



An Introduction:

- Why The Applied Finance Group
- Linking Valuation and Corporate Performance
- Performance, Valuation and Equity Returns





Why The Applied Finance Group

Helping Investment Managers Make Better Investment Decisions Through Unique Corporate and Valuation Insights

AFG provides its clients a clear and robust set of applications to easily compare valuations and corporate performance over time, firms, industries and countries. By understanding differences between a stock's intrinsic value and market price, management effectiveness, and earnings quality, the firm's recommendations outperform the market regardless of a company's sector, size, or growth/value orientation.



Select AFG's Client Benefits Include:

- Ability to evaluate a company's ability to create shareholder value
- Identifying Under/Over Valued Companies
- Ability to Analyze and Compare Companies Globally
- Access to AFG's Proprietary Corporate Performance and Valuation Framework
- Buy /Hold /Sell Recommendations
- Stock Intrinsic Value and Expectations Analysis
- Equity Sensitivity Analysis and Performa Builder
- Management Quality and Wealth Creation Analysis
- AFG 50 Model Portfolio of S&P 500
- Stock Screener
- Excel Addin
- Tools and Research to help portfolio managers/analyst focus on investment decision-making.
- **And much more**



Why The Applied Finance Group

Why Traditional Accounting-Based Metrics Fall Short

Earnings are a poor proxy for economic profitability because they do not accurately reflect the true cash flow of the firm.

- On average, corporate earnings represent only 45 to 50 percent of a company's cash flow.
- Earnings do not reflect risk.

Accounting ratios mix/confuse many different value drivers.

- Return on Assets/Return on Equity fail to reflect wealth creation or destruction.
- Different Asset Life, Asset Mix, Asset Age, Capital Structure distort ratios across firms.

Accounting rules distort many aspects of economic reality.

- Research & Development costs, which are long term investments, are immediately expensed under GAAP accounting.
- Operating Leases, obligations which must be paid similar to debt never appear on company balance sheets.

Key questions when evaluating any investment:

- How much capital is required? How much capital does the company use in its operations? Is the amount growing or declining through time?
- What is the cash flow? How much cash does the company generate per unit of invested capital? Is the company's cash yield increasing or decreasing?
- What are the opportunity costs of capital? In the current marketplace, what should the average investor expect as a return for an investment given its risk?



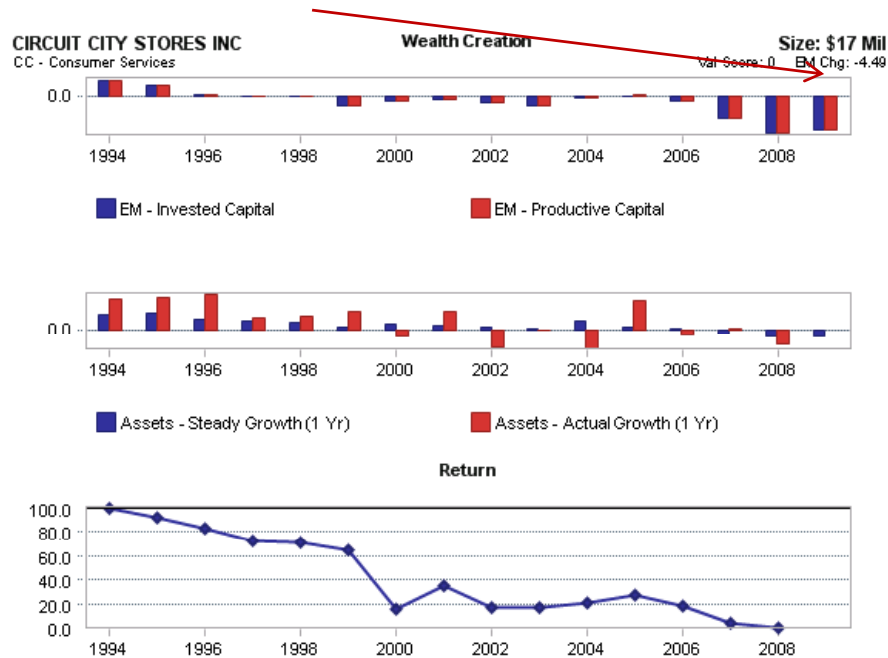
Why The Applied Finance Group

From Accounting to Economics to Valuation

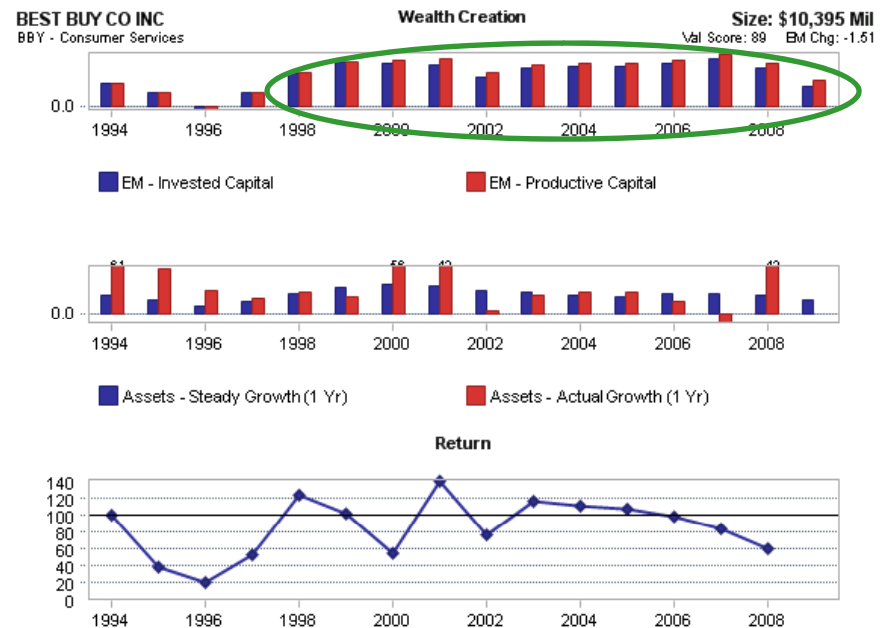
The Applied Finance Group (AFG) helps investment advisors, institutional investment, consulting, corporate firms globally in accurately measuring corporate performance and identifying mispriced equities. AFG developed its proprietary framework, Economic Margin, to correct distortions created by traditional accounting-based analysis.

Our Economic Margin (EM) Framework help investments professionals evaluate management's ability to create wealth for their shareholder. Below is a comparison between Best Buy (BBY) and Circuit City (CC). Not surprisingly, soon after we took a snapshot of Circuit City's Wealth Creation report they filed for bankruptcy.

Circuit City: Wealth Destroyer (Declining EM's)



Best Buy: Wealth Creator (Consistent EM's)



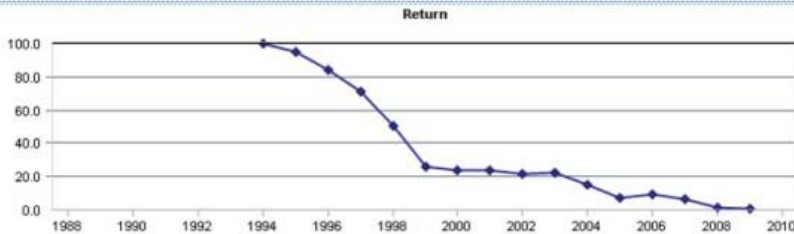


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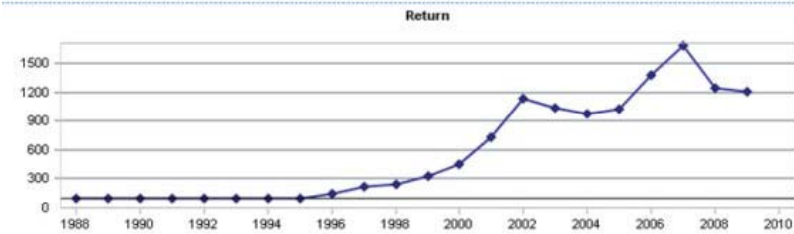
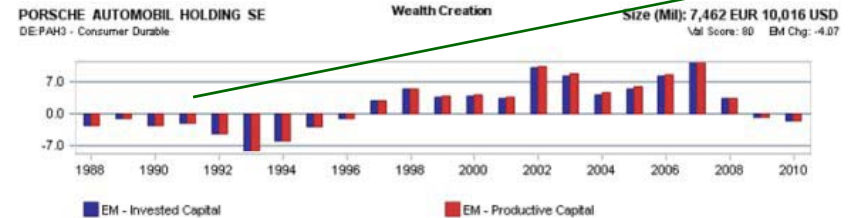
A Global Perspective

As you will notice, GM's management team has had a consistent track record of destroying shareholder value, while Porsche has done a great job of creating wealth for its shareholders.

General Motors: Wealth Destroyer

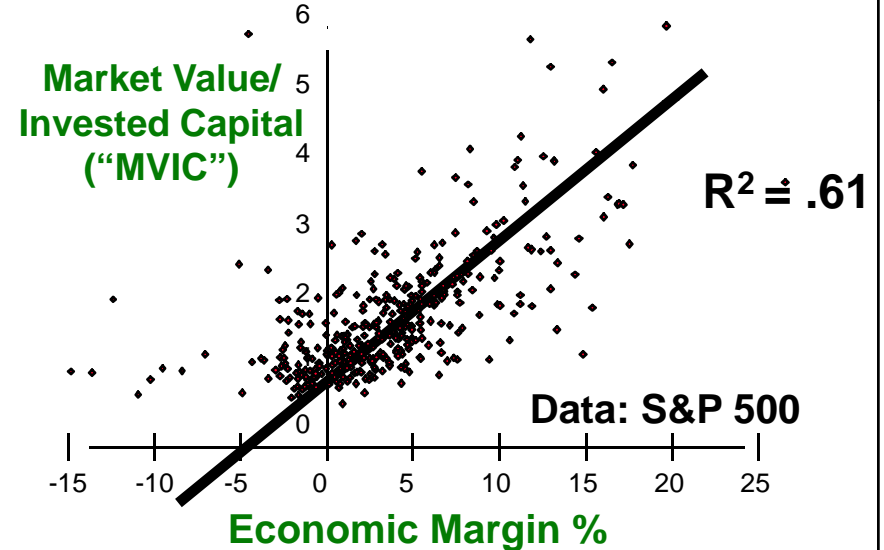
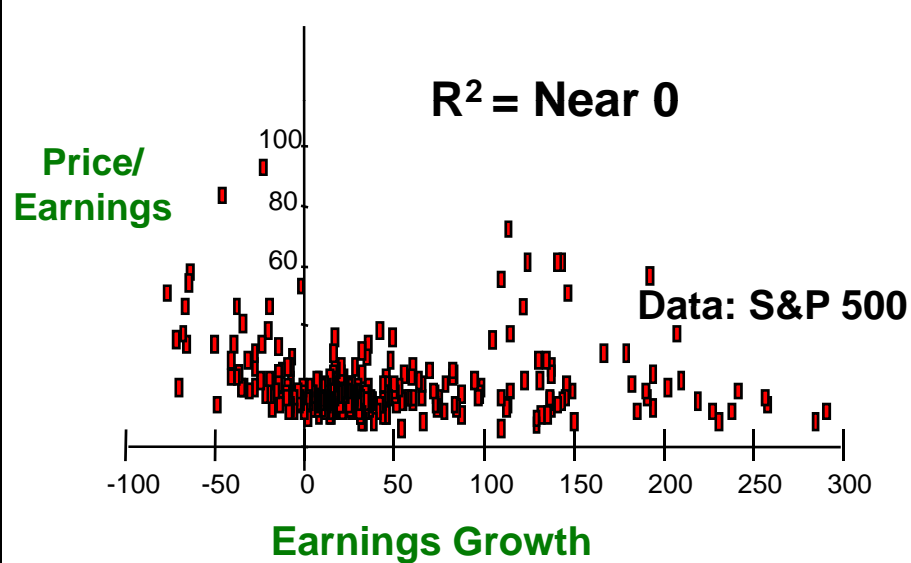


Porsche: Wealth Creator





Linking Performance to Value



Successful companies measure results, make decisions and set strategy with the goal of creating value. A company's performance measures must serve as a proxy for its market value creation. While important, S-T Earnings alone are a poor indicator of a company's value, due to what they do not measure.

Economic Margin is a more complete performance measure for companies to use to guide performance and motivate employees. Executives consider Cash Flow, Investment, Competition & Risk when setting strategy. The above charts show that investors do the same.



Why The Applied Finance Group

$$EV = \sum_{t=1}^T \frac{EP_t}{(1 + MDDR)^t}$$

The Economic Margin Framework is more than just a performance metric, as it encompasses a valuation system that explicitly addresses the four main value drivers of enterprise value:

profitability, competition, growth, and cost of capital. Unlike traditional valuation approaches that utilize highly sensitive perpetuity assumptions, AFG's approach incorporates company specific competitive advantage periods which identify companies that may lose excess returns over time faster than their competitors.

AFG equity valuation analysis can be harnessed through various sensitivity applications available to clients, such as AFG's Value Expectations and AFG's Prorma Builder

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	21
Income Statement														
Sales	12,470	13,170	13,740	16,285	17,005	19,601	19,600	22,308	22,470	25,914	27,082	30,519	33,402	36.6
Cost of Goods Sold ex. DDA	4,810	5,149	5,411	6,580	7,329	8,199	7,596	9,282	8,266	9,667	9,181	9,863	10,288	11.4
SG&A Expense	3,956	4,051	4,245	5,313	5,541	6,784	6,619	7,317	8,005	9,914	9,514	10,220	10,972	11.8
EBITDA	3,902	3,977	4,090	4,392	4,815	4,697	4,466	5,730	5,615	6,433	6,287	10,435	11,842	13.4
Depreciation Expense	750	789	789	986	1,114	1,203	1,198	1,276	1,427	1,723	1,695	1,978	2,300	2.6
Amortization Expense	34	39	39	182	64	71	80	83	132	132	142	142	142	1
Total DDA Expense	784	828	827	1,168	1,177	1,274	1,279	1,359	1,559	1,855	1,837	2,121	2,442	2.8
Operating Inc. EBIT	3,118	3,149	3,262	3,224	3,638	3,423	4,177	4,379	4,056	4,679	7,450	8,315	9,400	10.6
Interest Expense	104	145	114	307	239	188	200	154	416	593	566	643	731	8
Non Operating Inc./Exp.	227	392	668	(1,034)	275	500	149	394	(1,364)	484	0	0	0	0
Pretax Inc.	3,241	3,397	3,817	1,883	3,674	3,735	4,126	4,620	2,276	4,470	6,884	7,672	8,669	9.7
Tax Expense	907	951	1,030	333	880	981	950	1,248	560	863	1,892	1,886	2,131	2.4
Minority Interest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inc. Before Pref., Extra. & Disc. Ops.	2,333	2,446	2,786	1,550	2,794	2,753	3,176	3,372	1,717	3,605	5,192	5,786	6,538	7.3
Preferred Dividends	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Inc. Avail. to Common	2,333	2,446	2,786	1,550	2,794	2,753	3,176	3,372	1,717	3,605	5,192	5,786	6,538	7.3
Net Inc. Avail. to Common Adj. for St	2,333	2,446	2,786	2,940	3,243	3,479	3,351	3,383	3,881	4,429	5,192	5,786	6,538	7.3
Shares for EPS	1,516	1,547	1,546	1,555	1,563	1,560	1,560	1,539	1,537	1,550	1,554	1,521	1,482	1.4
Shares for Valuation	1,516	1,547	1,546	1,555	1,563	1,565	1,560	1,539	1,537	1,550	1,552	1,552	1,552	1.5
EPS	1.54	1.58	1.80	1.89	2.07	2.22	2.15	2.20	2.52	2.86	3.32	3.70	4.18	4
Supplemental Items:														
Rental Expense	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Research & Development	1,222	1,279	1,261	1,578	1,574	1,720	1,788	1,817	2,261	2,491	2,684	3,089	3,549	4.0
Special Items	(6)	0	0	(2,336)	(712)	(1,152)	(279)	(17)	(8,435)	(1,308)	0	0	0	0
COGS ex. DDA	4610	5149	5411	6580	7329	8199	7596	9282	8266	9667	9181	9863	10500	
As % of Sales	36.9%	39.1%	39.4%	40.4%	41.4%	41.7%	38.6%	41.6%	36.7%	36.9%	32.8%	32.3%	31.7%	
% Growth Rate		11.7%	5.1%	21.6%	11.4%	11.9%	-7.4%	22.2%	-11.1%	15.9%	-4.0%	7.4%	7.4%	



Value Expectation – Sample 1

Value Expectations lets our clients harness the Economic Margin Framework, and solve for the performance a company must deliver to justify its current price. For example, Value Expectations for Cisco in 1995 revealed that Cisco was really more of a value stock, in spite of a P/E greater than 50. At that time, the expectations priced into Cisco's stock were very modest. The table below shows Cisco actual value driver performance prior to 1995, the expectations priced into Cisco's stock at the start of 1995, and what Cisco subsequently delivered.

Table 1: Value Expectations Priced into Cisco 12/94

LOW Expectations		Performance (92/94)	Expectations priced into stock 12/94	Performance (95/99)
	Sales Growth	43%	0%	60%
	EBITDA	32%	20%	35%

Value Expectations indicated that despite a 50+ P/E Cisco was relatively cheap. Huge potential rewards were available to those that took the time to think through the analysis.

By significantly exceeding the expectations priced into its stock, Cisco delivered extraordinary returns to its owners (68% annualized total shareholder return in excess of the S&P 500 from 95-99).

Table 2: Value Expectations priced into stock (00)

HIGH Expectations		Annualized Performance (98-00)	Expectations priced into stock (00)	'01 Performance
	Sales Growth	43%	65%	40%
	EBITDA	32%	32%	10%

By July 2000, Cisco was priced to deliver extraordinary future levels of growth and profitability. Over the subsequent year, it failed to achieve those expectations.

By significantly falling short of these market expectations, Cisco has returned an annualized return 62% lower than the S&P 500 since July of 2000.



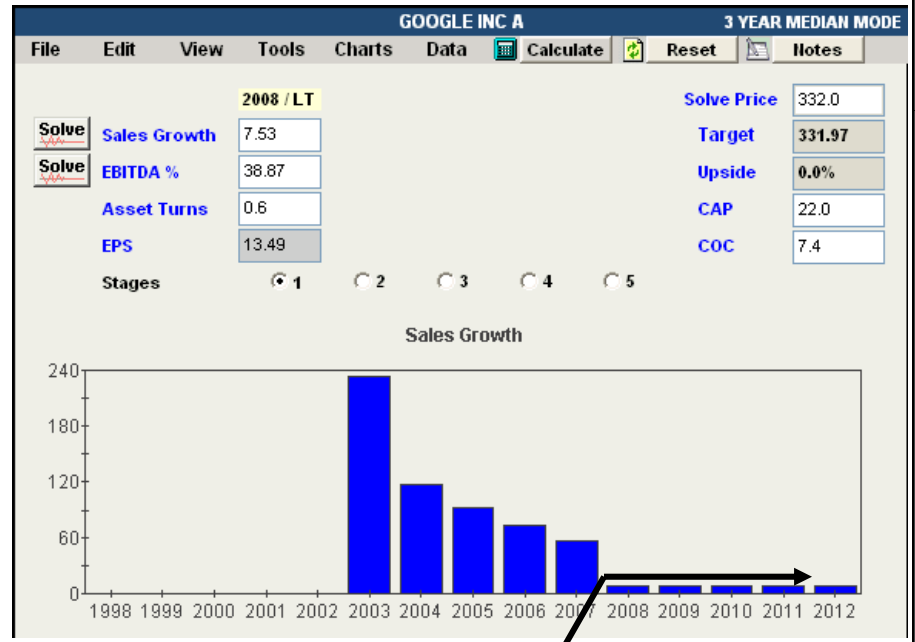
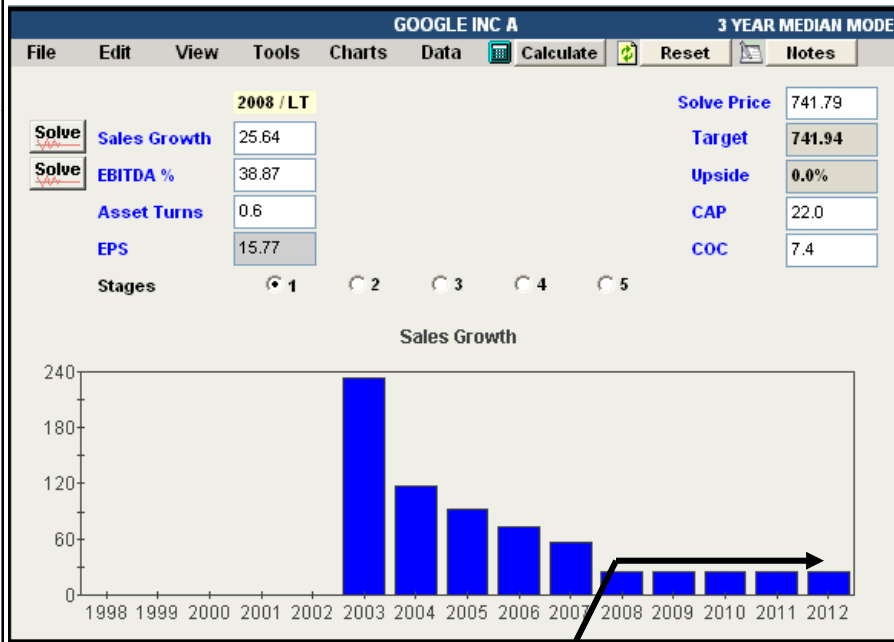
Value Expectation – Sample 2

HIGH Expectations

LOW Expectations

GOOG Price Close: November 6, 2007

GOOG Price Close: October 10, 2008

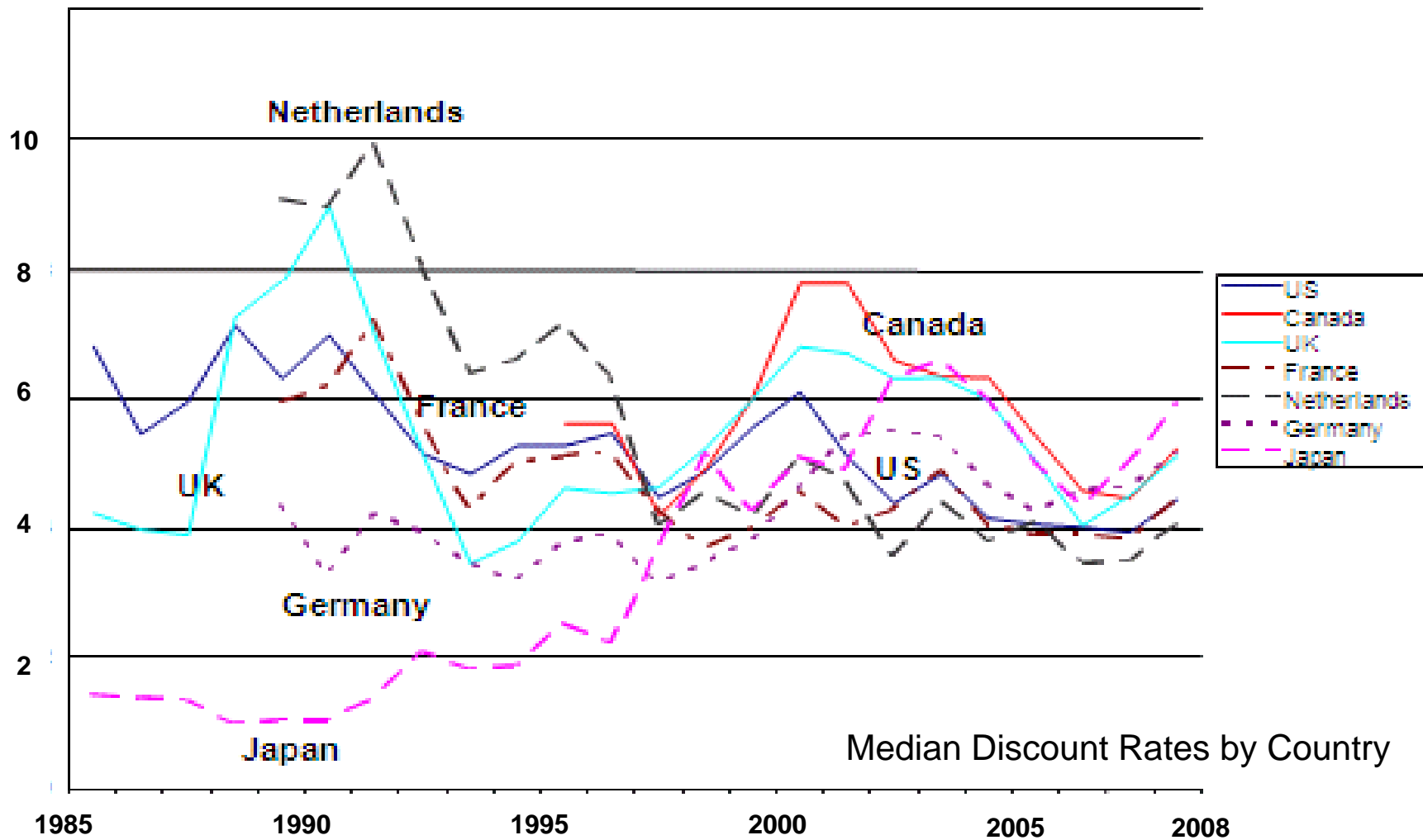


Sales priced into stock price
 \$16,654 (2007)
 To **25.6% CAGR**
 \$51,951 (2012)

Sales priced into stock price
 \$16,654 (2007)
 To **7.5% CAGR**
 \$23,856 (2012)



Discount Rates By Country





International Research Performance Review

Variables Analyzed in Report

Percent to Target

Earnings Quality

EM MOJO

Management Quality

Buy/Sell (with Momentum)

Buy/Sell





Variables Tested: AFG Database

	Buy Criteria	Sell Criteria
Valuation Rank Ranks how over/undervalued a company is relative to a specific universe	Top Half	Bottom Half
Earnings Quality Many companies are channel-stuffers, which is one form of accruals that often leads to negative earnings surprises.	Bottom Half	Top Half
EM Momentum Month over month change in the 1 year out Economic Margin. Identifies companies expected to improve economic performance, not just due to share buy backs or other non economic factors.	EM MOJO > 0	EM MOJO < 0
Management Quality Quantifies Management ability to follow a wealth creation strategy	MQS > -1	MQS = -1
Buy/Sell Identifies investment opportunities and potential torpedoes.	AFG Buy	AFG Sell
Buy/Sell (with Momentum) Identifies Investment opportunities and potential torpedoes with a momentum overlay.	AFG Buy & EM MOJO >= 0 & MQS >=0	AFG Sell & EM MOJO <= 0 & MQS < 0



United States: 1/1/1999 – 12/31/2008





Valuation Across the Globe

Annualized Returns

Country: Variable	Returns					Count			Batting Avg.		Test Dates
	Uni	TH	BH	TH-BH	TH-Uni	Uni	TH	BH	TH	BH	
United States: Valuation Rank	5.8%	11.1%	0.4%	10.7%	5.3%	4224	2106	2120	65.0%	60.0%	1/1999 – 12/2008
United States: Earnings Quality	5.2%	9.9%	0.5%	9.4%	4.7%	3493	1761	1734	63.3%	55.8%	
United States: EM Momentum	5.7%	9.6%	0.7%	8.9%	3.8%	4186	1414	1668	67.5%	67.5%	
United States: Buy/Sell (w/Momentum)	6.0%	14.8%	-6.4%	21.2%	8.9%	4084	562	314	72.5%	65.8%	
United States: Buy/Sell	5.8%	12.7%	-2.4%	15.1%	6.9%	4228	632	863	65.8%	74.2%	
Belgium: Valuation Rank	-0.7%	0.4%	-1.9%	2.4%	1.1%	75	38	38	55.0%	52.5%	1/1999 – 12/2008
Belgium: Earnings Quality	-0.9%	1.2%	-2.5%	3.7%	2.1%	52	27	27	55.8%	49.2%	
Belgium: EM Momentum	-0.1%	6.0%	-5.1%	11.2%	6.1%	75	26	32	65.0%	56.7%	
Belgium: Buy/Sell (w/Momentum)	-0.2%	4.9%	-1.4%	6.3%	5.0%	71	9	7	55.8%	48.3%	
Belgium: Buy/Sell	-0.7%	3.0%	0.6%	2.4%	3.7%	75	14	28	56.7%	50.0%	
Spain: Valuation Rank	5.2%	8.6%	2.0%	6.6%	3.5%	100	50	51	61.7%	59.2%	1/1999 – 12/2008
Spain: Earnings Quality	4.8%	7.4%	1.8%	5.6%	2.6%	82	41	41	50.8%	51.7%	
Spain: EM Momentum	5.6%	8.4%	0.9%	7.5%	2.8%	102	41	42	65.0%	56.7%	
Spain: Buy/Sell (w/Momentum)	5.5%	9.4%	2.1%	7.3%	3.9%	97	11	7	59.2%	55.0%	
Spain: Buy/Sell	5.2%	9.5%	3.9%	5.7%	4.4%	100	21	34	63.3%	51.7%	
Sweden: Valuation Rank	4.5%	8.6%	0.3%	8.3%	4.1%	151	75	77	68.3%	65.8%	1/1999 – 12/2008
Sweden: Earnings Quality	4.4%	9.9%	-0.8%	10.7%	5.6%	127	65	63	58.3%	56.7%	
Sweden: EM Momentum	5.1%	11.9%	0.9%	11.0%	6.8%	153	58	72	70.0%	64.2%	
Sweden: Buy/Sell (w/Momentum)	4.6%	12.4%	-10.7%	23.1%	7.8%	146	18	9	54.2%	59.2%	
Sweden: Buy/Sell	4.5%	8.8%	2.7%	6.0%	4.2%	151	28	48	53.3%	48.3%	
Switzerland: Valuation Rank	5.5%	7.0%	3.8%	3.2%	1.5%	153	76	78	60.0%	55.8%	1/1999 – 12/2008
Switzerland: Earnings Quality	5.8%	6.5%	4.7%	1.8%	0.7%	123	63	61	50.8%	50.8%	
Switzerland: EM Momentum	5.1%	9.6%	0.7%	8.9%	4.5%	154	57	72	67.5%	62.5%	
Switzerland: Buy/Sell (w/Momentum)	5.5%	13.5%	0.0%	13.5%	8.1%	147	18	11	55.0%	55.0%	
Switzerland: Buy/Sell	5.5%	5.0%	3.6%	1.5%	-0.4%	153	30	49	47.5%	55.0%	



Source: AFGView Databases: United States, Belgium, Spain, Sweden, Switzerland: 1/1999 – 12/2008.
Equal Weighted, Monthly Re-balanced Total Returns.



Valuation Across the Globe

Annualized Returns

Country: Variable	Returns					Count			Batting Avg.		Test Dates
	Uni	TH	BH	TH-BH	TH-Uni	Uni	TH	BH	TH	BH	
Germany: Valuation Rank	3.4%	6.9%	-0.1%	7.0%	3.5%	337	167	170	59.6%	59.6%	1/1999 – 6/2008
Germany: Earnings Quality	4.7%	9.9%	-0.6%	10.5%	5.1%	276	140	137	60.5%	58.8%	
Germany: EM Momentum	2.1%	8.6%	-4.5%	13.1%	6.4%	344	102	135	73.7%	66.7%	
Germany: Buy/Sell (w/Momentum)	5.1%	12.7%	-4.2%	16.9%	7.6%	313	45	28	56.1%	61.4%	
Germany: Buy/Sell	3.4%	6.7%	1.4%	5.3%	3.3%	337	50	101	50.9%	50.9%	
France: Valuation Rank	7.5%	9.8%	5.2%	4.6%	2.3%	333	166	169	63.2%	57.0%	1/1999 – 6/2008
France: Earnings Quality	7.6%	9.9%	5.2%	4.7%	2.3%	293	148	146	59.6%	53.5%	
France: EM Momentum	7.7%	13.2%	1.5%	11.7%	5.6%	338	116	149	71.9%	64.9%	
France: Buy/Sell (w/Momentum)	7.9%	15.2%	3.9%	11.3%	7.3%	318	43	24	64.9%	56.1%	
France: Buy/Sell	7.5%	9.0%	3.1%	5.9%	1.5%	333	60	93	52.6%	65.8%	
Netherlands: Valuation Rank	7.9%	10.6%	5.0%	5.5%	2.7%	128	64	65	57.0%	57.0%	1/1999 – 6/2008
Netherlands: Earnings Quality	7.9%	10.6%	5.5%	5.1%	2.7%	111	57	55	56.1%	51.8%	
Netherlands: EM Momentum	7.6%	12.9%	2.5%	10.4%	5.3%	132	50	62	59.6%	60.5%	
Netherlands: Buy/Sell (w/Momentum)	8.2%	11.7%	7.1%	4.6%	3.5%	124	15	9	53.5%	51.8%	
Netherlands: Buy/Sell	7.9%	8.1%	4.7%	3.4%	0.2%	128	25	43	55.3%	60.5%	
United Kingdom: Valuation Rank	12.9%	16.6%	9.3%	7.3%	3.7%	895	444	452	69.7%	61.6%	1/1999 – 3/2007
United Kingdom: Earnings Quality	12.0%	15.8%	8.2%	7.5%	3.7%	758	383	376	65.7%	57.6%	
United Kingdom: EM Momentum	12.9%	18.3%	8.8%	9.4%	5.4%	881	272	329	72.7%	61.6%	
United Kingdom: Buy/Sell (w/Momentum)	13.0%	20.2%	5.4%	14.8%	7.1%	865	123	74	66.7%	61.6%	
United Kingdom: Buy/Sell	12.9%	17.7%	9.9%	7.8%	4.8%	895	140	238	58.6%	59.6%	
Japan: Valuation Rank	11.5%	16.9%	6.3%	10.6%	5.4%	2103	1043	1062	71.7%	65.7%	1/1999 – 3/2007
Japan: Earnings Quality	10.8%	11.9%	9.5%	2.4%	1.2%	1895	958	939	62.6%	55.6%	
Japan: EM Momentum	11.6%	16.9%	5.2%	11.7%	5.3%	2065	527	603	65.7%	67.7%	
Japan: Buy/Sell (w/Momentum)	11.3%	18.3%	5.3%	13.0%	7.0%	2024	251	187	73.7%	63.6%	
Japan: Buy/Sell	11.5%	16.0%	6.4%	9.7%	4.6%	2103	357	514	68.7%	64.6%	
Canada: Valuation Rank	-7.3%	-5.6%	-9.1%	3.6%	1.7%	447	223	225	61.5%	55.8%	8/2004 – 12/2008
Canada: Earnings Quality	-7.4%	-5.4%	-9.7%	4.3%	2.0%	395	201	196	57.7%	53.8%	
Canada: EM Momentum	-7.3%	2.8%	-13.0%	15.8%	10.0%	445	136	174	67.3%	73.1%	
Canada: Buy/Sell (w/Momentum)	-6.7%	2.7%	-11.1%	13.8%	9.5%	431	60	37	51.9%	50.0%	
Canada: Buy/Sell	-7.3%	-2.2%	-8.3%	6.1%	5.1%	447	78	112	67.3%	53.8%	



Source: AFGView Databases: Germany, France, Netherlands: 1/1999 – 6/2008, United Kingdom, Japan: 1/1999 – 3/2007.
Equal Weighted, Monthly Re-balanced Total Returns.



Valuation Across the Globe

Annualized Returns

Country: Variable	Returns					Count			Batting Avg.		Test Dates
	Uni	TH	BH	TH-BH	TH-Uni	Uni	TH	BH	TH	BH	
South Africa: Valuation Rank	20.3%	23.5%	17.0%	6.5%	3.2%	151	75	77	56.7%	54.2%	1/1999 – 12/2008
South Africa: Earnings Quality	22.5%	31.2%	13.9%	17.3%	8.7%	102	52	51	72.5%	69.2%	
South Africa: EM Momentum	20.4%	26.0%	15.4%	10.6%	5.6%	149	51	61	62.5%	59.2%	
South Africa: Buy/Sell (w/Momentum)	21.1%	26.6%	12.1%	14.4%	5.4%	138	20	13	57.5%	60.0%	
South Africa: Buy/Sell	20.3%	21.2%	16.5%	4.7%	0.9%	151	30	50	53.3%	58.3%	
Singapore: Valuation Rank	6.3%	7.9%	4.7%	3.2%	1.5%	192	96	97	51.7%	48.3%	1/1999 – 12/2008
Singapore: Earnings Quality	6.2%	10.5%	1.9%	8.7%	4.3%	147	74	73	59.2%	55.0%	
Singapore: EM Momentum	6.3%	13.7%	-3.2%	16.9%	7.3%	187	53	63	68.3%	72.5%	
Singapore: Buy/Sell (w/Momentum)	6.6%	12.8%	-0.6%	13.3%	6.2%	171	26	12	55.0%	56.7%	
Singapore: Buy/Sell	6.3%	12.7%	3.8%	8.9%	6.4%	192	38	57	60.8%	51.7%	
Hong Kong: Valuation Rank	6.6%	8.5%	4.6%	4.0%	1.9%	258	128	131	51.7%	46.7%	1/1999 – 12/2008
Hong Kong: Earnings Quality	6.4%	12.4%	0.5%	11.9%	5.9%	185	94	92	68.3%	63.3%	
Hong Kong: EM Momentum	6.4%	14.7%	1.3%	13.5%	8.3%	252	80	98	70.8%	60.8%	
Hong Kong: Buy/Sell (w/Momentum)	6.8%	7.2%	-1.1%	8.4%	0.4%	234	37	17	45.0%	57.5%	
Hong Kong: Buy/Sell	6.6%	10.8%	4.7%	6.1%	4.1%	258	40	77	52.5%	48.3%	
Australia: Valuation Rank	3.6%	3.2%	3.8%	-0.6%	-0.4%	378	188	191	58.3%	48.3%	1/1999 – 12/2008
Australia: Earnings Quality	4.1%	8.6%	-0.6%	9.2%	4.5%	279	141	139	69.2%	65.8%	
Australia: EM Momentum	3.3%	11.7%	-2.2%	13.9%	8.4%	370	130	156	80.8%	67.5%	
Australia: Buy/Sell (w/Momentum)	4.0%	9.2%	-4.4%	13.6%	5.3%	339	48	26	55.8%	61.7%	
Australia: Buy/Sell	3.6%	1.6%	5.7%	-4.1%	-2.0%	378	63	103	46.7%	41.7%	
Taiwan: Valuation Rank	-3.7%	-0.5%	-7.0%	6.5%	3.2%	265	132	134	55.8%	54.2%	1/1999 – 12/2008
Taiwan: Earnings Quality	-4.6%	-2.1%	-7.4%	5.2%	2.4%	214	109	106	59.2%	57.5%	
Taiwan: EM Momentum	-4.1%	3.3%	-7.4%	10.7%	7.4%	260	67	90	65.0%	55.8%	
Taiwan: Buy/Sell (w/Momentum)	-3.8%	-3.2%	-10.8%	7.6%	0.6%	231	33	21	50.0%	57.5%	
Taiwan: Buy/Sell	-3.7%	-2.0%	-5.4%	3.4%	1.7%	265	65	78	52.5%	50.8%	
South Korea: Valuation Rank	9.6%	18.3%	1.4%	16.9%	8.7%	347	172	175	70.8%	65.8%	1/1999 – 12/2008
South Korea: Earnings Quality	9.7%	14.4%	4.9%	9.6%	4.8%	271	137	135	65.8%	63.3%	
South Korea: EM Momentum	9.0%	17.4%	3.2%	14.2%	8.4%	343	99	116	66.7%	60.0%	
South Korea: Buy/Sell (w/Momentum)	10.1%	19.4%	2.1%	17.3%	9.3%	293	34	30	58.3%	53.3%	
South Korea: Buy/Sell	9.6%	12.9%	6.5%	6.5%	3.3%	347	44	91	58.3%	50.0%	



Source: AFGView Databases: South Africa, Singapore, Hong Kong, Australia: 1/1999 – 12/2008; Canada: 8/2004 – 12/2008.
Equal Weighted, Monthly Re-balanced Total Returns.



Valuation Across the Globe

Annualized Returns – Valuation Rank

Valuation Rank	Returns					Count			Batting Avg.	
	Uni	TH	BH	TH-BH	TH-Uni	Uni	TH	BH	TH	BH
United States	5.8%	11.1%	0.4%	10.7%	5.3%	4224	2106	2120	65.0%	60.0%
Canada	-7.3%	-5.6%	-9.1%	3.6%	1.7%	447	223	225	61.5%	55.8%
United Kingdom	12.9%	16.6%	9.3%	7.3%	3.7%	895	444	452	69.7%	61.6%
Japan	11.5%	16.9%	6.3%	10.6%	5.4%	2103	1043	1062	71.7%	65.7%
France	7.5%	9.8%	5.2%	4.6%	2.3%	333	166	169	63.2%	57.0%
Germany	3.4%	6.9%	-0.1%	7.0%	3.5%	337	167	170	59.6%	59.6%
Netherlands	7.9%	10.6%	5.0%	5.5%	2.7%	128	64	65	57.0%	57.0%
Belgium	-0.7%	0.4%	-1.9%	2.4%	1.1%	75	38	38	55.0%	52.5%
Spain	5.2%	8.6%	2.0%	6.6%	3.5%	100	50	51	61.7%	59.2%
Sweden	4.5%	8.6%	0.3%	8.3%	4.1%	151	75	77	68.3%	65.8%
Switzerland	5.5%	7.0%	3.8%	3.2%	1.5%	153	76	78	60.0%	55.8%
South Africa	20.3%	23.5%	17.0%	6.5%	3.2%	151	75	77	56.7%	54.2%
Australia	3.6%	3.2%	3.8%	-0.6%	-0.4%	378	188	191	58.3%	48.3%
Hong Kong	6.6%	8.5%	4.6%	4.0%	1.9%	258	128	131	51.7%	46.7%
Singapore	6.3%	7.9%	4.7%	3.2%	1.5%	192	96	97	51.7%	48.3%
Taiwan	-3.7%	-0.5%	-7.0%	6.5%	3.2%	265	132	134	55.8%	54.2%
South Korea	9.6%	18.3%	1.4%	16.9%	8.7%	347	172	175	70.8%	65.8%



Source: AFGView Databases:

United States, Belgium, Spain, Sweden, Switzerland, South Africa, Singapore, Hong Kong, Australia, Taiwan, South Korea: 1/1999 – 12/2008;

Germany, France, Netherlands: 1/1999 – 6/2008;

United Kingdom, Japan: 1/1999 – 3/2007;

Canada: 8/2004 – 12/2008.

Equal Weighted, Monthly Re-balanced Total Returns.



Valuation Across the Globe

Annualized Returns – Earnings Quality

Earnings Quality	Returns					Count			Batting Avg.	
	Uni	TH	BH	TH-BH	TH-Uni	Uni	TH	BH	TH	BH
United States	5.2%	9.9%	0.5%	9.4%	4.7%	3493	1761	1734	63.3%	55.8%
Canada	-7.4%	-5.4%	-9.7%	4.3%	2.0%	395	201	196	57.7%	53.8%
United Kingdom	12.0%	15.8%	8.2%	7.5%	3.7%	758	383	376	65.7%	57.6%
Japan	10.8%	11.9%	9.5%	2.4%	1.2%	1895	958	939	62.6%	55.6%
France	7.6%	9.9%	5.2%	4.7%	2.3%	293	148	146	59.6%	53.5%
Germany	4.7%	9.9%	-0.6%	10.5%	5.1%	276	140	137	60.5%	58.8%
Netherlands	7.9%	10.6%	5.5%	5.1%	2.7%	111	57	55	56.1%	51.8%
Belgium	-0.9%	1.2%	-2.5%	3.7%	2.1%	52	27	27	55.8%	49.2%
Spain	4.8%	7.4%	1.8%	5.6%	2.6%	82	41	41	50.8%	51.7%
Sweden	4.4%	9.9%	-0.8%	10.7%	5.6%	127	65	63	58.3%	56.7%
Switzerland	5.8%	6.5%	4.7%	1.8%	0.7%	123	63	61	50.8%	50.8%
South Africa	22.5%	31.2%	13.9%	17.3%	8.7%	102	52	51	72.5%	69.2%
Australia	4.1%	8.6%	-0.6%	9.2%	4.5%	279	141	139	69.2%	65.8%
Hong Kong	6.4%	12.4%	0.5%	11.9%	5.9%	185	94	92	68.3%	63.3%
Singapore	6.2%	10.5%	1.9%	8.7%	4.3%	147	74	73	59.2%	55.0%
Taiwan	-4.6%	-2.1%	-7.4%	5.2%	2.4%	214	109	106	59.2%	57.5%
South Korea	9.7%	14.4%	4.9%	9.6%	4.8%	271	137	135	65.8%	63.3%



Source: AFGView Databases:

United States, Belgium, Spain, Sweden, Switzerland, South Africa, Singapore, Hong Kong, Australia, Taiwan, South Korea: 1/1999 – 12/2008;

Germany, France, Netherlands: 1/1999 – 6/2008;

United Kingdom, Japan: 1/1999 – 3/2007;

Canada: 8/2004 – 12/2008.

Equal Weighted, Monthly Re-balanced Total Returns.



Valuation Across the Globe

Annualized Returns – EM Momentum

EM Momentum	Returns					Count			Batting Avg.	
	Uni	TH	BH	TH-BH	TH-Uni	Uni	TH	BH	TH	BH
United States	5.7%	9.6%	0.7%	8.9%	3.8%	4186	1414	1668	67.5%	67.5%
Canada	-7.3%	2.8%	-13.0%	15.8%	10.0%	445	136	174	67.3%	73.1%
United Kingdom	12.9%	18.3%	8.8%	9.4%	5.4%	881	272	329	72.7%	61.6%
Japan	11.6%	16.9%	5.2%	11.7%	5.3%	2065	527	603	65.7%	67.7%
France	7.7%	13.2%	1.5%	11.7%	5.6%	338	116	149	71.9%	64.9%
Germany	2.1%	8.6%	-4.5%	13.1%	6.4%	344	102	135	73.7%	66.7%
Netherlands	7.6%	12.9%	2.5%	10.4%	5.3%	132	50	62	59.6%	60.5%
Belgium	-0.1%	6.0%	-5.1%	11.2%	6.1%	75	26	32	65.0%	56.7%
Spain	5.6%	8.4%	0.9%	7.5%	2.8%	102	41	42	65.0%	56.7%
Sweden	5.1%	11.9%	0.9%	11.0%	6.8%	153	58	72	70.0%	64.2%
Switzerland	5.1%	9.6%	0.7%	8.9%	4.5%	154	57	72	67.5%	62.5%
South Africa	20.4%	26.0%	15.4%	10.6%	5.6%	149	51	61	62.5%	59.2%
Australia	3.3%	11.7%	-2.2%	13.9%	8.4%	370	130	156	80.8%	67.5%
Hong Kong	6.4%	14.7%	1.3%	13.5%	8.3%	252	80	98	70.8%	60.8%
Singapore	6.3%	13.7%	-3.2%	16.9%	7.3%	187	53	63	68.3%	72.5%
Taiwan	-4.1%	3.3%	-7.4%	10.7%	7.4%	260	67	90	65.0%	55.8%
South Korea	9.0%	17.4%	3.2%	14.2%	8.4%	343	99	116	66.7%	60.0%



Source: AFGView Databases:

United States, Belgium, Spain, Sweden, Switzerland, South Africa, Singapore, Hong Kong, Australia, Taiwan, South Korea: 1/1999 – 12/2008;

Germany, France, Netherlands: 1/1999 – 6/2008;

United Kingdom, Japan: 1/1999 – 3/2007;

Canada: 8/2004 – 12/2008.

Equal Weighted, Monthly Re-balanced Total Returns.



Valuation Techniques (Strengths and Weakness)

DDM	P/E Analysis	DCF	CFIRR	RONA EP
<p>MAJORCOMPONENTS</p> <ul style="list-style-type: none"> Dividend at $t = 1$ Growth rate Discount rate <hr/> $P_0 = \frac{D_1}{k - g}$ $D_1 = E_1(1 - b)$ $g = ROE \times b$ <hr/> <p>ADVANTAGES</p> <ul style="list-style-type: none"> Quick and easy Useful indicator of market's expectations for growth opportunities <hr/> <p>DISADVANTAGES</p> <ul style="list-style-type: none"> Difficult to use without dividends Overly influenced by g Accounting not economics based <hr/> <p>FALLACIOUSUNDERPINNINGS</p> <ul style="list-style-type: none"> Assumes constant growth Assumes dividends Assumes growth in dividends is important Beta derived discount rate k No inflation adjustment No Off-Balance Sheet (OBS) adjustments 	<p>MAJORCOMPONENTS</p> <ul style="list-style-type: none"> Earnings per share Growth rate Reinvestment rate <hr/> <p><i>Note, by association</i></p> $\frac{P_0}{E_1} = \frac{E_1(1 - b)}{k - ROE \times b}$ <p><i>Hence, P/E's have all the pitfalls of DDM analysis</i></p> <hr/> <p>ADVANTAGES</p> <ul style="list-style-type: none"> Quick and easy Useful indicator of market's expectations for growth opportunities High P/E multiple appears to indicate firm is endowed with ample growth opportunities <hr/> <p>DISADVANTAGES</p> <ul style="list-style-type: none"> P/E ratios vary across industries Distorted by capital structure Accounting not economics based <hr/> <p>FALLACIOUSUNDERPINNINGS</p> <ul style="list-style-type: none"> Beta derived discount rate k P_0 distorted by ROE For $ROE > k$, P/E increases for higher reinvestment Net income generally misstated P/E distorted by inflation 	<p>MAJORCOMPONENTS</p> <ul style="list-style-type: none"> Cash Flows at t, t_2, t_3, \dots Discount Rate – Beta derived Reinvestment rate <hr/> $PV = \sum \frac{C_t}{(1 + r)^t}$ <hr/> <p>ADVANTAGES</p> <ul style="list-style-type: none"> Potential Accuracy Ease of use Flexibility Common acceptance <hr/> <p>DISADVANTAGES</p> <ul style="list-style-type: none"> Time consuming Lack of Standard Generally accounting based <hr/> <p>FALLACIOUSUNDERPINNINGS</p> <ul style="list-style-type: none"> Beta derived discount rate r Perpetuity assumptions imply no competition Lack of clarity on: <ul style="list-style-type: none"> Inflation adjustment R&D expense Rental Expense 	<p>MAJORCOMPONENTS</p> <ul style="list-style-type: none"> CFIRR at t, t_2, t_3, \dots Discount Rate – Market derived Reinvestment Rate <hr/> $CFIRR = PV \text{ of Cash Flows}$ <hr/> <p><i>CFIRR represents a significant improvement over other valuation models at measuring intrinsic value</i></p> <hr/> <p>ADVANTAGES</p> <ul style="list-style-type: none"> Excellent link to value Income/Asset Insight Better measure of economic profits Performance based metric <hr/> <p>DISADVANTAGES</p> <ul style="list-style-type: none"> Influenced by historical cost in depreciation Cumbersome calculations Black-box <hr/> <p>FALLACIOUSUNDERPINNINGS</p> <ul style="list-style-type: none"> Size bias -- discount rate inaccurate CFIRR unduly affected by leverage Inconsistent decay assumptions Firms which change capital structure not comparable through time 	<p>MAJORCOMPONENTS</p> <ul style="list-style-type: none"> NOPAT Capital Charge Tax Benefit <hr/> $PV = \frac{NOPAT}{k} + tD + \frac{I(r - c^*)T}{c^*(1 + c^*)}$ <p>(1) Current Operations (2) Tax Benefit of Debt (3) Forward Plan incorporating competition</p> <hr/> <p>ADVANTAGES</p> <ul style="list-style-type: none"> Boardroom Appeal Performance-based Metric Elegant formula Easy to understand <hr/> <p>DISADVANTAGES</p> <ul style="list-style-type: none"> Time T purely subjective Esoteric Influenced by inflation <hr/> <p>FALLACIOUSUNDERPINNINGS</p> <ul style="list-style-type: none"> Inaccurate measure of value Beta derived discount rate r What is "Big T" Inaccurate depreciation charge EVA reward from Father Time Perpetuity assumption similar to DCF mode