

## Global Portfolio Strategy August 2013

### *Japan's Exporters: Now What?*

### *International Portfolio Performance and Changes*

#### *Drama, Number of Acts Unknown*

- Japanese exporters have so far been the largest beneficiaries of Abenomics, with the autos and auto parts leading the way. The autos have almost doubled since last October and the entire exporter composite is up by +60%. We were first attracted to these stocks several years ago as lowly-valued options on global demand recovery. At this point the discount they carried having to do with a strong Yen is gone, and to like them from here we need to sign on to a story of improved competitiveness that will flow through to margins. We'll review how we got to this point and where we stand now.
- The Japanese equity market has been revalued, consistent with a more benign exchange rate setting. Its valuation and the spreads within it, that are around average, look like they did back in 2005. It's not that investors have become convinced that the lost decades are over, rather they think that Japan is now better positioned to benefit from a recovery in global demand.
- More than its competitors like Germany or the U.S. most production by Japanese companies still occurs onshore, and over the past several decades around 60% of movements in the Yen have flowed through to their top lines. That's more or less what's happened lately, boosting margins and guidance for a range of exporters. The trends in export volumes, that've been shrinking for most of the last two years, are getting less bad, but have yet to turn positive. That's also true where Japan is feeding the Asian supply chain, now 40% of its exports. Like China, Japan needs a rising tide.
- The valuations of Japan's exporters have come into line with their developed world competitors, and they're now priced as though we're in the early stages of a global demand recovery. If that's the right read, which we think it is, the stocks still offer optionality, but much less before. We're being more selective when picking among them, emphasizing gross profit yield, the ratio of gross profits-to-capitalization. It's our bluntest indicator of margin skepticism and it's been the leading source of alpha in the U.S. since 2009. Given that what we're trying to exploit is operating leverage, we think it should prove handy in Japan too. Appendix 2 on page 11 ranks Japanese exporters using our international stock selection model and it's ranked in order of gross profit yield.

#### *International Portfolio Performance and Changes*

- Our international stock selection model is having a good year, and its top quintile leads the market by +9 percentage points while the bottom one trails by (4) points. Our diversified large-cap portfolio is five points ahead, and has generated nearly four points of alpha a year since its launch in March 2010. The latest changes to it are described in Exhibit 35 on page 10 and the entire portfolio is presented in Appendix 1 on page 11.

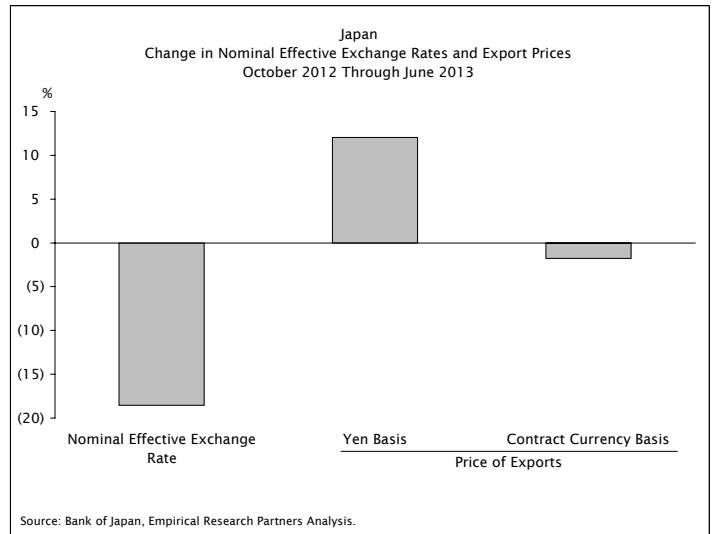
Brian Cho 212 803-7920 Nicole Price 212 803-7935 Sungsoo Yang 212 803-7925 Yi Liu 212 803-7942 Laura Dix 212 803-7930 Longying Zhao 212 803-7940 Iwona Scanzillo 212 803-7915

## Conclusions in Brief

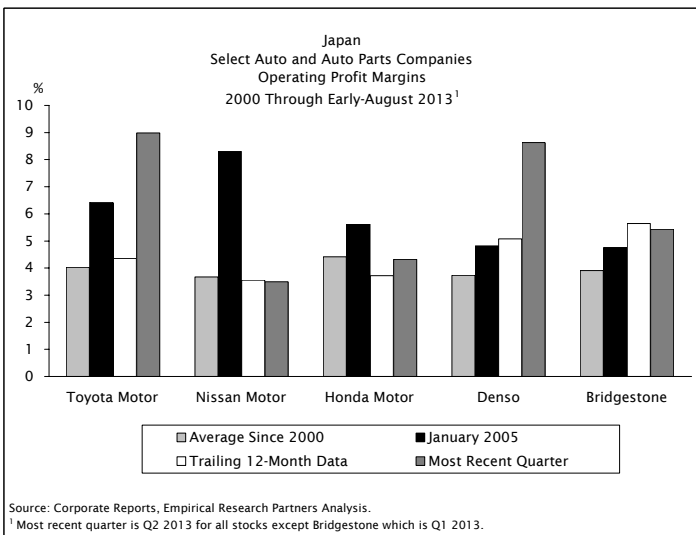
- Manufacturer's effective Yen exchange rate is back to its pre-Crisis level...



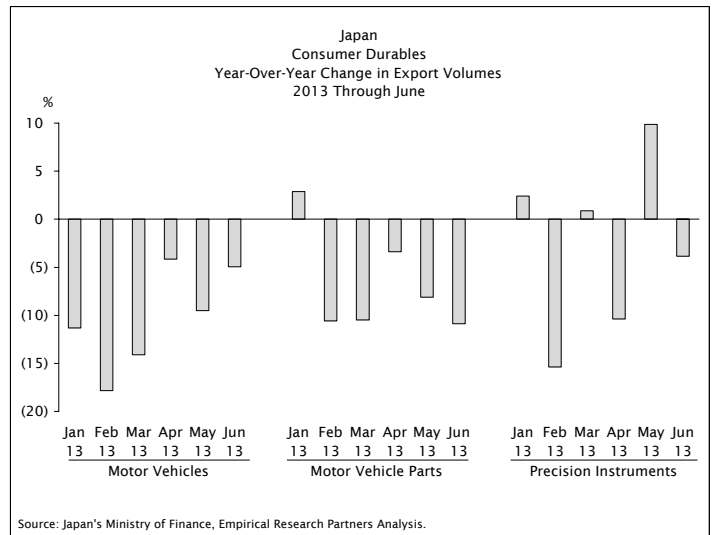
- ...Boosting prices received by exporters...



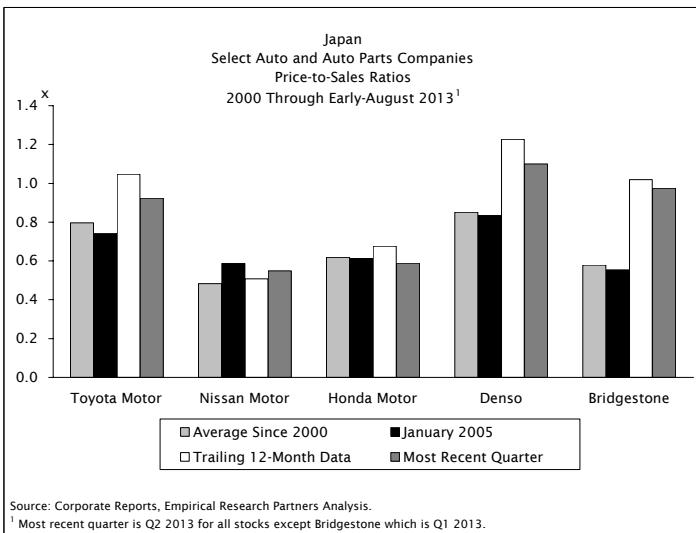
- ...And their profit margins:



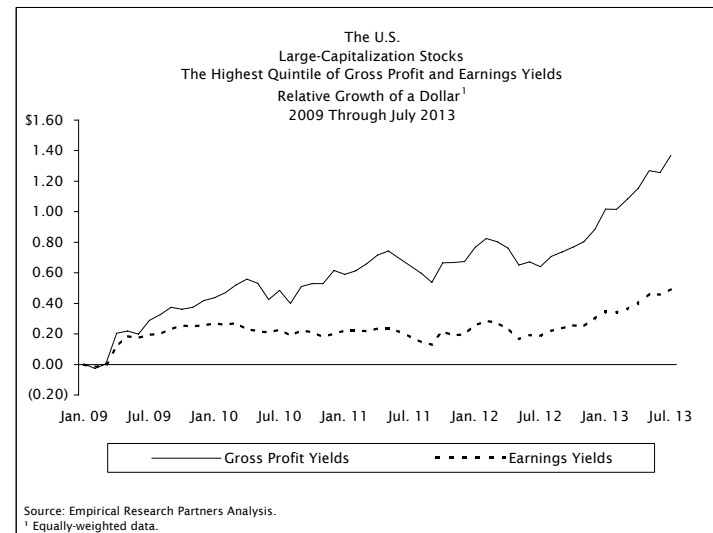
- We've yet to see a real pick-up in export volumes...



- ...And the market isn't pricing one in:



- Gross profit yields should help us exploit optionality:



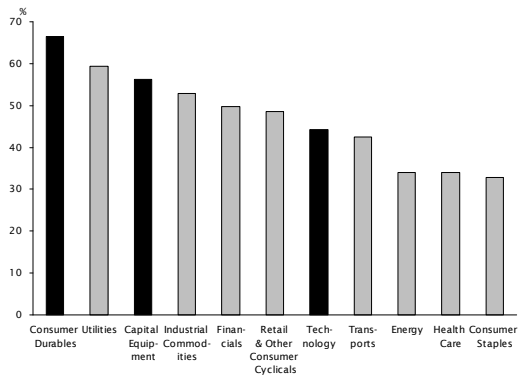
## Japan's Exporters: Now What?

### Discounting a Sort-of-New World

We've been proponents of Japanese exporters for the last several years, having originally been drawn to them because they looked like cheap options on global growth.<sup>1</sup> Then, ten months ago, lightning struck and Abenomics at least temporarily changed the rules of the game. The three sectors with lots of export exposure, shown in black in Exhibit 1 below, did well during the melt-up in the equity market, with the autos leading the consumer durables to nearly a +70% gain. In this research we'll review how we think the pieces of the puzzle fit together, dimensioning the leverage from exchange rates, and we'll describe what we think has to happen from here to perpetuate the story of a new, more hospitable reality. We'll also highlight the valuation tool we rely on in situations like this one.

Stepping back, the entire Japanese equity market has been revalued in the past ten months, but not by enough to convince us that investors now believe that the lost decades are a thing of the past. Exhibit 2 presents the history of its price-to-book ratios since 1971, compared to its U.S. counterpart. They're in the range that's prevailed since the late-1990s, and a quarter of Japanese stocks are still selling below book value, half the proportion that had that status 18 months ago (see Exhibit 3). By comparison, that share is a fifth in Continental Europe and just above 5% in the U.S. Gross cash flow yields in Japan average 11%, compared to 11.5% in Europe and 9% in the U.S. (see Exhibit 4). The yield comparison tells us that the stocks are being priced primarily off current fundamentals, and don't anticipate that an entirely new world is on the horizon.

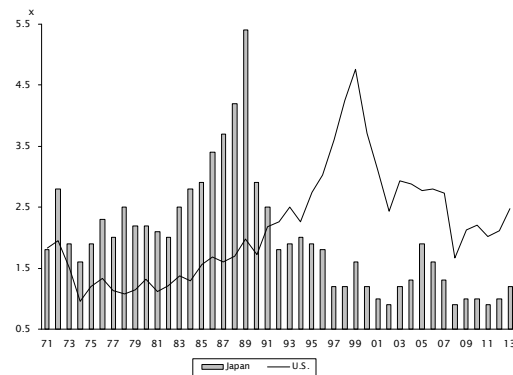
**Exhibit 1: Japan**  
Total Returns by Sector<sup>1</sup>  
October 2012 Through Early-August 2013



Source: Empirical Research Partners Analysis.

<sup>1</sup> Equally-weighted USD-hedged returns.

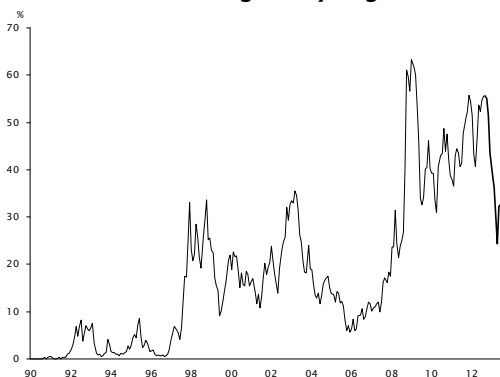
**Exhibit 2: Japan and the U.S.**  
Nominal Price-to-Book Ratios<sup>1</sup>  
1971 Through July 2013



Source: Tokyo Stock Exchange, Empirical Research Partners Analysis.

<sup>1</sup> Japan data is drawn from the First Section of the Tokyo Stock Exchange. U.S. data is from the largest 1,500 stocks.

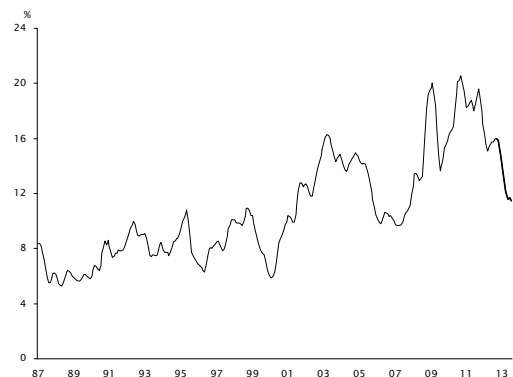
**Exhibit 3: Japan**  
Share of Stocks with  
Price-to-Book Ratios of Less Than One<sup>1</sup>  
1990 Through Early-August 2013



Source: Empirical Research Partners Analysis.

<sup>1</sup> Equally-weighted data.

**Exhibit 4: Japan**  
Nominal Gross Cash Flow Yields<sup>1</sup>  
1987 Through Early-August 2013



Source: Empirical Research Partners Analysis.

<sup>1</sup> Capitalization-weighted data, smoothed on a trailing three-month basis.

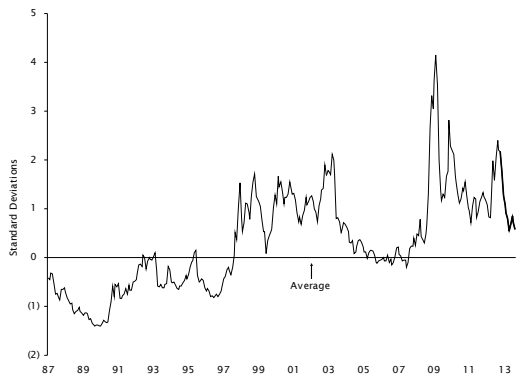
<sup>1</sup> Global Portfolio Strategy May 2011. "Buy Japanese Exporters," Global Portfolio Strategy October 2012. "Moving Japan to Neutral from Underweight."

Valuation spreads within the Japanese market have contracted by a couple of standard deviations in the past ten months, leaving them narrower than they've been throughout the post-Crisis period (see Exhibit 5). They were more compressed during the second-half of the last recovery, from 2004 through 2007. Once again it looks like the market is anticipating better times, though not necessarily good ones.

**As Expected, Exporters Take the Ride**

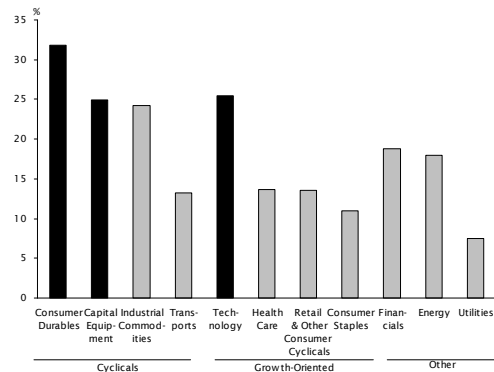
Exporters are an important part of the Japanese equity market, and manufacturers of consumer durables, industrial capital goods and technology products represent over 40% of its capitalization. It's not surprising to find that the nominal returns of stocks drawn from those sectors have in recent years been correlated with changes in the Yen/Dollar exchange rate (see Exhibit 6).

**Exhibit 5: Japan**  
Valuation Spreads  
Top Quintile Compared to the Average  
1987 Through Early-August 2013



Source: Empirical Research Partners Analysis.

**Exhibit 6: Japan**  
Correlation in Nominal Returns with the  
Yen/Dollar Exchange Rate by Sector<sup>1</sup>  
2007 Through Late-July 2013

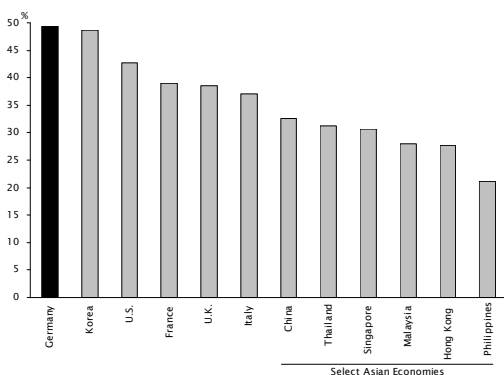


Source: Empirical Research Partners Analysis.

<sup>1</sup> Equally-weighted data.

The market's favorable reaction to the policy of currency depreciation is largely in keeping with evidence on how the global economy works. Germany tops the list of Japan's direct competitors, followed by Korea, the U.S. and France (see Exhibit 7). An analysis of data from the past 21 years suggests Japan's export prices are more statistically linked to changes in exchange rates than those of most of its closest competitor nations, save Korea (see Exhibit 8). What the black bar tells us is that 60% of the movement in exchange rates has flowed through to export prices. Japan still manufactures goods that have lots of Yen-denominated content and the domestically-sourced share of its exports has declined the least among its peer group (see Exhibit 9). That's also the story when we graph the share of all trade-related employment that's tied to global supply chains (see Exhibit 10). The portion of manufactured goods that are produced offshore has trended up, but by less than in the U.S., Germany and elsewhere (see Exhibit 11).

**Exhibit 7: Japan and Competitor Nations**  
Export Similarity Index<sup>1</sup>  
2012<sup>2</sup>

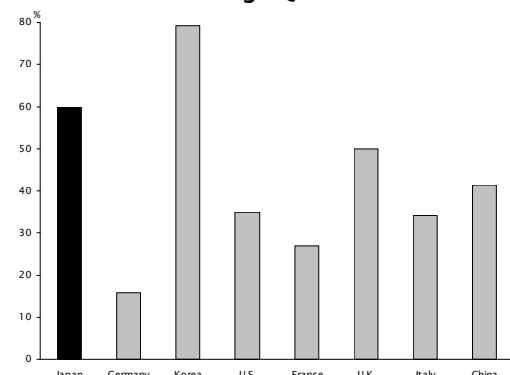


Source: UN Comtrade, Empirical Research Partners Analysis.

<sup>1</sup> Export similarity index calculated using the Finger and Kreinen methodology. A value of 100 corresponds to identical export structures and zero to completely dissimilar structures.

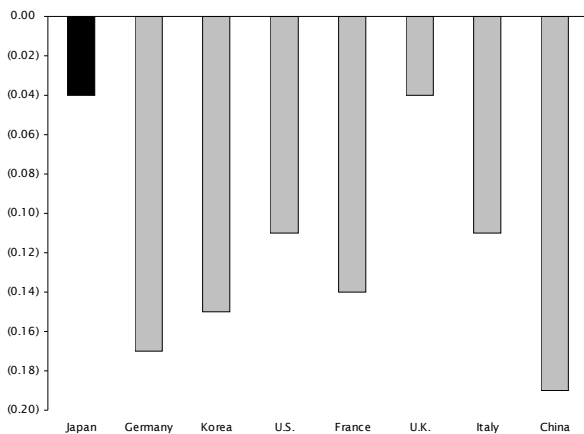
<sup>2</sup> Data for Italy, Korea, Malaysia and the Philippines are for 2011.

**Exhibit 8: Japan and Competitor Nations**  
Elasticities of Export Prices to Exchange Rates  
1990 Through Q2 2011



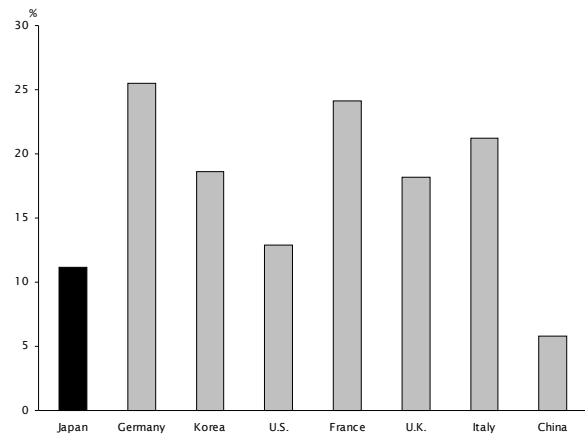
Source: Eurostat, Bussiere, M., Delle Chiaie, S and Tuomas Peltonen, 2013. "Exchange Rate Pass-Through in the Global Economy," Banque De France Working Paper.

**Exhibit 9: Japan and Competitor Nations  
Change in Value-Added-to-Export Ratios  
1970 Through 2009**



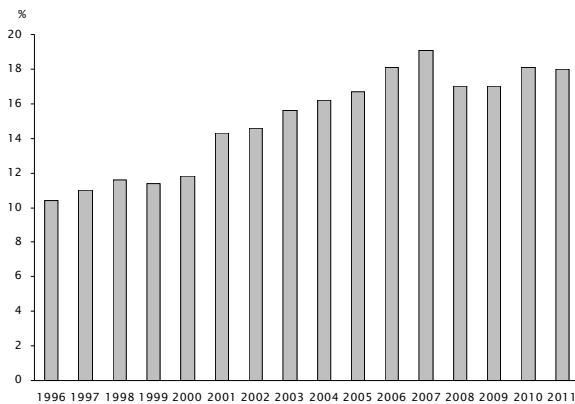
Source: Johnson, R.C. and Guillermo Noguera, 2012. "Fragmentation and Trade in Value Added Over Four Decades," NBER Working Paper No. 18186.

**Exhibit 10: Japan and Competitor Nations  
Employment Tied to Global Value Chains  
As a Share of the Trade-Related Total  
2009**



Source: Jiang, X. and William Milberg, 2013. "Capturing the Jobs from Globalization: Trade and Employment in Global Value Chains," New School of Social Science Working Paper 30.

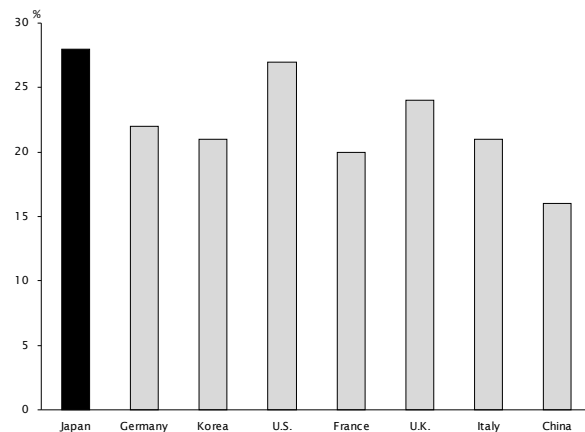
**Exhibit 11: Japan  
Manufacturers' Overseas Production Ratios  
1996 Through 2011<sup>1</sup>**



Source: Japan's Ministry of Economy, Trade and Industry.

<sup>1</sup> Japan data is based on fiscal years.

**Exhibit 12: Japan and Competitor Nations  
Domestically-Produced Inputs Used in  
Third-Country Exports as a Share of Total Exports  
2009**



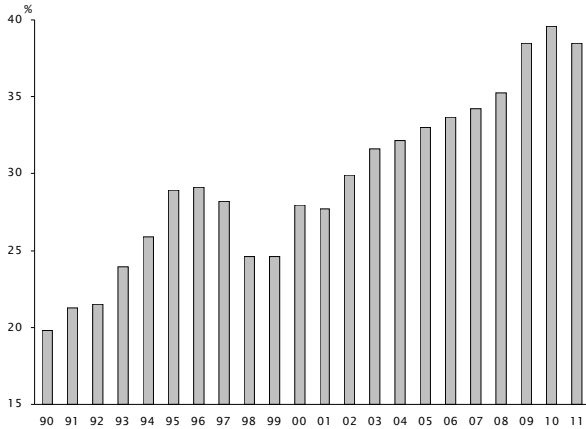
Source: OECD.

Even though much of its production is domestic, Japan has become a part of supply chains, in fact more than many of its peers although not the U.S. (see Exhibit 12). More than a quarter of its exports are incorporated into products assembled elsewhere. Around two-thirds of its shipments to East Asia are used in that fashion, and they now represent almost 40% of total exports (see Exhibit 13). Exhibit 14 presents the real effective exchange rates for manufacturers based in Japan, China and Korea. Following the collapse in the Yen the currency-related competitive disadvantage of Japanese companies vis-à-vis their Korean counterparts has entirely disappeared, and the gap with the Yuan is at its widest point since 2005. Japanese manufacturing wages are still about eight times those in China.

**So Far, Translation Benefits Without a Pick-Up in Volume**

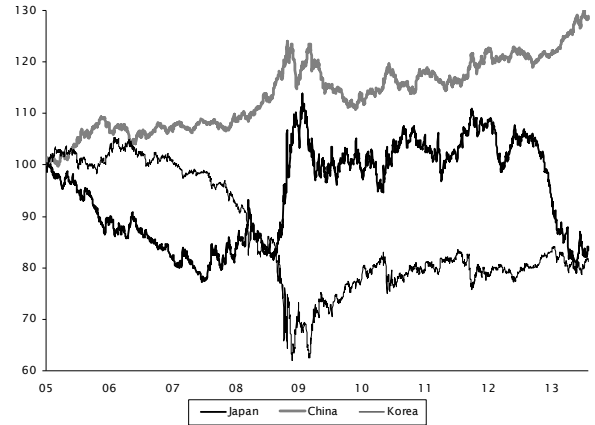
Consistent with the model put forward in Exhibit 8, the nearly (20)% plunge in the trade-weighted Yen has led to a +12% rise in prices realized by Japanese manufacturers (see Exhibit 15). When measured on a contract-currency basis prices are down by (2)%. There's been a margin-expansion story at work here and manufacturers of capital equipment and durable consumer goods have seen the price of what they sell rise more than their input prices, while for processors of commodities the opposite has been true (see Exhibit 16). The value of Japanese goods exports is up with a weaker Yen, but unit volumes are still shrinking (see Exhibit 17). For a circle of virtue to develop, Japan's share loss of the global export market must begin to reverse. The value of exports to its Asian trading partners have lately moved in lockstep with the total (see Exhibit 18). Global demand has been weak in the last year, undermining any gains in competitiveness.

**Exhibit 13: Japan**  
Exports of Intermediate Goods to East Asia  
Relative to Total Goods Exports<sup>1</sup>  
1990 Through 2011



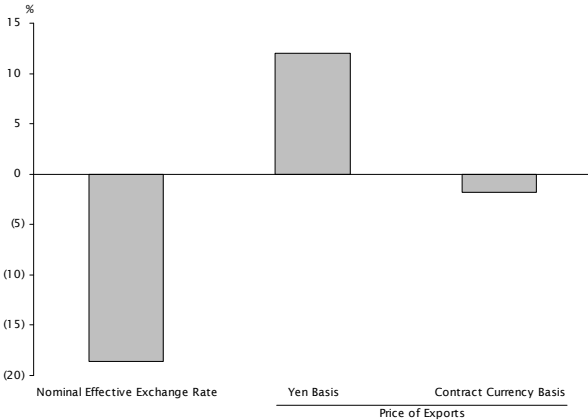
Source: RIETI-TID 2012, Empirical Research Partners Analysis.  
<sup>1</sup> Intermediate goods include processed goods and parts and components. East Asia includes China, Hong Kong, South Korea, Taiwan, Singapore, Indonesia, Malaysia, Philippines, Thailand, Brunei, Cambodia and Vietnam.

**Exhibit 14: Japan, China and Korea**  
Real Effective Exchange Rates for Manufacturing  
(2005 = 100)  
2005 Through Early-August 2013



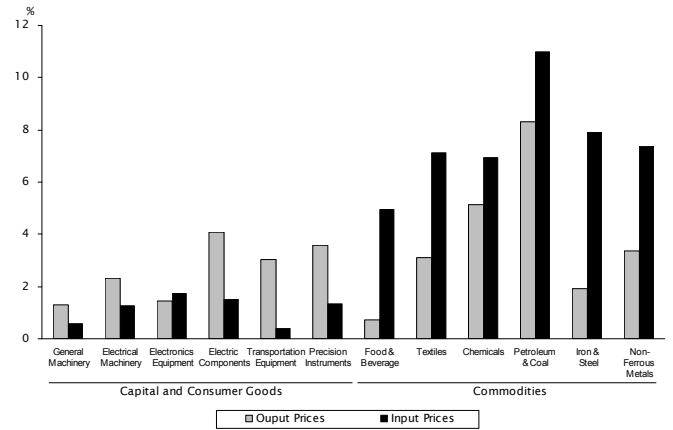
Source: The Research Institute of Economy, Trade and Industry.

**Exhibit 15: Japan**  
Change in Nominal Effective Exchange Rates  
and Export Prices  
October 2012 Through June 2013



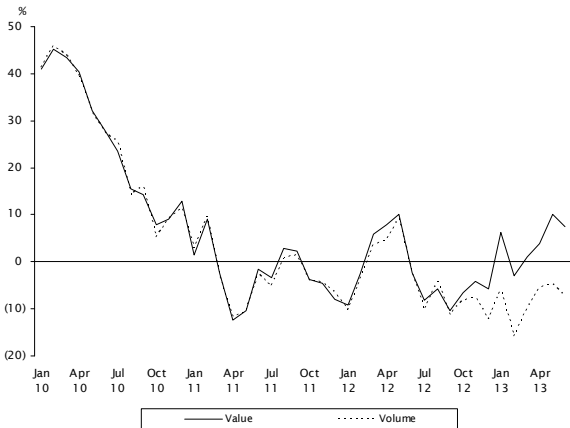
Source: Bank of Japan, Empirical Research Partners Analysis.

**Exhibit 16: Japan**  
Change in Manufacturers' Output and Input Prices  
October 2012 Through June 2013



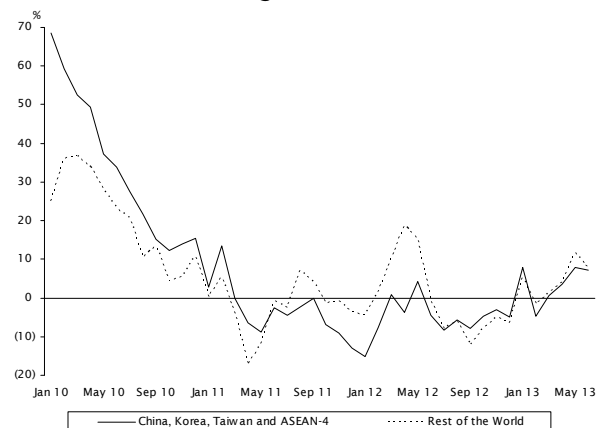
Source: Bank of Japan, Empirical Research Partners Analysis.

**Exhibit 17: Japan**  
Year-Over-Year Change in Goods' Exports  
Measured in Value and Volume Terms  
2010 Through June 2013



Source: Japan's Ministry of Finance, Empirical Research Partners Analysis.

**Exhibit 18: Japan**  
Year-Over-Year Change in the Value of  
Goods Exports to China, Korea, Taiwan  
and ASEAN-4 and the Rest of the World<sup>1</sup>  
2010 Through June 2013



Source: Japan's Ministry of Finance, Empirical Research Partners Analysis.  
<sup>1</sup> ASEAN-4 economies are Indonesia, Malaysia, Philippines and Thailand.

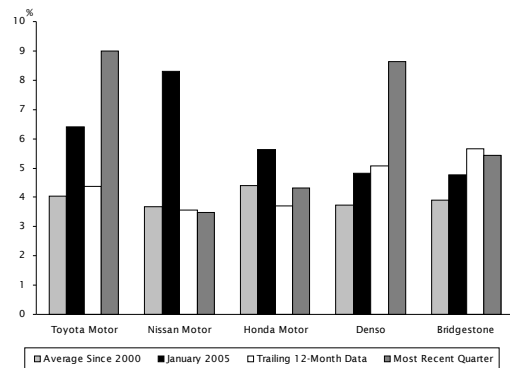
Consistent with the price differentials shown in Exhibit 16 the profit margins of Japan's largest exporters have benefited from a weaker Yen and they've generally trended up in the last year or so. Exhibit 19 presents the latest results and comparators for a handful of Japanese auto and auto parts companies. The black bars represent the margins at the outset of 2005 when the Yen had the same competitiveness it does now versus the Korean Won. Exhibits 20 and 21 make the same comparisons for a few large capital equipment and technology companies. For all these firms foreign customers are responsible for between 40% and 80% of revenues, and they've become more important over time. There've been short-term translation gains that've boosted margins, to get another step up we'll eventually need to see further currency weakness or signs that volumes are picking up.

The major exporters shown in these charts are forecasting that revenue growth will average around +10% in the fiscal year ending March of 2014. The majority of those gains can be explained by the weakness in the Yen and the pass-through to the top line. There've been signs of improvement in export volumes, mostly showing up as lesser rates of contraction (see Exhibits 22 through 24).

The market has given the exporters some credit for the recent pick-up in margins and their price-to-sales ratios have trended higher (see Exhibits 25 through 27). Exhibit 28 presents the price-to-sales multiple of the entire Japanese market compared to that for all developed markets. It's recovered back to the level that prevailed in the later part of the last expansion when the real effective exchange rate for manufacturing was similar to today's level (see Exhibit 14 on page 6).

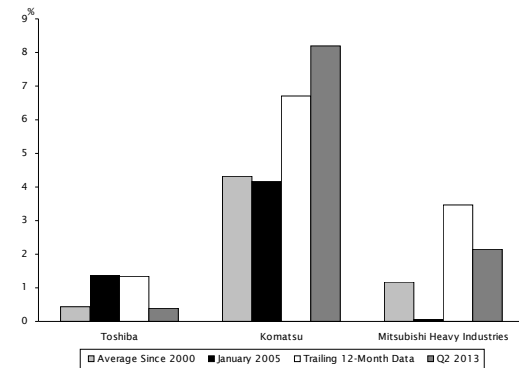
The bottom line is that the market is skeptical that Abenomics will transform the prospects for Japanese industry. It's given the administration credit for reversing the Yen strength that undermined margins throughout the last five years.

**Exhibit 19: Japan**  
**Select Auto and Auto Parts Companies**  
**Operating Profit Margins**  
**2000 Through Early-August 2013<sup>1</sup>**



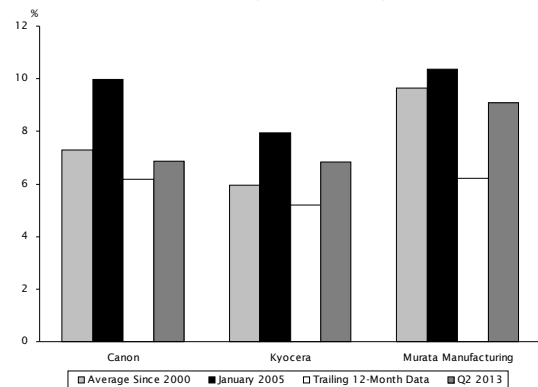
Source: Corporate Reports, Empirical Research Partners Analysis.  
<sup>1</sup> Most recent quarter is Q2 2013 for all stocks except Bridgestone which is Q1 2013.

**Exhibit 20: Japan**  
**Select Capital Equipment Companies**  
**Operating Profit Margins**  
**2000 Through Early-August 2013**



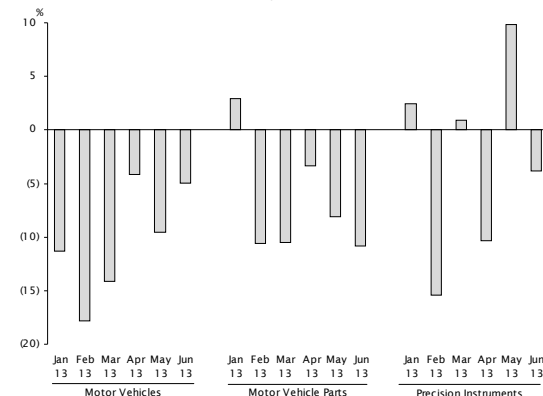
Source: Corporate Reports, Empirical Research Partners Analysis.

**Exhibit 21: Japan**  
**Select Technology Companies**  
**Operating Profit Margins**  
**2000 Through Early-August 2013**



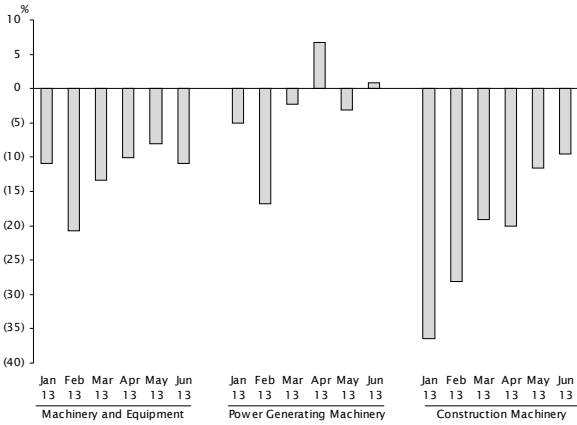
Source: Corporate Reports, Empirical Research Partners Analysis.

**Exhibit 22: Japan**  
**Consumer Durables**  
**Year-Over-Year Change in Export Volumes**  
**2013 Through June**



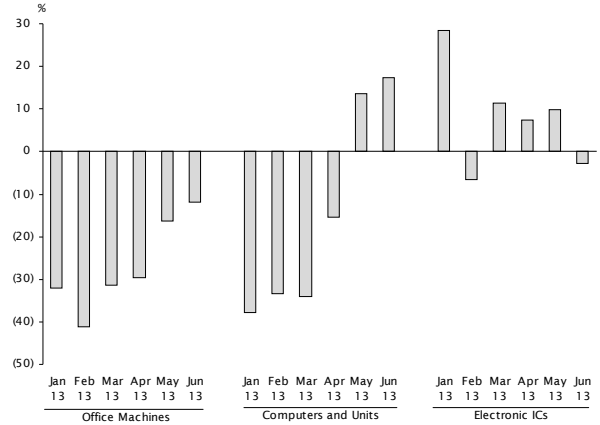
Source: Japan's Ministry of Finance, Empirical Research Partners Analysis.

**Exhibit 23: Japan**  
**Machinery and Equipment**  
**Year-Over-Year Change in Export Volumes**  
**2013 Through June**



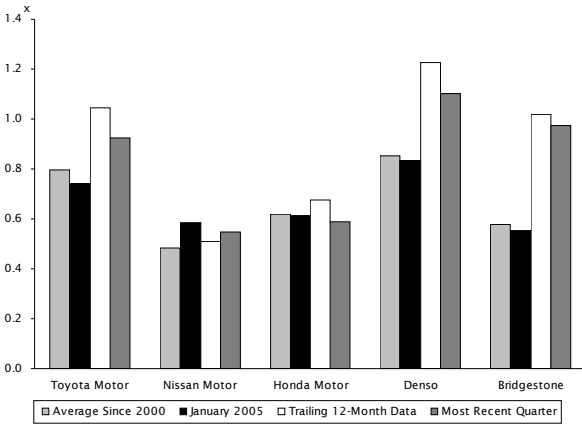
Source: Japan's Ministry of Finance, Empirical Research Partners Analysis.

**Exhibit 24: Japan**  
**Technology Products**  
**Year-Over-Year Change in Export Volumes**  
**2013 Through June**



Source: Japan's Ministry of Finance, Empirical Research Partners Analysis.

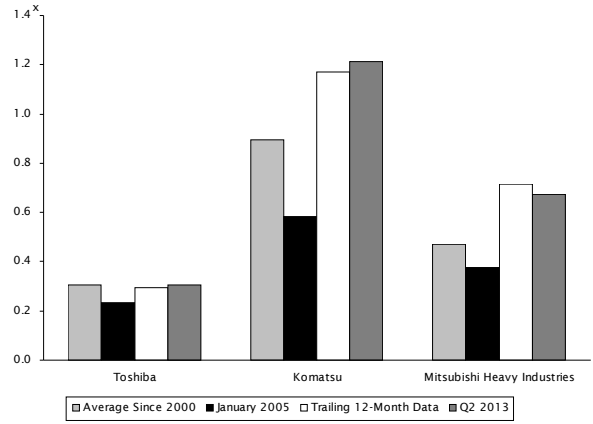
**Exhibit 25: Japan**  
**Select Auto and Auto Parts Companies**  
**Price-to-Sales Ratios**  
**2000 Through Early-August 2013<sup>1</sup>**



Source: Corporate Reports, Empirical Research Partners Analysis.

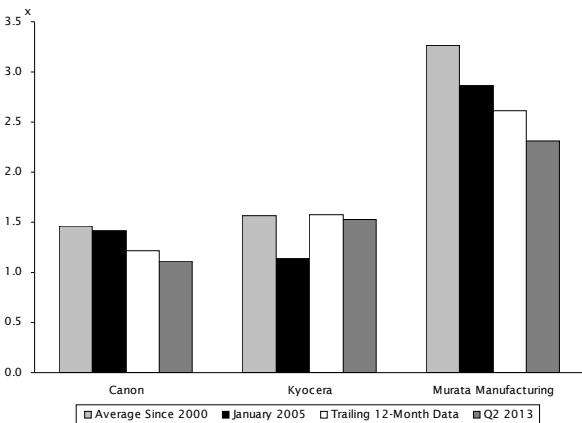
<sup>1</sup> Most recent quarter is Q2 2013 for all stocks except Bridgestone which is Q1 2013.

**Exhibit 26: Japan**  
**Select Capital Equipment Companies**  
**Price-to-Sales Ratios**  
**2000 Through Early-August 2013**



Source: Corporate Reports, Empirical Research Partners Analysis.

**Exhibit 27: Japan**  
**Select Technology Companies**  
**Price-to-Sales Ratios**  
**2000 Through Early-August 2013**



Source: Corporate Reports, Empirical Research Partners Analysis.

**Exhibit 28: Japan**  
**Relative Price-to-Sales Ratios<sup>1</sup>**  
**1986 Through Early-August 2013**



Source: Empirical Research Partners Analysis.

<sup>1</sup> Capitalization-weighted data, relative to the developed markets universe.



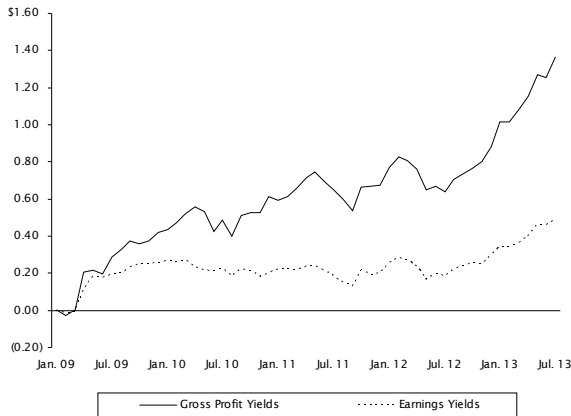
**Conclusion: Looking for Margin Leverage**

Several years ago we became interested in Japanese exporters because their valuations had fallen to near-historic lows under the weight of a persistently-strong Yen. That discount, measured relative to the norms of the last expansion, has disappeared after a +60% run that began last October. From here we need either the Yen to weaken further, a pick-up in volume due to improved price competitiveness or a recovery in global demand. The “easy” money has been made, and we need to be more selective when picking among these stocks.

One valuation tool that can help us separate winners from losers is gross profit yield, the ratio of gross profits taken from the P&L statement divided by capitalization. That ratio has proven to be a blunt, but effective gauge of skepticism about the potential for margin expansion. It’s been the best way to pick stocks in the U.S. market during this recovery, and has generated +9 percentage points of alpha so far this year (see Exhibit 29). During the Abenomics era it’s come into its own in Japan as well (see Exhibit 30). Japanese exporters sell at gross profit yields that are for the most part similar to their U.S. counterparts, with those of autos, with the exception of Toyota, more advantageous (see Exhibit 31). P/E multiples have moved up, and are comparable to those in place in 2005 when measured relative to those in the U.S. (see Exhibit 32). We’re betwixt and between.

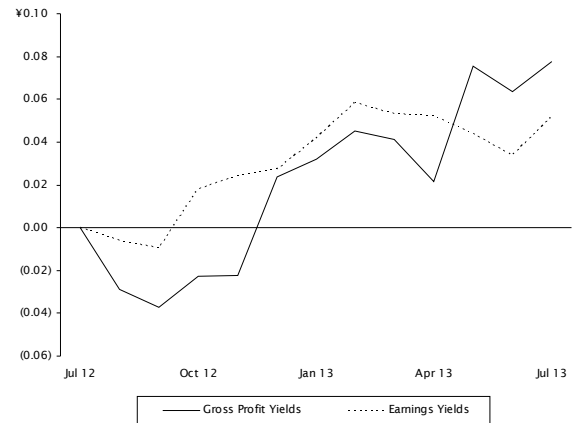
Appendix 2 on page 11 presents a ranking of select large-cap Japanese exporters sorted by their gross profit yields. Most are still reasonably attractive within our framework, with the fewest ideas within the capital equipment sector.

**Exhibit 29: The U.S.**  
**Large-Capitalization Stocks**  
**The Highest Quintile of Gross Profit**  
**and Earnings Yields**  
**Relative Growth of a Dollar<sup>1</sup>**  
**2009 Through July 2013**



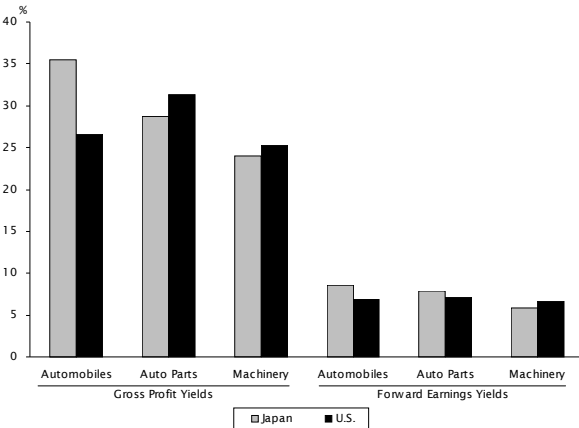
Source: Empirical Research Partners Analysis.  
<sup>1</sup> Equally-weighted data.

**Exhibit 30: Japan**  
**The Highest Quintile of Gross Profit**  
**and Earnings Yields**  
**Relative Growth of a Yen<sup>1</sup>**  
**Year Ended July 2013**



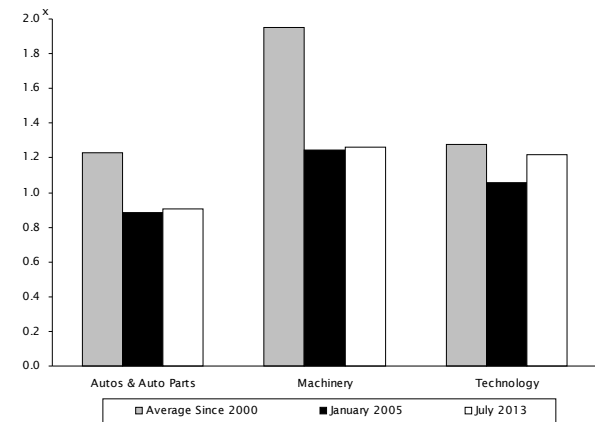
Source: Empirical Research Partners Analysis.  
<sup>1</sup> Equally-weighted data.

**Exhibit 31: Japan and the U.S.**  
**Automobiles, Auto Parts and Machinery**  
**Gross Profit and Forward Earnings Yields<sup>1</sup>**  
**As of Early-August 2013**



Source: Empirical Research Partners Analysis.  
<sup>1</sup> Equally-weighted data.

**Exhibit 32: Japan Relative to the U.S.**  
**Export Industries**  
**Ratio of Forward-P/E Ratios<sup>1</sup>**  
**2000 Through July 2013**

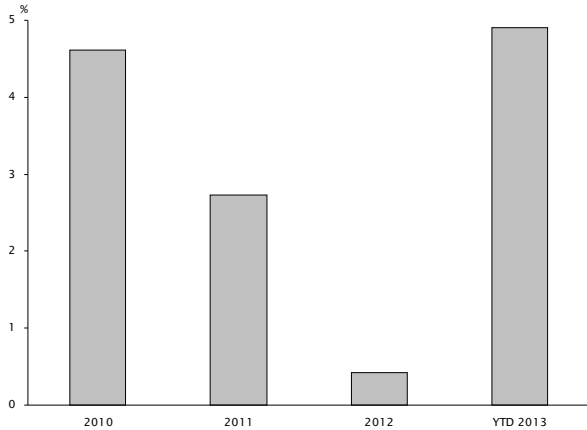


Source: Corporate Reports, Empirical Research Partners Analysis.  
<sup>1</sup> Capitalization-weighted data.

**Updating Our International Large-Cap Model Portfolio**

We're updating our International Large-Cap Portfolio that so far this year has outperformed its benchmark by about +500 basis points (see Exhibit 33). Its overweight in Japan helped and, we're maintaining our exposure to the region (see Exhibit 34). The top quintile of our international stock selection model leads the market by almost nine points. The latest changes are presented below in Exhibit 35 and the entire portfolio is displayed in Appendix 1.

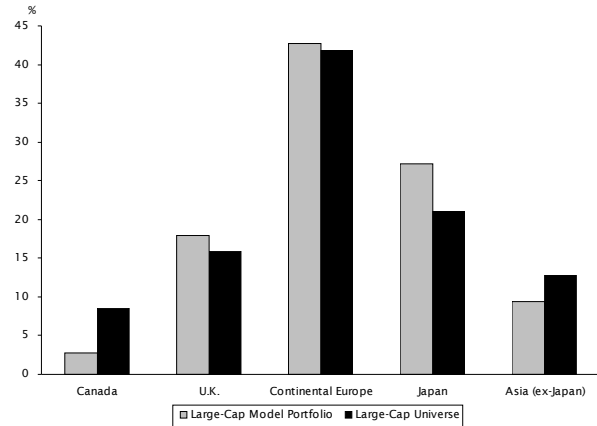
**Exhibit 33: International Large-Cap Model Portfolio  
Relative Local Currency Returns  
Monthly Data Compounded  
Mid-March 2010 Through Early-August 2013<sup>1</sup>**



Source: Empirical Research Partners Analysis.

<sup>1</sup> Mid-March 2010 is the inception date of the model portfolio.

**Exhibit 34: Developed Markets (ex-U.S.) Large-Cap Stocks  
Regional Exposure of the  
International Large-Cap Model Portfolio  
As of Early-August 2013**



Source: Corporate Reports, Empirical Research Partners Analysis.

**Exhibit 35: Changes to the International Large-Capitalization Core Portfolio  
As of Early-August 2013**

Local Ticker	Company	Suggested Weight	Price at Inclusion (Local)	Price 08/06/13	Local Currency Code	Rationale
<b>Additions</b>						
8411-JP	Mizuho Financial Group Inc.	2.2 %	216.00	216.00	JPY	Attractive
DAI-DE	Daimler AG	1.9	54.03	54.03	EUR	Attractive
6448-JP	Brother Industries Ltd.	1.6	1,175.00	1,175.00	JPY	Attractive
LYB	LyondellBasell Industries N.V. CI A	1.5	51.53	51.53	USD	Attractive
ROG-CH	Roche Holding AG	1.5	231.80	231.80	CHF	Attractive
4-HK	Wharf (Holdings) Ltd.	1.5	69.70	69.70	HKD	Attractive
5711-JP	Mitsubishi Materials Corp.	1.4	364.00	364.00	JPY	Attractive
4901-JP	FUJIFILM Holdings Corp.	1.4	2,279.00	2,279.00	JPY	Attractive
9201-JP	Japan Airlines Co. Ltd.	1.3	5,530.00	5,530.00	JPY	Attractive
MQG-AU	Macquarie Group Ltd.	1.2	45.02	45.02	AUD	Attractive
NXT-GB	Next PLC	1.0	50.15	50.15	GBP	Attractive
<b>Increasing Weights</b>						
SREN-CH	Swiss Re AG		63.75	73.10	CHF	Attractive Stock, Still Looks Inexpensive
	Was	1.2 %				
	Now	2.4				
YAR-NO	Yara International ASA		261.54	253.00	NOK	Attractive Stock, Still Looks Inexpensive
	Was	1.1 %				
	Now	1.6				
6758-JP	Sony Corp.		2,863.66	2,039.00	JPY	Attractive Stock, Still Looks Inexpensive
	Was	0.8 %				
	Now	1.3				
<b>Deletions</b>						
ASML-NL	ASML Holding N.V.	3.1 %	34.58	69.18	EUR	Loss in Model Rank
MKS-GB	Marks & Spencer Group PLC	2.3	3.30	4.84	GBP	Loss in Model Rank
7201-JP	Nissan Motor Co. Ltd.	1.6	736.00	1,073.00	JPY	Loss in Model Rank
SAN-ES	Banco Santander S.A.	1.4	10.48	5.50	EUR	Loss in Model Rank
4502-JP	Takeda Pharmaceutical Co. Ltd.	1.3	4,025.00	4,670.00	JPY	Loss in Model Rank
BHP-AU	BHP Billiton Ltd.	1.3	43.24	35.62	AUD	Loss in Model Rank
ISP-IT	Intesa Sanpaolo S.p.A.	0.9	1.52	1.40	EUR	Loss in Model Rank
AAL-GB	Anglo American PLC	0.8	23.57	14.16	GBP	Loss in Model Rank
PRE-CA	Pacific Rubiales Energy Corp.	0.8	23.46	21.16	CAD	Loss in Model Rank
TCK-B-CA	Teck Resources Ltd. CI B	0.4	40.17	24.47	CAD	Loss in Model Rank
<b>Decreasing Weights</b>						
7270-JP	Fuji Heavy Industries Ltd.		584.50	2,569.00	JPY	Taking Profits
	Was	6.8 %				
	Now	3.6				
BMW-DE	Bayerische Motorenwerke AG BMW		56.00	71.37	EUR	Taking Profits
	Was	2.1 %				
	Now	1.6				
IMT-GB	Imperial Tobacco Group PLC		20.99	22.00	GBP	Loss in Model Rank
	Was	2.2 %				
	Now	1.1				

Source: Empirical Research Partners Analysis.

**Appendix 1: The International Large-Capitalization Model Portfolio  
As of Early-August 2013**

Symbol	Company	Weight	Price at Inclusion (Local)	Price 08/06/13	Local Currency Code	Developed Markets (ex-U.S.) Index Weight	Symbol	Company	Weight	Price at Inclusion (Local)	Price 08/06/13	Local Currency Code	Developed Markets (ex-U.S.) Index Weight
<b>CYCLICALS</b>													
<b>Consumer Durables and Apparel</b>													
7270-JP	Fuji Heavy Industries Ltd.	3.6 %	584.50	2,569.00	JPY		WPP-GB	WPP PLC	1.5 %	8.33	11.92	GBP	
VOW-DE	Volkswagen AG	2.0	70.28	175.20	EUR		REL-GB	Reed Elsevier PLC	1.4	6.00	8.44	GBP	
DAI-DE	Daimler AG	1.9	54.03	54.03	EUR		NXT-GB	Next PLC	1.0	50.15	50.15	GBP	
BMW-DE	BMW AG	1.6	56.00	71.37	EUR				3.9 %				4.0 %
6758-JP	Sony Corp.	1.3	2,542.61	2,039.00	JPY		<b>Consumer Staples</b>						
7259-JP	Aisin Seiki Co. Ltd.	0.8	2,977.84	4,120.00	JPY	8.9 %	CO-FR	Casino Guichard-Perrachon S.A.	1.9 %	61.50	77.98	EUR	
		11.2 %					2914-JP	Japan Tobacco Inc.	1.8	2,154.00	3,595.00	JPY	
<b>Capital Equipment</b>													
8002-JP	Marubeni Corp.	2.8 %	534.48	728.00	JPY		MEO-DE	Metro AG	1.7	20.29	27.72	EUR	
BA-GB	BAE Systems PLC	2.1	2.96	4.54	GBP		AH-NL	Ahold	1.2	9.77	12.51	EUR	
8031-JP	Mitsui & Co. Ltd.	2.0	1,287.02	1,403.00	JPY		IMT-GB	Imperial Tobacco Group PLC	1.1	20.99	22.00	GBP	
N21-SG	Noble Group Ltd	0.6	8.20	5.63	SGD				7.7 %				11.5 %
DC-FR	Vinci S.A.	0.5	42.00	40.20	EUR		<b>OTHER Financials</b>						
		8.0 %				8.7 %	ALV-DE	Allianz SE	2.6 %	88.47	117.70	EUR	
<b>Commercial Services</b>													
		0.0 %				0.8 %	SREN-CH	Swiss Re AG	2.4	68.60	73.10	CHF	
<b>Industrial Commodities</b>													
YAR-NO	Yara International ASA	1.6 %	258.81	253.00	NOK		8306-JP	Mitsubishi UFJ Financial Group Inc.	2.2	387.97	636.00	JPY	
LYB	LyondellBasell Industries N.V. Cl A	1.5	51.53	51.53	USD		8411-JP	Mizuho Financial Group Inc.	2.2	216.00	216.00	JPY	
5711-JP	Mitsubishi Materials Corp.	1.4	364.00	364.00	JPY		ZURN-CH	Zurich Insurance Group AG	2.0	254.02	253.10	CHF	
VOE-AT	voestalpine AG	1.3	27.65	29.45	EUR		DNB ASA	DNB ASA	1.9	77.50	98.00	NOK	
ILU-AU	Iluka Resources Ltd.	0.9	9.64	11.71	AUD	6.8 %	SHB-A-SE	Svenska Handelsbanken A	1.7	207.70	300.50	SEK	
		6.8 %				6.8 %	KBC-GB	KBC Group N.V.	1.7	17.77	32.70	EUR	
<b>Transports</b>													
9201-JP	Japan Airlines Co. Ltd.	1.3 %	5,530.00	5,530.00	JPY		OML-GB	Old Mutual PLC	1.6	1.45	1.93	GBP	
NS8U-SG	Hutchison Port Holdings Trust	1.3	0.96	0.93	SGD		BNP-FR	BNP Paribas S.A.	1.6	49.41	49.09	EUR	
LHA-DE	Deutsche Lufthansa AG	0.9	9.13	14.53	EUR	2.9 %	4-HK	Wharf (Holdings) Ltd.	1.5	69.70	69.70	HKD	
		3.5 %				2.9 %	MQG-AU	Macquarie Group Ltd.	1.2	45.02	45.02	AUD	
<b>GROWTH-ORIENTED</b>													
<b>Technology</b>													
AMS-ES	Amadeus IT Holding S.A.	1.8 %	13.95	25.74	EUR		CM-CA	Canadian Imperial Bank of Commerce	1.2	77.59	77.54	CAD	
700-HK	Tencent Holdings Ltd.	1.8	143.83	296.44	HKD		NA-CA	National Bank of Canada	0.8	61.31	77.98	CAD	
6448-JP	Brother Industries Ltd.	1.6	1,175.00	1,175.00	JPY		BPO-CA	Brookfield Office Properties Inc.	0.8	16.11	17.34	CAD	
4901-JP	FUJIFILM Holdings Corp.	1.4	2,279.00	2,279.00	JPY				25.3 %				24.2 %
SAP-DE	SAP AG	1.3	34.02	57.07	EUR		<b>Energy</b>						
6702-JP	Fujitsu Ltd.	1.2	518.82	388.00	JPY	4.7 %	5020-JP	JX Holdings Inc.	2.0 %	498.86	536.00	JPY	
		9.1 %				4.7 %	OMV AG	OMV AG	2.0	27.04	34.21	EUR	
<b>Pharmaceuticals &amp; Biotechnology</b>													
AZN-GB	AstraZeneca PLC	3.4 %	29.50	32.72	GBP		RDSB-GB	Royal Dutch Shell PLC (CL B)	1.5	22.71	21.85	GBP	
SAN-FR	Sanofi S.A.	2.9	54.49	77.50	EUR		STL-NO	Statoil ASA	1.2	143.21	126.00	NOK	
ROG-CH	Roche Holding AG	1.5	231.80	231.80	CHF	8.3 %	FOE-NO	Fred. Olsen Energy ASA	1.2	239.87	282.70	NOK	
		7.8 %				8.3 %			7.9 %				7.8 %
<b>Health Care Equipment &amp; Services</b>													
		0.0 %				0.9 %	<b>Telecommunication Services</b>						
		0.0 %				0.9 %	BT-A-GB	BT Group PLC	2.4 %	1.91	3.39	GBP	
		0.0 %				0.9 %	TLS-AU	Telstra Corp. Ltd.	1.7	2.99	5.07	AUD	
		0.0 %				0.9 %	9432-JP	Nippon Telegraph & Telephone Corp.	1.5	3,765.00	5,300.00	JPY	
		0.0 %				0.9 %	TEL-NZ	Telecom Corp. of New Zealand Ltd.	0.6	1.90	2.31	NZD	
		0.0 %				0.9 %			6.2 %				6.3 %
		0.0 %				0.9 %	<b>Utilities</b>						
		0.0 %				0.9 %	NG-GB	National Grid PLC	1.8 %	6.58	7.81	GBP	
		0.0 %				0.9 %	GSZ-FR	GDF Suez S.A.	0.8	18.26	16.65	EUR	
		0.0 %				0.9 %			2.6 %				4.4 %
		0.0 %				0.9 %	<b>TOTAL</b>		100.0 %				100.0 %

Source: Empirical Research Partners Analysis.

**Appendix 2: Select Japanese Exporters  
Japanese Core Model Ranking  
Sorted By Gross Profit Yield  
As of Early-August 2013**

Symbol	Company	Price (Local)	Foreign Sales Ratio	Quintiles (1=Best, 5=Worst)									
				Super Factors		Earnings Quality and Trend		Market Reaction		Core Model	Gross Profit Yield	Forward P/E Ratio	Market Capitalization (Yen Million)
Valuation	Capital Deployment	Quality	Market	Reaction	Model	Yield	Ratio	Cap	Cap				
<b>Consumer Durables</b>													
6753-JP	Sharp Corp.	411.00	2	5	1	1	2	4	95.3 %	NM	496,934	\$5,008	
6752-JP	Panasonic Corp.	909.00	2	4	1	1	2	2	90.7	34.8 x	2,381,800	24,004	
6758-JP	Sony Corp.	2,104.00	1	2	1	1	2	1	89.3	42.5	2,166,266	21,832	
7272-JP	Yamaha Motor Co. Ltd.	1,392.00	1	5	4	2	4	5	50.0	12.9	515,019	5,190	
7269-JP	Suzuki Motor Corp.	2,428.00	2	2	1	2	5	3	48.9	12.9	1,406,838	14,178	
7731-JP	Nikon Corp.	2,049.00	1	4	5	1	5	4	42.7	12.4	821,401	8,278	
7261-JP	Mazda Motor Corp.	424.00	2	5	2	2	1	3	41.6	13.0	1,315,161	13,254	
7267-JP	Honda Motor Co. Ltd.	3,605.00	1	2	3	1	3	2	36.5	10.6	6,485,226	65,359	
5108-JP	Bridgestone Corp.	3,595.00	1	3	4	1	2	2	36.5	10.7	3,019,700	30,433	
7201-JP	Nissan Motor Co. Ltd.	1,039.00	1	2	4	3	4	3	36.1	9.5	4,751,905	47,890	
7259-JP	Aisin Seiki Co. Ltd.	4,040.00	2	1	2	3	2	1	31.1	12.9	1,236,391	12,460	
6902-JP	Denso Corp.	4,640.00	2	4	1	3	2	3	27.0	15.6	4,267,633	43,010	
7270-JP	Fuji Heavy Industries Ltd.	2,576.00	2	5	2	1	1	2	23.6	12.1	2,144,890	21,616	
7203-JP	Toyota Motor Corp.	6,220.00	1	3	3	2	1	2	21.3	11.4	22,344,640	225,192	
7202-JP	Isuzu Motors Ltd.	704.00	1	3	3	1	1	2	21.0	10.1	1,206,576	12,160	
7309-JP	Shimano Inc.	8,960.00	1	5	5	1	2	5	11.6	25.7	842,049	8,486	
7211-JP	Mitsubishi Motors Corp.	1,302.00	1	2	1	1	1	1	4.3	15.0	816,022	8,224	
<b>Capital Equipment</b>													
6502-JP	Toshiba Corp.	412.00	2	3	4	3	4	4	83.6 %	11.8 x	1,692,488	\$17,057	
7012-JP	Kawasaki Heavy Industries Ltd.	372.00	2	4	5	3	2	4	40.8	15.6	644,466	6,495	
7011-JP	Mitsubishi Heavy Industries Ltd	550.00	2	2	2	1	1	1	36.9	16.5	1,936,487	19,516	
7013-JP	IHI Corp.	423.00	2	4	4	2	1	3	31.7	24.4	635,592	6,406	
6471-JP	NSK Ltd.	960.00	2	3	3	3	1	2	26.7	15.1	553,430	5,578	
6301-JP	Komatsu Ltd.	2,209.00	1	4	5	1	4	3	24.2	11.5	2,192,579	22,097	
5486-JP	Hitachi Metals Ltd.	1,245.00	2	4	5	1	2	3	21.0	14.5	563,887	5,683	
6586-JP	Makita Corp.	5,230.00	1	4	2	1	2	3	16.4	17.4	749,441	7,553	
6326-JP	Kubota Corp.	1,458.00	2	5	5	4	1	4	15.8	18.0	1,867,728	18,823	
6594-JP	Nidec Corp.	8,240.00	1	5	4	2	3	4	12.8	20.0	1,231,281	12,409	
6273-JP	SMC Corp.	21,460.00	1	5	2	1	1	2	10.2	21.2	1,527,035	15,390	
6954-JP	Fanuc Corp.	15,480.00	1	5	5	1	5	5	7.8	28.7	3,862,280	38,924	
<b>Technology</b>													
7752-JP	Ricoh Co. Ltd.	1,160.00	2	1	4	1	2	1	94.7 %	10.6 x	909,577	\$9,167	
4901-JP	FUJIFILM Holdings Corp.	2,190.00	2	1	1	1	1	1	82.0	14.9	1,146,399	11,554	
7751-JP	Canon Inc.	3,095.00	1	2	1	1	5	2	47.2	12.8	4,223,522	42,565	
6645-JP	OMRON Corp.	3,090.00	2	4	2	2	2	2	37.1	16.0	714,523	7,201	
7741-JP	Hoya Corp.	2,136.00	1	4	3	1	1	1	30.9	17.3	938,866	9,462	
5333-JP	NGK Insulators Ltd.	1,404.00	1	5	4	2	2	4	21.0	18.3	507,942	5,119	
6971-JP	Kyocera Corp.	10,350.00	2	3	2	3	2	2	20.2	18.8	2,059,651	20,577	
8035-JP	Tokyo Electron Ltd.	4,420.00	1	3	1	1	4	3	18.3	46.9	790,255	7,964	
3659-JP	NEXON Co. Ltd.	1,264.00	1	3	1	1	3	1	16.9	12.9	565,524	5,699	
6981-JP	Murata Manufacturing Co. Ltd.	7,220.00	1	4	4	1	1	2	14.9	19.6	1,742,230	17,558	
6806-JP	Hirose Electric Co. Ltd.	13,520.00	1	5	3	1	2	3	10.7	26.2	558,855	5,632	
7974-JP	Nintendo Co. Ltd.	13,050.00	1	5	1	2	3	2	8.8	32.7	1,942,559	19,577	

Source: Empirical Research Partners Analysis.