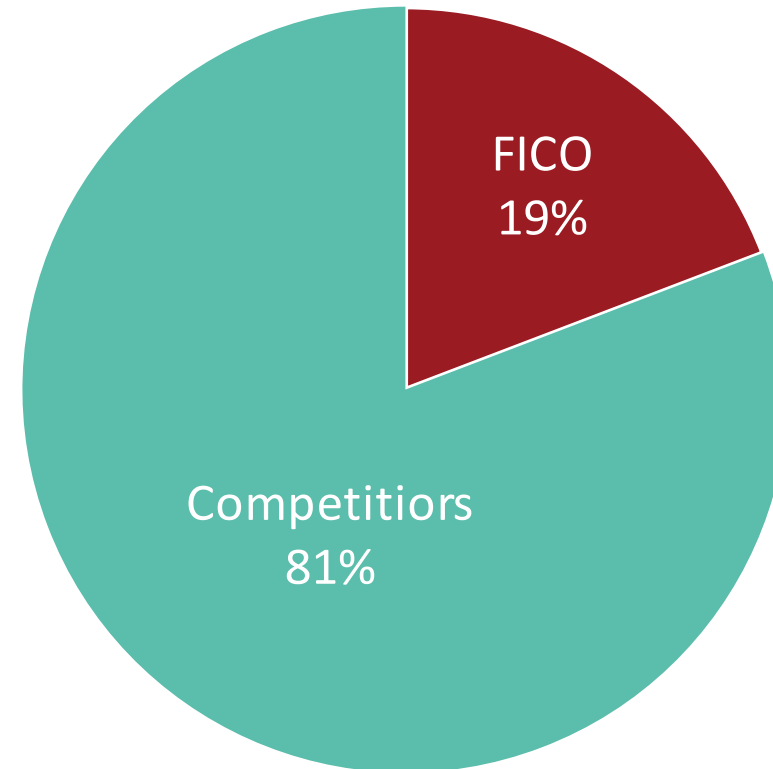
Chip Inclusion in Debit and Credit Cards

> As credit and debit cards increasingly use computer chips the amount of retail fraud will decrease, but online fraud will spike.

- The new credit and debit smartcards use an encrypted chip rather than a magnetic stripe, reducing electronic payment fraud.

- U.S. fraud rate expected to follow Canada's dramatic decrease.

- Industry will need to rely on a continuing growth from other areas of fraud within the U.S. and Canada

- "In every country that has switched to EMV cards, online fraud has jumped." –Aite Group

- UK saw a **79% increase** in online fraud once chips were introduced.

Canada's Decrease in Retail Fraud Since Chips

Online Fraud driving Software application sales.

Legend:
- Debit and Credit Card Fraud Losses
- Expon. (Debit and Credit Card Fraud Losses)

Source: Bloomberg, IBIS World, Yahoo Finance

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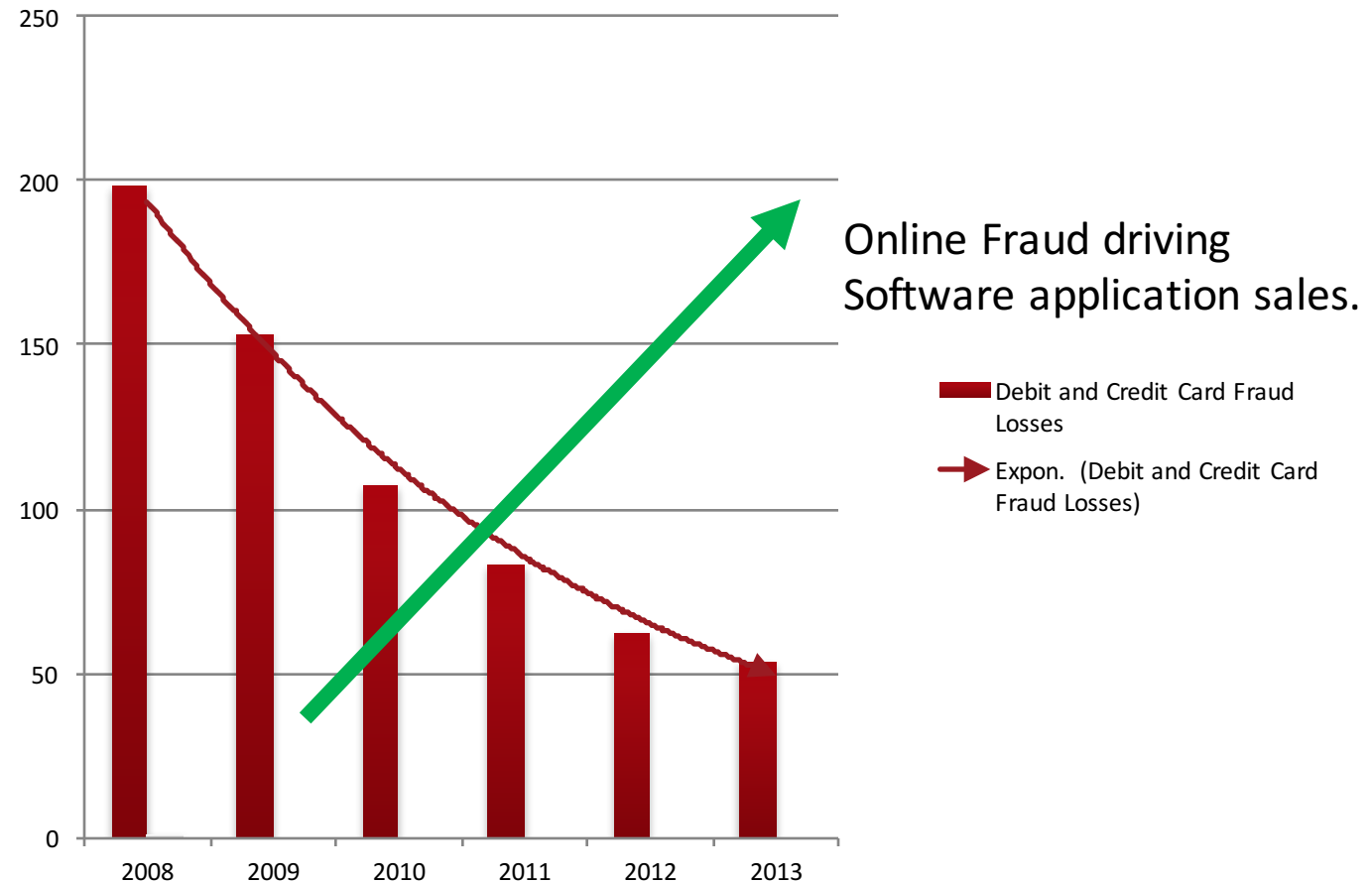
Discounted Cash Flow Valuation

Exit Multiple Method			Key Statistics:			Perpetuity Growth Method		
EBITDA Multiple		15.10x	Current Trading Price (MM-DD-YYYY)	$	108.80	Growth Rate		6.07%
Undiscounted TEV	$	7,544.68	Market Cap	$	3,416.54	Undiscounted TEV	$	5,400.13
Discounted TEV	$	4,290.85	Net Debt	$	289.88	Discounted TEV	$	3,071.20
DCF Value	$	5,166.71	Beta		1.20	DCF Value	$	3,947.05
Equity Value	$	4,876.83	Shares Outstanding		31.40	Equity Value	$	3,657.17
Share Price	**$**	**155.30**	Marginal Tax Rate		35.00%	**Share Price**	**$**	**116.46**
Implied Growth Rate		7.68%				Implied Exit Multple		10.81x

- 6.07% growth rate based on average of 4 analyst estimates
- Applications growth pushes top-line earnings with a 10.3% expected revenue growth rate

> FICO's strong growth potential yields a great ROI opportunity.

WACC Calculation:

Cost of Debt	2.00%
% Weight	17%
Cost of Equity	14.04%
% Weight	83%
WACC	11.95%

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Comparable Companies Valuation

Comparable Company Analysis

Company	Ticker	EV	Market Cap	Revenue	EBITDA	Net Income	P/E	EV/EBITDA	EV/Revenue
Fair Isaac Corporation	**FICO**	**3,706.4**	**3,416.5**	**849.3**	**194.9**	**94.1**	**36.3x**	**19.0x**	**4.4x**
Nice Systems	NICE	3,396.0	3,830.0	926.8	225.6	140.5	27.3x	15.1x	3.7x
ACI Worldwide	ACIW	3,290.0	2,430.0	1,046.0	174.8	85.4	28.4x	18.8x	3.1x
Verint Systems	VRNT	2,590.0	2,180.0	1,130.3	164.8	17.6	123.6x	15.7x	2.3x
High							123.6x	19.0x	4.4x
Mean							53.9x	17.2x	3.4x
Median							**32.4x**	**17.3x**	**3.4x**
Low							27.3x	15.1x	2.3x

P/E		
LTM EPS	$	3.00
Implied Price Target		$97.0155
Upside (Downside) %		*-8.7%*

EV/EBITDA		
LTM EBITDA		189.6
Implied Price Target		$95.0595
Upside (Downside) %		*-10.5%*

EV/Revenue		
LTM Revenue		838.8
Implied Price Target		$81.7149
Upside (Downside) %		*-23.1%*

- Median used for all three multiples
- FICO is slightly overvalued compared to competitors
  – This is mostly based on the high hopes markets have for the firm
- FICO is a leading innovator and this is priced into their stock and shown by their high multiples
- Weighted 5% equally to price in the overvaluation

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Source: Bloomberg, IBIS World, Yahoo Finance

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14

Risks

> The company is at risk for industry-wide downturns, as well as general macroeconomic deterioration.

- Suffer from **dependency** on on a **small number of customers** for a significant amount of profit

- A decrease in **government spending** poses as threat as the public sector accounts for **20% of industry profit**

- Failure to continue **integrating acquired companies** easily
  - Recently acquired TONBELLER

- A failure for **high R&D** investment in *Decision Management Strategy Software* to provide returns

- If software has a **base code that has been open sourced** they may have to **make the resulting software open sourced** and free

FICO™

15.2% Potential Upside

Leading Innovator

Control of High Growth Sector

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BACK UP SLIDES

Sensitivity Analysis

DCF - Perpetuity Growth Sensitivity								
				WACC				
	10%	11%	11%	**12%**	12%	13%	13%	14%
Terminal Growth Rate 7.1%	$ 145.92	$ 143.08	$ 140.31	**$ 137.62**	$ 135.00	$ 132.45	$ 129.96	$ 127.54
6.6%		$ 130.99	$ 128.49	**$ 126.06**	$ 123.69	$ 121.39	$ 119.14	$ 116.96
6.1%	**$ 123.29**	**$ 120.95**	**$ 118.68**	**$ 116.46**	**$ 114.31**	**$ 112.21**	**$ 110.17**	**$ 108.18**
5.6%	$ 114.63	$ 112.49	$ 110.40	**$ 108.37**	$ 106.40	$ 104.47	$ 102.60	$ 100.77
5.1%	$ 107.23	$ 105.26	$ 103.33	**$ 101.46**	$ 99.63	$ 97.86	$ 96.13	$ 94.44
4.6%	$ 100.84	$ 99.00	$ 97.22	**$ 95.48**	$ 93.79	$ 92.14	$ 90.53	$ 88.97

Free Cash Flows

		2016		2017	Forecasted 2018		2019		2020
EBIT	$	195.89	$	222.82	$ 252.85	$	286.29	$	323.50
- Taxes		-51.5144372		-58.59873	-66.49445386		-75.2878518		-85.0740177
	$	144.37	$	164.23	$ 186.35	$	211.00	$	238.42
+ D&A		15.31		17.15	19.21		21.51		24.10
- CAPEX		6.38		4.63	3.03		1.57		0.22
- Δ in NWC		36.56		36.56	36.56		36.56		36.56
Unlevered FCF	$	202.63	$	222.56	$ 245.16	$	270.64	$	299.29
Net Present Value		$875.86							

Capital Asset Pricing Model

Capital Asset Pricing Model		
Beta		**1.197**
Risk-free Rate		1.78%
Base Risk Premium		9.26%
Market Cap	$	3,170.00
Size Premium		1.17%
CAPM		**14.04%**

Segment Revenue

Revenue Estimates

Segment I — Applications

	Historical					Forecasted				
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Volume	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-
Price	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-
Total	383.0	424.4	476.1	504.2	526.3	578.9	636.8	700.5	770.6	847.6
% Growth		10.8%	12.2%	5.9%	4.4%	10.0%	10.0%	10.0%	10.0%	10.0%
Volume Growth		0.0%	0.0%	0.0%	0.0%	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Price Growth		0.0%	0.0%	0.0%	0.0%	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Segment II — Scores

	Historical					Forecasted				
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Volume	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Price	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total	168.5	175.6	180.8	186.5	207.0	225.0	244.6	265.9	289.0	314.1
% Growth		4.2%	3.0%	3.2%	11.0%	8.7%	8.7%	8.7%	8.7%	8.7%
Volume Growth		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Price Growth		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Segment III — Tools

	Historical					Forecasted				
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Volume	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-
Price	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-
Total	68.0	76.1	86.6	98.2	105.5	115.2	125.8	137.3	149.9	163.7
% Growth		11.9%	13.8%	13.4%	7.4%	9.2%	9.2%	9.2%	9.2%	9.2%
Volume Growth		0.0%	0.0%	0.0%	0.0%	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Price Growth		0.0%	0.0%	0.0%	0.0%	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Total Revenues

	Historical					Forecasted				
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Segment I	383.0	424.4	476.1	504.2	526.3	578.9	636.8	700.5	770.6	847.6
Segment II	168.5	175.6	180.8	186.5	207.0	225.0	244.6	265.9	289.0	314.1
Segment III	68.0	76.1	86.6	98.2	105.5	115.2	125.8	137.3	149.9	163.7
Total	619.5	676.1	743.5	788.9	838.8	919.1	1,007.2	1,103.7	1,209.5	1,325.4

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Income Statement

Income Statement

		Historical					Forecasted			
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue	619.7	676.4	743.4	789.0	838.8	919.1	1,007.2	1,103.7	1,209.5	1,325.4
% growth		*9.2%*	*9.9%*	*6.1%*	*6.3%*	*9.6%*	*9.6%*	*9.6%*	*9.6%*	*9.6%*
COGS (excl. D&A)	$ (186.47) $	(197.95) $	(229.47) $	(249.28) $	(270.54)	(272.1)	(290.3)	(309.7)	(330.4)	(352.7)
% of Revenue	*30.09%*	*29.26%*	*30.87%*	*31.60%*	*32.25%*	*29.61%*	*28.82%*	*28.06%*	*27.32%*	*26.61%*
Gross Profit	**433.2**	**478.5**	**514.0**	**539.7**	**568.2**	**647.0**	**716.9**	**794.0**	**879.0**	**972.8**
% Margin	*69.9%*	*70.7%*	*69.1%*	*68.4%*	*67.7%*	*70.4%*	*71.2%*	*71.9%*	*72.7%*	*73.4%*
SG&A	-223.615	-238.522	-268.395	-278.203	-300.002 $	(328.08)	(359.5)	(394.0)	(431.7)	(473.1)
% of Revenue	*36.09%*	*35.26%*	*36.10%*	*35.26%*	*35.77%*	*35.70%*	*35.70%*	*35.70%*	*35.70%*	*35.70%*
EBITDA	**209.6**	**240.0**	**245.6**	**261.5**	**268.2**	**318.9**	**357.4**	**400.0**	**447.3**	**499.6**
% Margin	*33.8%*	*35.5%*	*33.0%*	*33.1%*	*32.0%*	*34.7%*	*35.5%*	*36.2%*	*37.0%*	*37.7%*
Depreciation	-	-	-	-	-	-	-	-	-	-
Amort. of Intangibles	-7.741	-6.944	-13.535	-11.917	-13.673	(15.3)	(17.2)	(19.2)	(21.5)	(24.1)
Total D&A	(7.7)	(6.9)	(13.5)	(11.9)	(13.7)	(15.3)	(17.2)	(19.2)	(21.5)	(24.1)
Other Operating Expenses	-62.129	-59.527	-66.967	-83.435	-98.824	(107.7)	(117.4)	(128.0)	(139.5)	(152.1)
Total Operating Expenses	(293.5)	(305.0)	(348.9)	(373.6)	(412.5)	(451.1)	(494.1)	(541.1)	(592.7)	(649.3)
Operating Income (EBIT)	**139.7**	**173.5**	**165.1**	**166.1**	**155.7**	**195.9**	**222.8**	**252.8**	**286.3**	**323.5**
% Margin	*22.5%*	*25.6%*	*22.2%*	*21.1%*	*18.6%*	*21.3%*	*22.1%*	*22.9%*	*23.7%*	*24.4%*
0.097270272										
Interest Expense	(32.4)	(31.4)	(30.2)	(28.6)	(29.2)	(30.4)	(40.1)	(45.5)	(51.5)	(58.2)
Interest Income	2.2	-	-	-	-	-	-	-	-	-
Net Interest Inc. (Exp)	(30.2)	(31.4)	(30.2)	(28.6)	(29.2)	(30.4)	(40.1)	(45.5)	(51.5)	(58.2)
Other Non-Operating Income	0.3	(0.7)	0.6	(0.2)	0.8	-	-	-	-	-
EBT Excl. Unusual Items	109.8	141.4	135.5	137.3	127.3	165.5	182.7	207.3	234.8	265.3
% Margin	*17.7%*	*20.9%*	*18.2%*	*17.4%*	*15.2%*	*18.0%*	*18.1%*	*18.8%*	*19.4%*	*20.0%*
Unusual Items	(12.4)	(5.1)	(3.5)	(4.3)	(18.2)	(14.0)	(5.0)	-	-	-
EBT Incl. Unusual Items	97.4	136.3	132.0	133.0	109.1	151.5	177.7	207.3	234.8	265.3
Income Tax Expense	(25.9)	(44.2)	(41.9)	(38.3)	(22.7)	(43.5)	(48.1)	(54.5)	(61.7)	(69.8)
Earnings from Cont. Ops	71.5	92.0	90.1	94.8	86.4	108.0	129.7	152.8	173.0	195.5
Earnings from Discounted Ops.	-	-	-	-	-	-	-	-	-	-
Extraord Item & Acct. Change	-	-	-	-	-	-	-	-	-	-
Net Income to Company	71.5	92.0	90.1	94.8	86.4	108.0	129.7	152.8	173.0	195.5
Minority Int. in Earnings	-	-	-	-	-	0	0	0	0	0
Net Income	**71.5**	**92.0**	**90.1**	**94.8**	**86.4**	**108.0**	**129.7**	**152.8**	**173.0**	**195.5**
% Margin	*11.5%*	*13.6%*	*12.1%*	*12.0%*	*10.3%*	*11.7%*	*12.9%*	*13.8%*	*14.3%*	*14.8%*
EPS	$ 1.82 $	2.64 $	2.55 $	2.80 $	2.75 $	3.44 $	4.13 $	4.87 $	5.51 $	6.23