
Grady Burkett, CFA
Associate Director, Technology
grady.burkett@morningstar.com
(312) 696-6420

© 2010, Morningstar, Inc. All rights reserved.

MORNINGSTAR®



Morningstar Equity and Credit Research

- ▶ One of the largest independent equity and credit research groups in the world.
- ▶ Broad coverage: 90 equity and credit analysts & strategists covering 1,800 companies across the globe.
- ▶ Consistent, disciplined research approach focused on intrinsic values and economic moats.

One Analyst Staff, Three Audiences

90 Analysts, 1,800 Companies, 90 Industry Groups

Morningstar Equity Analysts

Expertise

Competitive Moat Analysis
Industry Dynamics
Company Fundamentals
Valuation
Economic Drivers
Stewardship

Written Research

Company Reports
Industry Reports

Retail Audience
Advisor Audience
Institutional Audience

Media

Video Reports
Press (~ 9 quotes per day)
TV (~ 2 appearances per day)

Retail Audience
Advisor Audience
Institutional Audience

Investment Strategies

Real-Money Portfolios
Indexes
Newsletters

Retail Audience
Advisor Audience
Institutional Audience

Events

Morningstar Stocks Forum

Advisor Audience
Institutional Audience

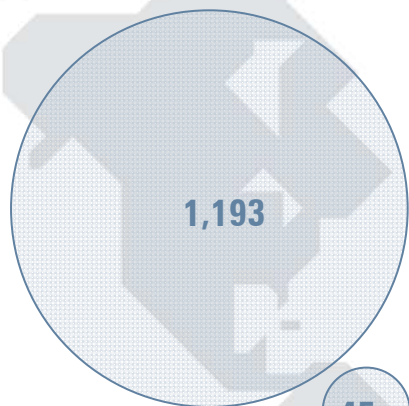
Institutional Services

Valuation Models
In-Depth Presentations
Analyst Access
Emails/Phone Calls
Conference Calls
Management Access

Institutional Audience

Equity Coverage by Region

North America



45

Latin America

Europe

334

15

Eurasia /
Middle East /
Africa

Asia

158

Australia /
New Zealand

264

Index	Mkt. Cap. Covered
S&P 500	99%
ASX 50	100%
TSX 60	98%
Stoxx 50	99%
CAC 40	96%
FTSE 100	80%
DAX 30	95%
Euro 350	79%
AEX 25	91%

Data as of 7 Sep 2011

Equity Coverage by Sector and Market Capitalization

Cyclical

	Basic Materials	186
	Consumer Cyclical	167
	Financial Services	244
	Real Estate	50

Sensitive

	Communication Services	84
	Energy	164
	Industrials	242
	Technology	171

Defensive

	Consumer Defensive	117
	Health Care	175
	Utilities	80

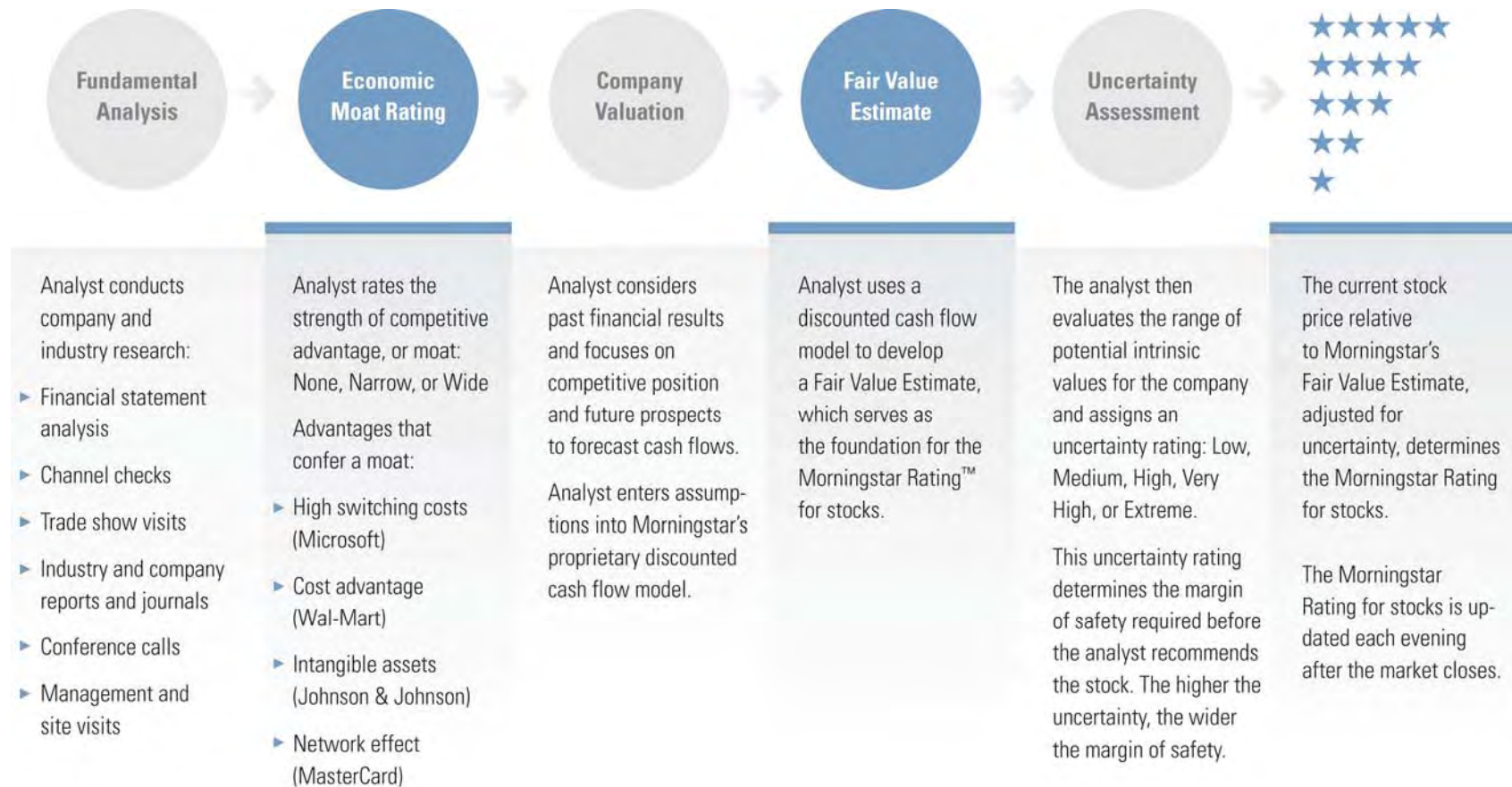
 **Large-cap stocks** **730**

 **Mid-cap stocks** **573**

 **Small-cap stocks** **398**

Data as of 7 Sep 2011

Morningstar Approach to Equity Research



Morningstar Competitive Advantage: Performance

	YTD	Trailing 3-Year*	Trailing 5-Year*	Trailing 10-Year
Morningstar Wide Moat Focus Index	0.55	6.36	6.67	—
Morningstar Tortoise	-4.85	0.51	0.79	6.69
Morningstar Hare	-10.19	5.90	3.80	6.79
Morningstar Dividend Builder	-2.31	-2.27	0.42	—
Morningstar Dividend Harvest	4.31	13.23	N/A	—
Buy at 5-star / Sell at 3-star	-17.03	12.12	4.67	—
S&P 500 Index (cap-weighted)	-8.68	1.22	-1.18	2.81
Morningstar Large Cap Blend Mutual Fund Cat	-11.30	0.36	-1.83	2.19

► Our Wide-Moat, 5-star stocks have generated an annualized return of over 16% since 2002.

► Morningstar was one of only three firms (out of 196 sell-side and independent firms surveyed) with three

#1 ranked analysts in *The Wall Street Journal's* 2011 'Best on the Street' survey.

Time-weighted returns through 9/30/2011

* Annualized percentage returns

Source: Morningstar



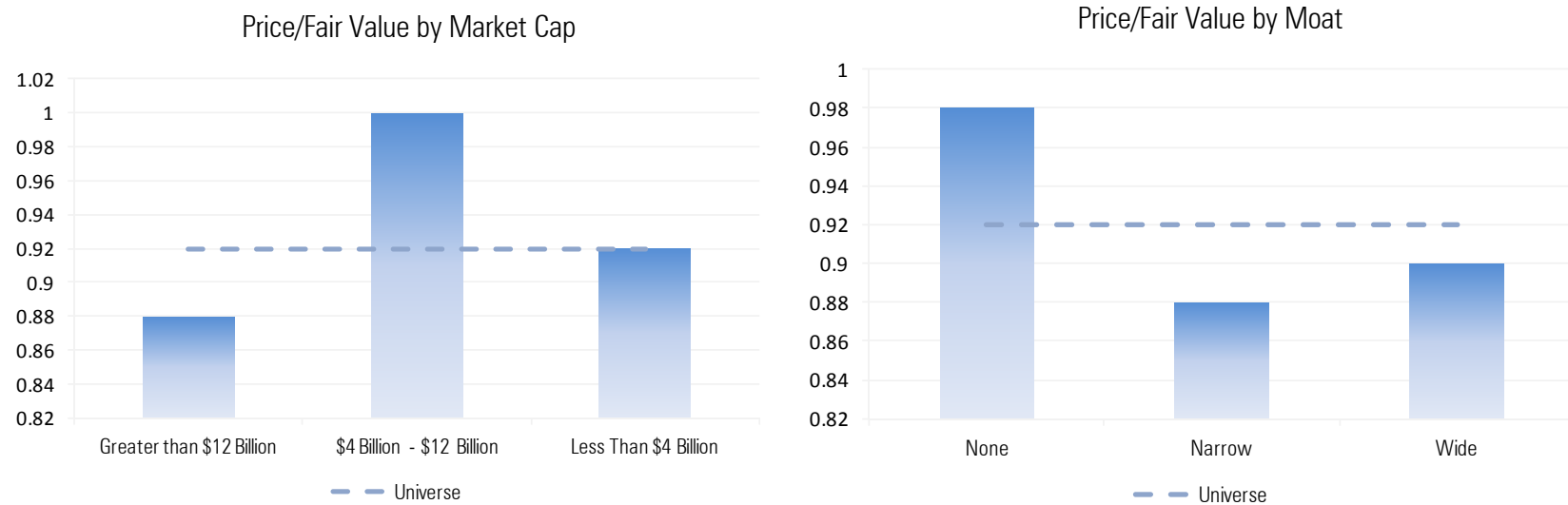
Tech Strategy — Clouds and Hardware

Grady Burkett, CFA
grady.burkett@morningstar.com
(312) 696-6420

MORNINGSTAR®

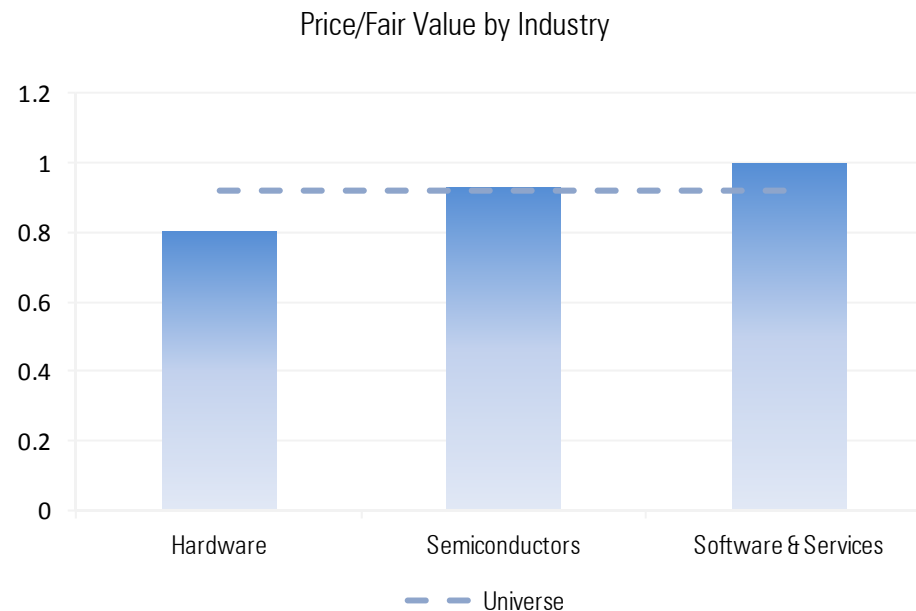
© 2010, Morningstar, Inc. All rights reserved.

Figures 1-2: Quality Large Cap Still Moderately Undervalued After Recent Rally



- Economic, Market Uncertainty Provided Third Quarter Lift to Higher Quality Large Cap → Margin of Safety Matters
- Avoid No Moat, Deep Cyclical and Consumer Tech → Weak Macro + No Customer Switching Costs + Disruption = Disaster
- Higher Quality Large Cap Tech Still Most Attractively Valued → Recent Nasdaq Rally has Shrunk Opportunity Set
- Best Ideas List More Moaty Than Ever → ORCL, GOOG, CSCO (wide) -- AAPL, ATMI (narrow)

Figure 5: Hardware industry remains undervalued, as long-term and near-term uncertainty increases



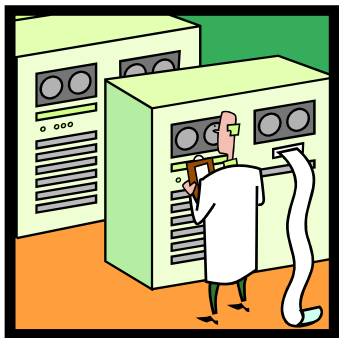
Although individual opportunities exist in other industries, hardware industry is significantly undervalued. Why?

- Canary in coalmine? HP, Dell and Cisco sluggish outlook was expected. But F5, NetApp, Riverbed slowing?
- Chipmakers Cautious in 2Q and 3Q. Typical cyclical pattern → chips, hardware, software services.
- Cyclicalities aside, hardware vendors face significant **secular** headwinds.

Cloud Computing Long-run Threat to Hardware Vendors

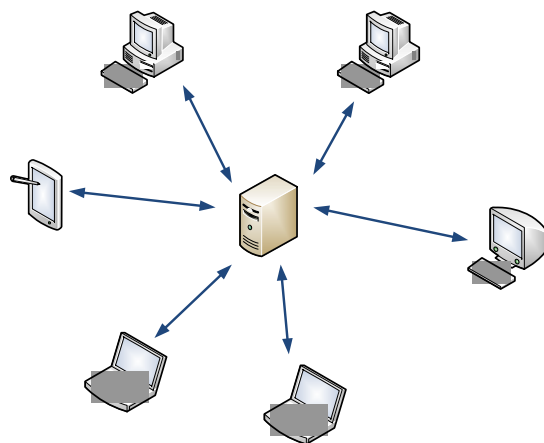
"In Silicon Valley you cannot go to a VC and get money to buy hardware, and they in fact aren't going to give you the money. They are going to say go get it from cloud. Because you have an unknown business model, they don't want to take the risk in that and you only want to pay for what you use."

9/14/2011 - Lew Tucker, VP and CTO, Cloud Computing, Cisco

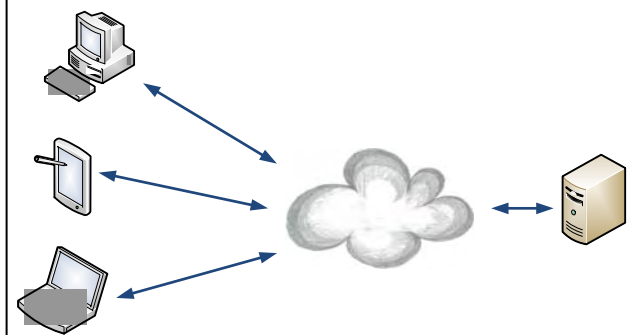


Mainframe/Minicomputer

Cloud – The Next Big IT Wave



Client-Server



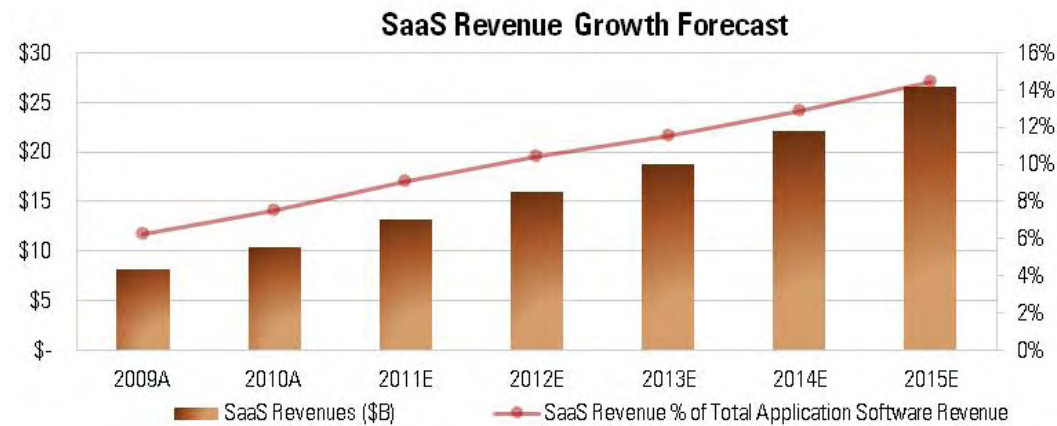
Cloud



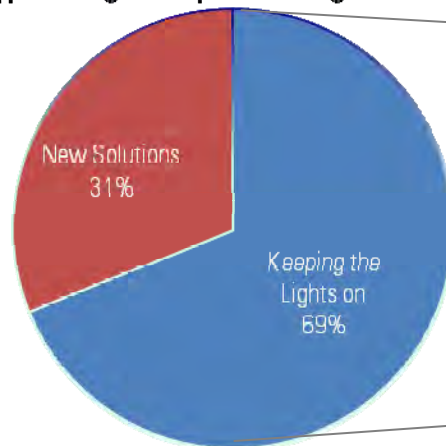
Cloud...

- ▶ Concentrates Customer Base
- ▶ Reduces Customer Switching Costs
- ▶ Emphasizes Best of Breed
- ▶ Rewards Innovation
- ▶ Commoditizes Standards-based Solutions
- ▶ Consolidates Under-Utilized Hardware

Figures 6, 7: SaaS vendors should grow quickly as corporations look to reduce IT spend



Typical Large Enterprise IT Budget Allocation



"Keeping the Lights on"



Source: IDC, Forrester, Gartner, Morningstar estimates

Figure 9: Competitive lines continue to blur among large vendors

	Private Cloud Portfolios						Recent Acquisitions	Acquisition Candidates
	Oracle	IBM	HP	Dell	Microsoft	VCE		
Business Intelligence	●	●	○	○	◐	●		SAS Institute, TIBX, MSTR
Data Warehouse	●	●	◐	○	●	●		
Application Software	●	○	○	○	◐	○	LWSN, AU	SAP, JDAS, LWSN, TDC, EPIC, PEGA, OTEX, AU
Middleware	●	●	○	○	●	○		RHT, TIBX
Database Software	●	●	○	○	●	○		PostgreSQL, Ingres
Operating System	●	●	○	○	●	○		RHT, NOVL
Virtualization (x86)	●	○	○	○	●	●		CTXS, RHT
Systems Management	◐	●	●	○	◐	◐	newScale	BMC, CA, SWI, QSFT, CPWR
Application Delivery	○	○	○	○	○	●	Zeus	FFIV, CTXS, RDWR
Storage Solutions	◐	●	●	◐	○	●	PAR, CML, ISLN, Pillar	ISLN, CVLT, CML, NTAP
Server Hardware	●	●	●	●	○	●		
Networking	○	○	◐	◐	○	●	BNT, COMS, Force10	BRCD, JNPR
Security	○	◐	◐	◐	○	◐	ArcSight	CHKP, FIRE, FTNT, WBSN

● Has a comprehensive solution
 ◐ Has a partial solution
 ○ Lacks a substantial solution

Software Vendors Have Upper Hand

- **Higher customer switching costs**
- **More control over development roadmaps**
- **Moore's Law**

"I don't care if our commodity x86 business goes to zero. We don't make any money selling those things. We have no interest in selling other people's IP. Commodity x86 includes Intel IP, Microsoft IP... we have interest in selling systems that include our IP."
 Larry Ellison, Oracle, 9/20/2011

Cloud Losers - Hardware

- Lack of Customer Switching Costs
- Component Suppliers to OEMs
- Feature of the Cloud
- Wrong Side of Disruptive Forces
- Limited Profitable Reinvestment Opportunities
- Classic Value Traps

Significant Pressure Over Long-run STX, BRCD, GRMN, RIMM

COMPARABLES											
Company	Ticker	Stock Price	FVE	P/FV	Market Cap	Economic Moat	Moat Trend	Enterprise Value	1-yr fwd EV/EBITDA	2-yr fwd EV/EBITDA	5-yr EBITDA CAGR
Brocade	BRCD	\$4.42	\$4	1.11	\$ 2,214	None	Stable	2,452	5.2x	5.1x	3.8%
Garmin	GRMN	\$35.29	\$26	1.36	\$ 6,846	None	Negative	2,962	5.4x	5.1x	-8.5%
RIM	RIMM	\$18.74	\$26	0.72	\$ 9,417	None	Stable	10,849	2.8x	3.4x	-20.4%
Seagate	STX	\$16.74	\$12	1.40	\$ 7,031	None	Stable	5,819	3.9x	4.1x	-3.8%
Average				1.2	\$ 6,939			4,391	4.6x	4.6x	-6%

Sources: Morningstar Estimates

Cloud Winners – Hardware

- Cloud Friendly
- Platforms
- Increasing Customer Switching Costs
- Innovative Solutions

Six Solid Long-term Cloud Plays **AAPL, RVBD, EMC, NTAP, ARUN, FFIV**

- **Consider Buy – AAPL, EMC**
- **Wait for Discount – RVBD, NTAP, ARUN, FFIV**

COMPARABLES											
Company	Ticker	Stock Price	FVE	P/FV	Market Cap	Economic Moat	Moat Trend	Enterprise Value	1-yr fwd EV/EBITDA	2-yr fwd EV/EBITDA	5-yr EBITDA CAGR
Apple	AAPL	\$397.39	\$530	0.75	\$ 370,367	Narrow	Positive	396,724	11.6x	9.1x	23.6%
Riverbed	RVBD	\$25.72	\$30	0.86	\$ 4,218	None	Positive	3,861	32.4x	21.x	51.6%
EMC	EMC	\$24.34	\$30	0.81	\$ 49,678	Narrow	Negative	57,867	13.3x	11.6x	12.4%
NetApp	NTAP	\$40.54	\$46	0.88	\$ 15,284	Narrow	Negative	14,518	13.x	11.3x	12.5%
Average				0.8	\$ 32,481			36,193	13.2x	11.5x	18.1%

Sources: Morningstar Estimates

Attractive Opportunities Exist in the Middle

- Conflicting Exposures
- Innovator's Dilemma
- Valuations Depressed
- Look for Customer Switching Costs
- Strategy to Navigate Disruption
- Shareholder Friendly Behaviors

Inflections Create Discounts

CSCO, JNPR, HPQ

COMPARABLES												
Company	Ticker	Stock Price	FVE	P/FV	Market Cap	Economic Moat	Moat Trend	Enterprise Value	1-yr fwd EV/EBITDA	2-yr fwd EV/EBITDA	5-yr EBITDA CAGR	
Cisco	CSCO	\$17.59	\$26	0.68	\$ 95,866	Wide	Negative	122,667	12.4x	11.1x	4.5%	
Juniper	JNPR	\$23.28	\$30	0.78	\$ 12,269	None	Positive	13,053	13.3x	12.6x	10.1%	
HP	HPQ	\$25.64	\$45	0.57	\$ 51,998	Narrow	Negative	117,241	7.1x	6.9x	2.3%	
Average				0.7	\$ 51,998			117,241	12.4x	11.1x	4.5%	

Sources: Morningstar Estimates