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Portfolio Strategy November 2016

Where We Stand: Counting Cards

Calculating the Odds

- Value strategies have had a great run this year, producing double-digit alpha since March. The election of Donald Trump supercharged the reflationary trade that was already underway. In the first two weeks of November the value stocks trounced their opposite numbers, the stable issues, by +8 percentage points, one of the largest short-term rotations on record. Our valuation spreads, that in February stood at almost two standard deviations above their norm, a recessionary level, have come all the way back to their mean. The stocks behaving as bond proxies now sell at a four P/E point premium over their opposite numbers, mostly financials, half of what it was at mid-year, although still well above the long-term average of zero. Many of the obvious opportunities have worked out quickly just as some serious unknowns have been put on the table. We have to decide whether to hold our existing hand for a while longer or take advantage of the shuffle and draw for a new one.
- A literal reading of history would lead us to conclude that the value rotation has further to run and the enormity of the recent move tells us that spreads are likely to fall further, to a well below-average level. There's still a decent case for narrower differentials in energy and to a lesser extent in the financial sector. The difficulty we have with such an interpretation is that this time around, sentiment, rather than problems in the real economy, played a large role in creating the opportunity set. Given that we'd expect the rotation to have weaker legs than most of the precedents because we're not starting from a depressed point in most of the economy, save the energy sector.
- Rather, this episode reminds us of the post-1987 crash period, with Donald Trump filling in for Alan Greenspan. He's planning to address a crisis in confidence by throwing the fuel of fiscal stimulus on a smoldering fire ignited by a tightening labor market. It looks like the revaluation of the financials and other anti-bond proxies could go further because although the term premium in the bond market has moved up since July it's still close to zero. A third of the distance to its average of the past 20 years has been traversed. Given how long the debt/deflationary fears lingered and how extreme they became earlier this year, we're going to trust our regime indicator and stick with the valuation tilt a while longer.
- In periods like this one following the discounting phase, paying attention to the market's reaction to company fundamentals typically does no harm, it might actually do some good, as was the case in 1988. Appendix 1 on page 12 lists undervalued stocks where the market has already recognized that fundamentals are improving. More than a third of them are drawn from the financial sector.

Bretton Woods II at Risk

- In the post-Crisis years the free cash flow yield of the equity market has exceeded the yield of ten-year Treasuries by an average of +375 basis points, and now that gap is about +300 basis points. For the better part of a decade investors have been skeptical of both profit margins and bond yields, and so far that disbelief has been misplaced. That said, we're fearful though that the market may be taking the President-Elect's protectionist rhetoric too lightly. It constitutes a mortal threat to the Bretton Woods II world order, that's rooted in free trade and has led to exceptional profitability, in part by importing deflation into the cost of goods sold line of manufacturers. While globalization has lost momentum, protectionism would cause it to actually reverse, creating an immediate problem for the multiple of the market. In addition, a quarter of entrepreneurs are immigrants.

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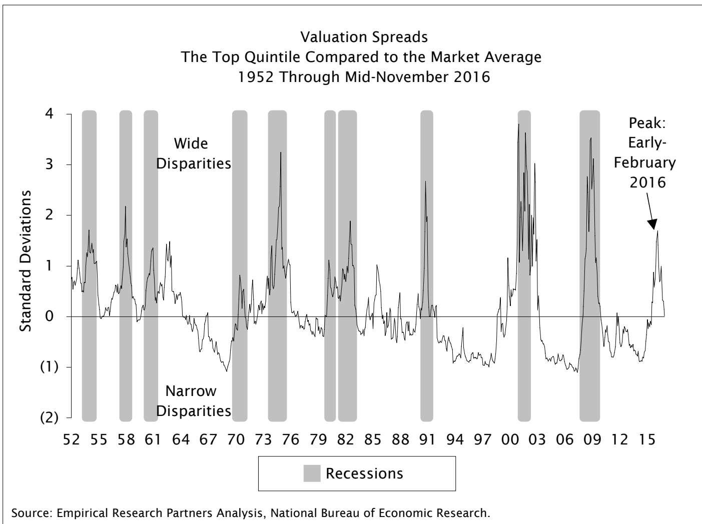
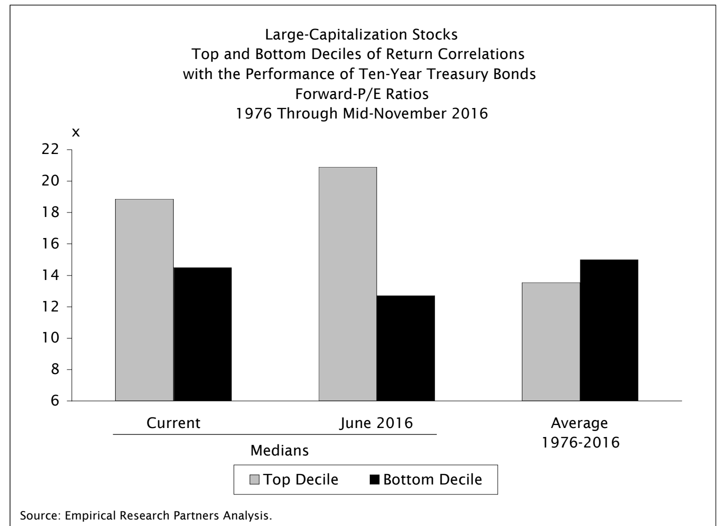
Conclusions in Brief

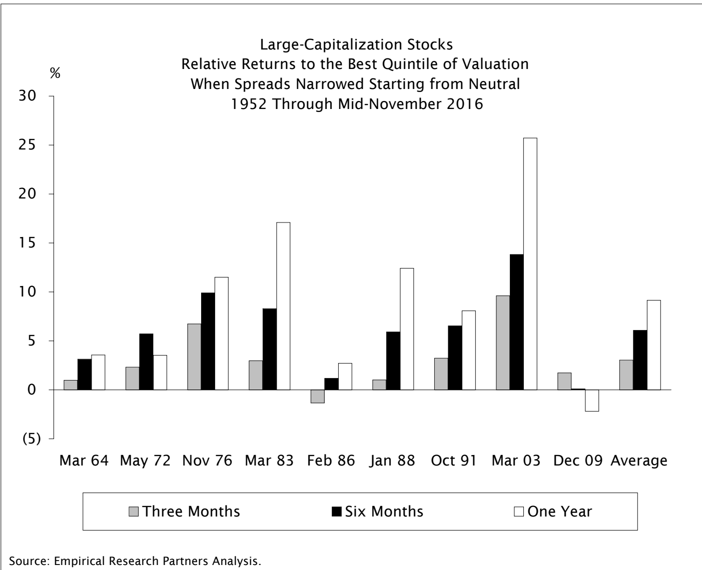
- Our valuation spreads have come back down to a neutral level…



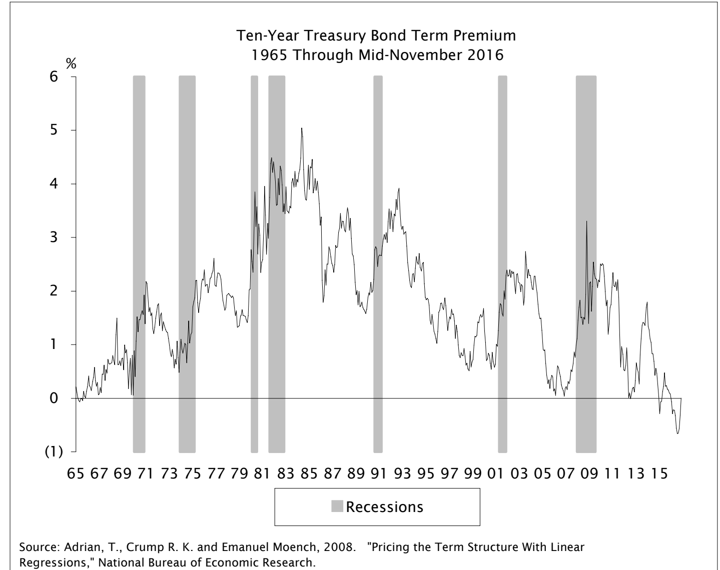
- …And the P/E premium of the bond surrogates has halved:



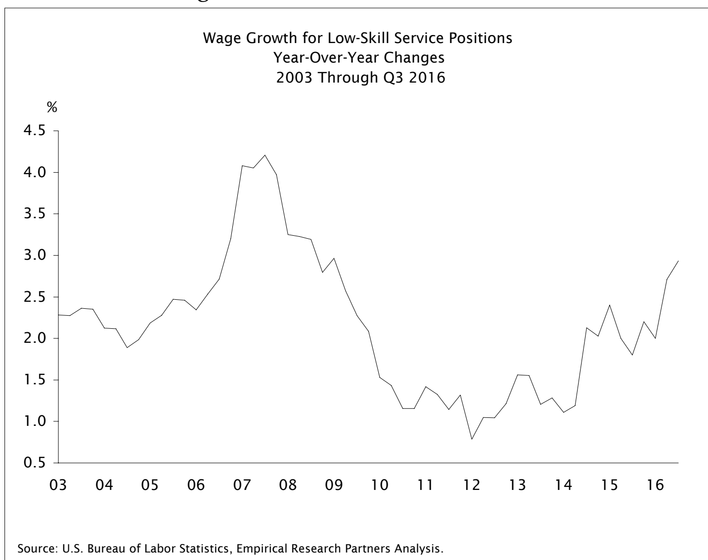
- Usually big value moves have legs…



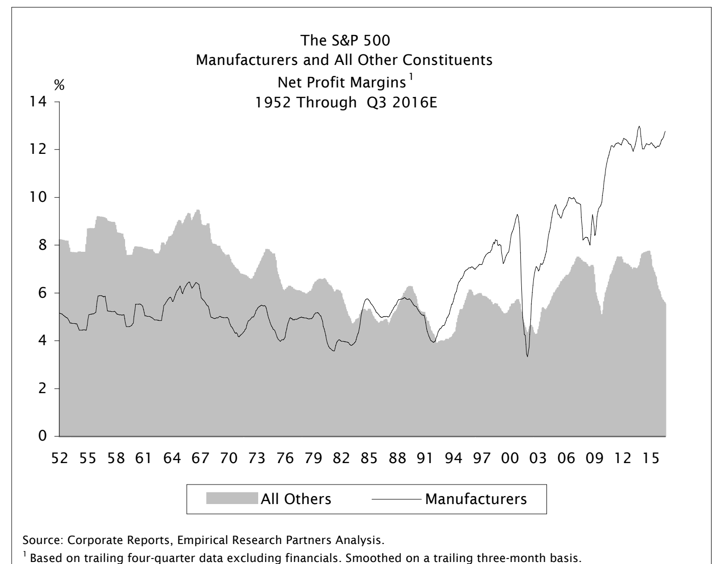
- …And this one probably has some room to run:



- The incoming administration plans to throw gasoline on smoldering embers:



- The Bretton Woods II era is at risk:



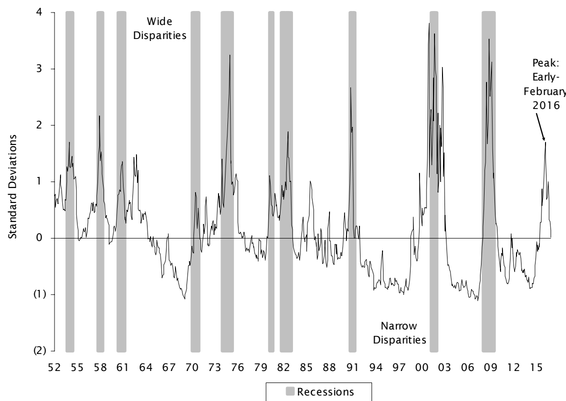
Where We Stand: Counting Cards

Hold 'Em or Fold 'Em?

The outcome of the presidential election supercharged a trend that had been in place for the better part of a year, while at the same time potentially calling into question the entire Bretton Woods II world order. The market's initial reaction to it has been to bet that massive fiscal stimulus is a sure thing and that real protectionism is a pipe dream. The idea is that the campaign promises will be recast in traditional political behavior. We have no idea whether that presumption is right or wrong, although it does seem optimistic. What we can do to help our cause is understand the odds associated with the cards that are already visible on the table. To do that we'll assess the valuation paradigm within the market, the market's overall level and the assumptions that underpin it, the state of the bond fund boom, and the vulnerability of the Bretton Woods II regime, that's been underway for 15 years now. We'll start with the tale being told in the guts of the market.

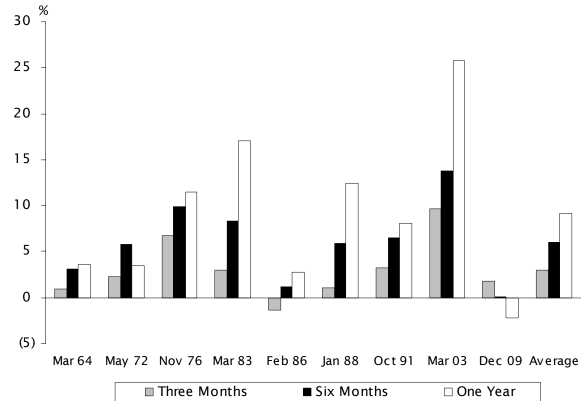
Our valuation spreads have been on an unprecedented wild ride in the past couple of years. At the beginning of 2015 they were at a neutral point, having had already risen off their lows in lockstep with the Dollar. A little more than a year later they sat 1.7 standard deviations above the norm, a level that in the past had been seen only during recessions (see Exhibit 1). Since February value strategies have produced double-digit alpha as the spreads have returned to their long-term average. Never before have we seen gyrations of that magnitude during an ongoing business cycle. Generally spreads don't sit on the average line for long, and typically the forces that caused them to narrow push them even lower. The market's initial response proves correct, and from a starting point like this one, the alpha generated in the next year has averaged +9 percentage points, with positive results in 8 of 9 episodes (see Exhibit 2). Of course most of the precedents occurred immediately following recessions, a decidedly different circumstance from that of today. In modern times the closest analogue we can find is in 1988, when the fears engendered by the 1987 crash proved misbegotten, soon after the infamous Greenspan put came into being.

Exhibit 1: Valuation Spreads
Top Quintile Compared to the Market Average
1952 Through Mid-November 2016



Source: National Bureau of Economic Research, Empirical Research Partners Analysis.

Exhibit 2: Large-Capitalization Stocks
Relative Returns to the Best Quintile of Valuation
When Spreads Narrowed Starting from Neutral
1952 Through Mid-November 2016

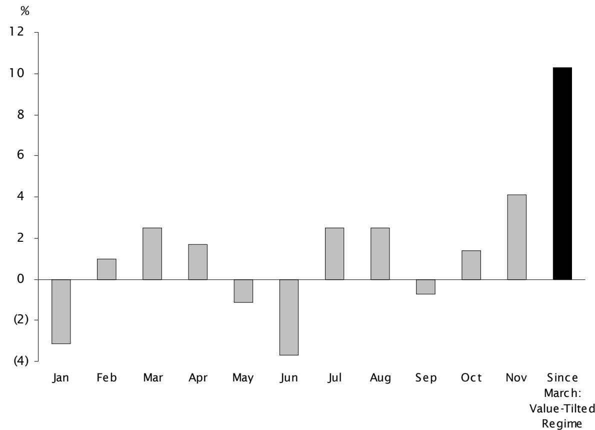


Source: Empirical Research Partners Analysis.

Our regime indicator shifted to a valuation-tilt early this year and that remains its current stance. The logic behind that recommendation was that we were getting paid to make a contrarian bet and the fundamentals didn't look so treacherous as to dissuade us from doing so. The idea has worked out and around 70% of the relative return we've been expecting has now been realized (see Exhibit 3).

Another way we can gauge where we stand is to return to the battlefield in the war between value stocks, an army populated by conscripts from the ranks of the financial and cyclical sectors, and the stocks with the most-stable fundamentals. We've thought there can be only one victor in that conflict because the relative returns of those two parts of the market have been nearly 90% anti-correlated (see Exhibit 4). In the first-half of November the value stocks outperformed the stable ones by +8 percentage points, the 12th most-extreme *monthly* return differential of the past 64 years. We looked at what happened in the year following other big, abrupt rotations and found that most of the time there was more to come (see Exhibit 5). Supporting that conclusion, there's still a provocative gap between the forward P/Es of the stable stocks and those of their opposite numbers (see Exhibit 6).

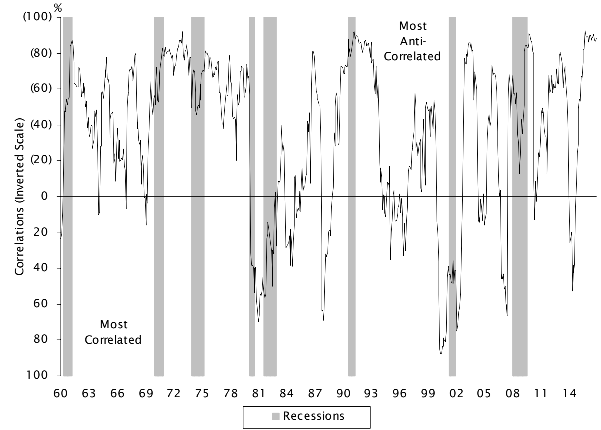
Exhibit 3: Large-Capitalization Stocks
Relative Returns to the Best Quintile of Valuation¹
2016 Through Mid-November



Source: Empirical Research Partners Analysis.

¹Equally-weighted monthly data.

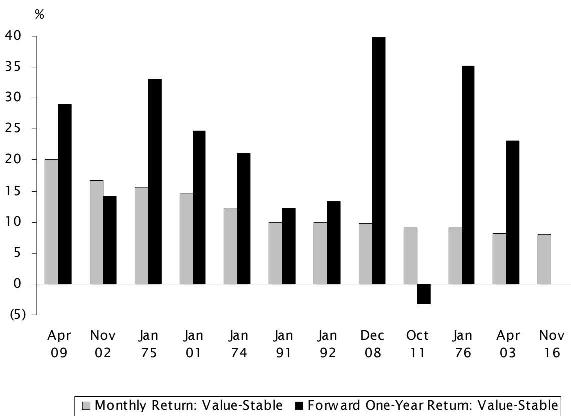
Exhibit 4: Large-Capitalization Value and Stable Stocks[1]
Correlation of their Relative Returns[2]
1960 Through Mid-November 2016



Source: Empirical Research Partners Analysis, National Bureau of Economic Research.

[1]Stable stocks are the top 20% by stability score.
[2]Computed over a twelve-month window and shown on an inverted scale.

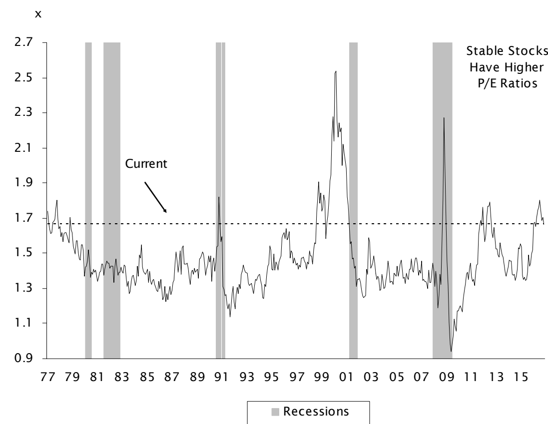
Exhibit 5: Large-Capitalization Value Versus Stable Stocks[1]
Forward One-Year Return Differential
When Value Has Just Had a Large Monthly Advantage
Monthly Data Compounded
1952 Through Mid-November 2016



Source: Empirical Research Partners Analysis.

[1]Stable stocks are the top 20% by stability score.

Exhibit 6: Large-Capitalization Value Versus Stable Stocks
Ratios of Forward-P/E Ratios[1]
1977 Through Mid-November 2016



Source: Empirical Research Partners Analysis, National Bureau of Economic Research.

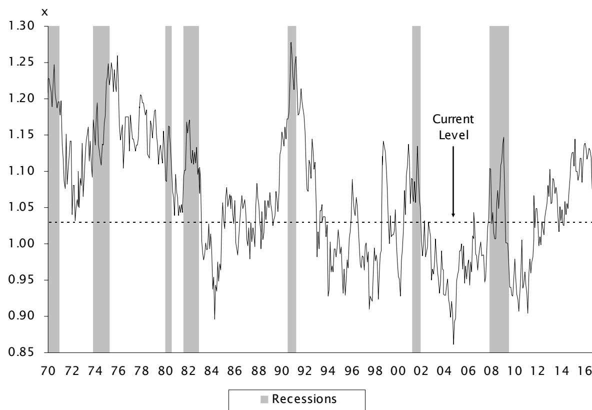
[1]Equally-weighted data.
[2]Stable stocks are the top 20% by stability score.

Fewer Aces Left in the Deck

Most of the aces in the deck have already been played, and we need to decide how much more conservatively (if at all) to bet. In February the sole decision we had to make was would the cycle continue, and the value cohort was loaded with tech, financial, energy and traditional cyclical issues, much as it had been at the last two economic troughs (see Exhibit 7). That's now far less the case and many of the most glaring anomalies have been resolved. Our longstanding favorites, the technology stocks, currently sell at the same free cash flow yield as the health care sector, and even the multiples of the consumer staples, that had been stretched to the point of absurdity, have returned to earth (see Exhibits 8 and 9). Defense, another long-time favorite of ours, and traditional capital goods companies have both been revalued in anticipation of a big-spending president (see Exhibits 10 and 11).

There's still some visible stress remaining within the energy and financial sectors, more in the former than the latter (see Exhibits 12 and 13). The large bank stocks now sell at 70% of the market's multiple based on the estimated numbers, leaving some room for further revaluation (see Exhibit 14). From here the outlook for value comes down to a momentum call: Is the market's reaction to the events directionally correct? If it is, our spreads are destined to return to a typical level for an expansion, around ¾ of a standard deviation below the mean.

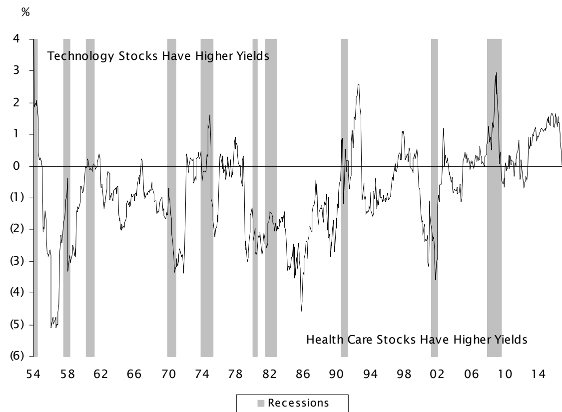
**Exhibit 7: Large-Capitalization Stocks
The Top Quintile of Valuation
Share Drawn from Cyclical Sectors[1]
as a Ratio to Their Benchmark Weights
1970 Through Mid-November 2016**



Source: Empirical Research Partners Analysis, National Bureau of Economic Research.

[1]Consumer cyclicals, financials, technology, energy, industrial commodities and capital equipment.

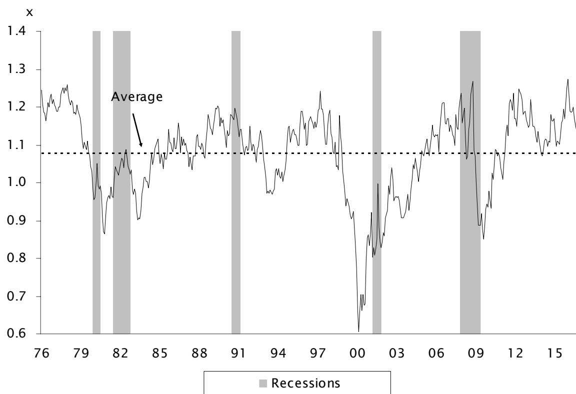
**Exhibit 8: Large-Capitalization Stocks
Technology Compared to Health Care[1]
Differentials in Free Cash Flow Yields
1954 Through Mid-November 2016**



Source: Corporate Reports, Empirical Research Partners Analysis, National Bureau of Economic Research.

[1]Equally-weighted data.

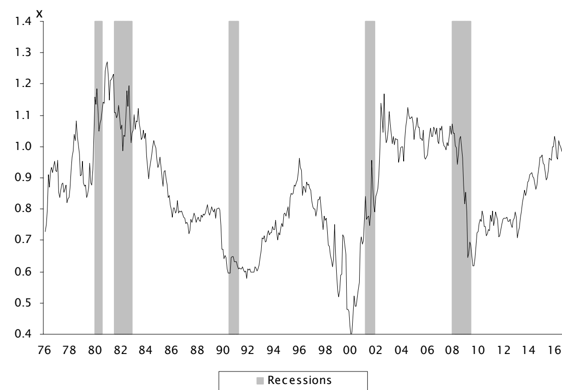
**Exhibit 9: Large-Capitalization Consumer Staple Stocks[1]
Relative Forward-P/E Ratios
1976 Through Mid-November 2016**



Source: Corporate Reports, National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Capitalization-weighted data.

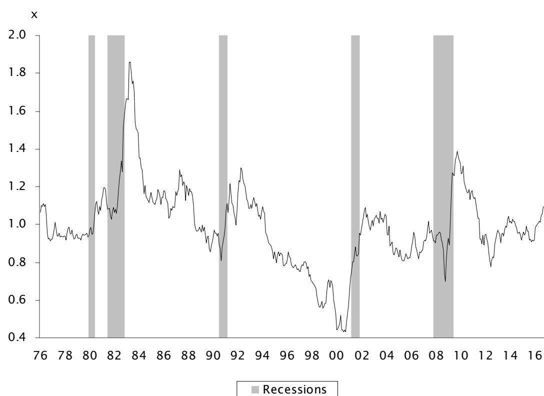
**Exhibit 10: Large-Capitalization Defense Stocks
Relative Forward-P/E Ratios[1]
1976 Through Mid-November 2016**



Source: National Bureau of Economic Research, Corporate Reports, Empirical Research Partners Analysis.

[1]Capitalization-weighted data.

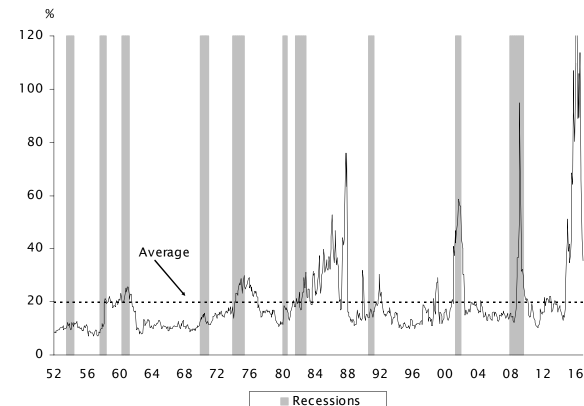
**Exhibit 11: Large-Capitalization Machinery Stocks[1]
Relative Forward-P/E Ratios
1976 Through Mid-November 2016**



Source: Corporate Reports, National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Capitalization-weighted data.

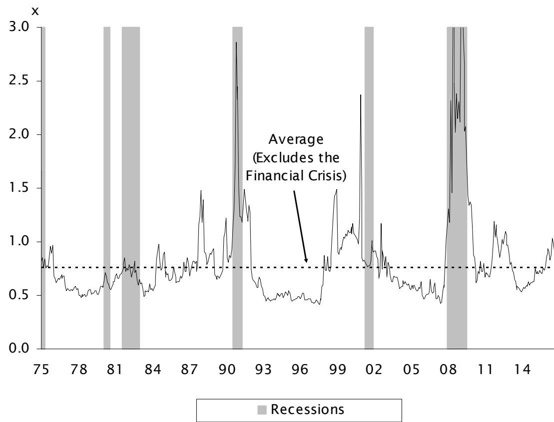
**Exhibit 12: Energy Stocks[1]
Differential in Gross Cash Flow Yields
Highest Quintile Compared to the Sector Average
1952 Through Mid-November 2016**



Source: National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Drawn from the largest 1,500 stocks.

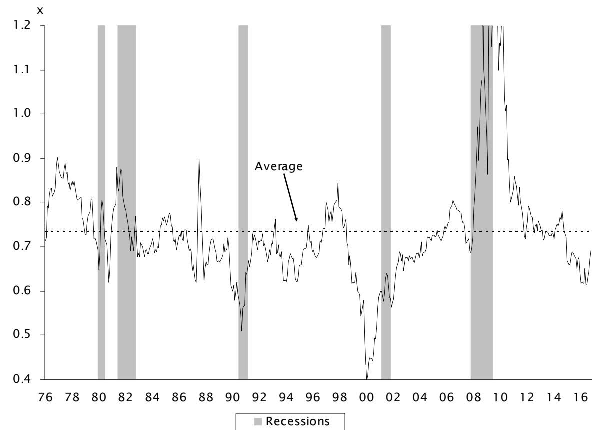
Exhibit 13: Financial Stocks[1]
Differential in Book-to-Price Ratios
Cheapest Quintile Compared to the Sector Average
1975 Through Mid-November 2016



Source: National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Drawn from the largest 1,500 stocks.

Exhibit 14: Large-Capitalization Bank Stocks[1]
Relative Forward-P/E Ratios
1976 Through Mid-November 2016



Source: Corporate Reports, National Bureau of Economic Research, Empirical Research Partners Analysis.

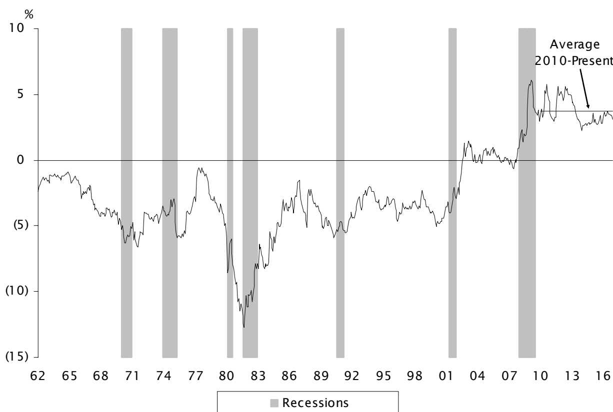
[1]Capitalization-weighted data.

Taking account of what we know about the cards that've already been played, we don't see a compelling reason to overrule the message of our regime indicator. First the laws of gravity, and then the election of a presumably big-spending administration have led to a reshuffling of the deck, but not by enough to cause us to fold the hand we've been playing. It looks like we're transitioning from a period of risk aversion to one where the nominals increase, perhaps in a meaningful way. We're prone to hold onto our winners rather than rebalancing toward the old stable leadership on the dip.

The Market Holds 'Em

The events of recent weeks haven't yet called into question the valuation of the equity market. At the moment, the core, that excludes the commodity sectors and utilities, is priced to a free cash flow yield that's a tad above 5.25%, a spread of around three percentage points over the yield of the ten-year Treasury bond (see Exhibit 15). That's not an unusual reading, and throughout the post-Crisis era equities have been priced at a substantial premium, averaging 375 basis points. We think that the reason it's been stable for so long is that investors have never believed in the market's free cash flow margins nor the Treasury's yields. That skepticism isn't crazy because both the margins and the bond term premium have been at historic extremes (see Exhibits 16 and 17). Since July, the latter has retraced a third of the distance back to its 20-year average. What's also stood out is that up until the last week or so the Bond had yielded (100) basis points less than the rate of wage growth (see Exhibit 18).

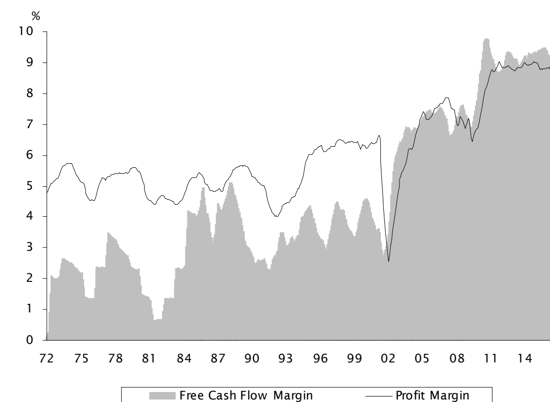
Exhibit 15: Core Large-Capitalization Stocks[1]
Free Cash Flow Yields Less the Ten-Year Treasury Bond Yield
1962 Through Mid-November 2016



Source: Bloomberg L.P., Corporate Reports, National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Core excludes financials, utilities, energy and industrial commodities; capitalization-weighted data.

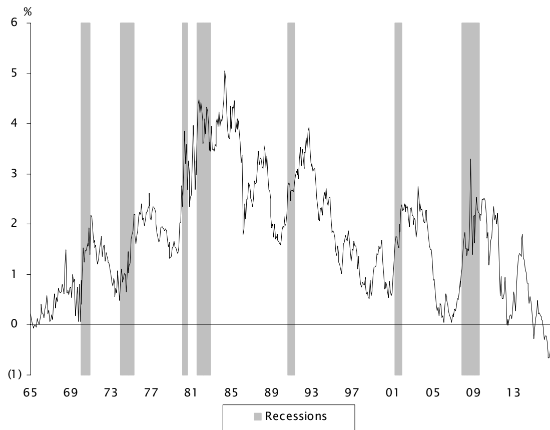
Exhibit 16: Core Large-Capitalization Stocks
Free Cash Flow and Profit Margins[1]
1972 Through October 2016



Source: Corporate Reports, Empirical Research Partners Analysis.

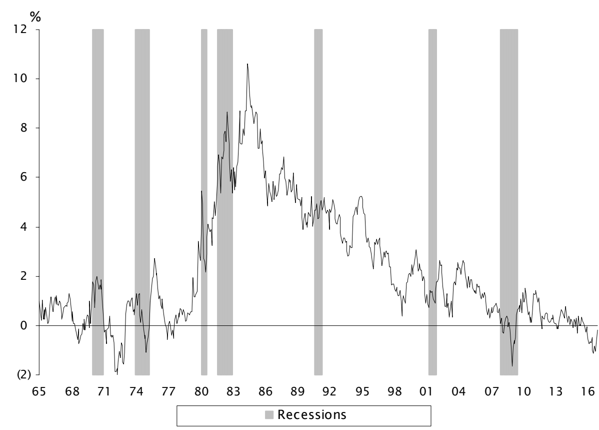
[1]Excluding financials, energy, industrial commodities and utilities; based on trailing four-quarter data smoothed on a trailing three-month basis.

**Exhibit 17: Ten-Year Treasury Bond Term Premium
1965 Through Mid-November 2016**



Source: Adrian, T., Crump R. K. and Emanuel Moench, 2008. "Pricing the Term Structure With Linear Regressions," National Bureau of Economic Research.

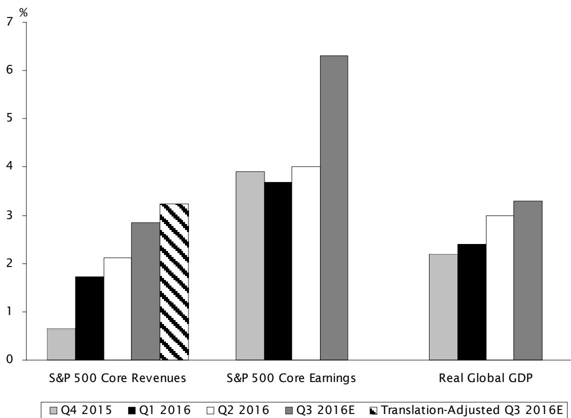
**Exhibit 18: Ten-Year Treasury Bond Yield Less the
Growth Rate of Average Hourly Earnings
1965 Through Mid-November 2016**



Source: Bureau of Labor Statistics, Federal Reserve Board, National Bureau of Economic Research, Empirical Research Partners Analysis.

We don't see an immediate endogenous threat to profit margins, that've been on the rise throughout most of the expansion, even as top-line growth fell to low single digits (see Exhibit 19). The earnings per share of the core market has been increasing at a mid-single-digit rate, while capital expenditures have lagged behind (see Exhibit 20). It still looks to us to be a drawn-out earnings cycle, where animal spirits have yet to really take hold. Managements have never been confident enough to do real harm.

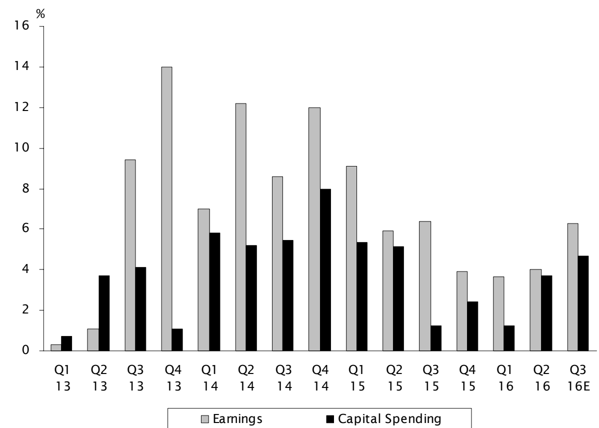
**Exhibit 19: The Core S&P 500[1]
Rates of Change: Revenues, Earnings
Per Share and Real Global GDP
Q4 2015 Through Q3 2016E**



Source: Bloomberg L.P., Corporate Reports, Empirical Research Partners Analysis.

[1]The core statistics exclude financials, energy and industrial commodities.

**Exhibit 20: The Core S&P 500[1]
Growth Rates in Capital Spending and
in Earnings Per Share
2013 Through Q3 2016E**



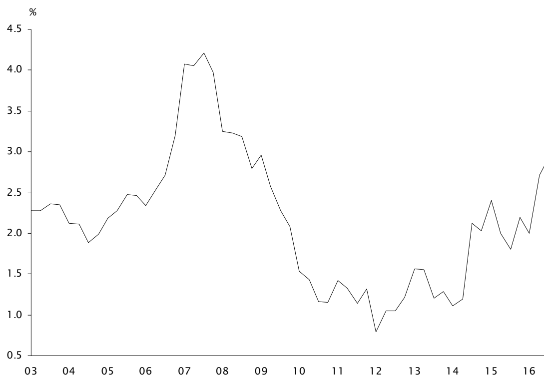
Source: Corporate Reports, Empirical Research Partners Analysis.

[1]Excluding financials, energy and industrial commodities, computed on a year-over-year basis.

The threat to the status quo in the bond market looks more immediate than that to earnings. Wage growth has been picking up for some time, particularly at the low end, where the supply of (desperate) applicants is ebbing (see Exhibit 21). In addition, the hit to the economic growth from the retirement of baby boomers reached its zenith last year (see Exhibit 22). Raising the ante, perhaps by a lot, the incoming administration has aggressive spending plans without an associated source of tax revenues.

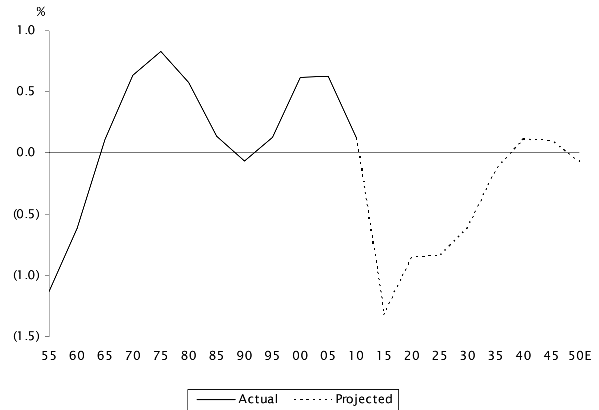
The situation in the bond market is provocative because so much money poured into open-ended vehicles at exceptionally low yields (see Exhibit 23). Bond fund investors are in part there for the safety those funds offer and unlike their equity counterparts they've been more sensitive to losses than gains (see Exhibit 24). Given the duration and size of the bond market a +100 basis point rise in rates would create about $(1.5) trillion of losses (see Exhibit 25). It's interesting that in the week of the election retail investors put $3 billion *into* taxable bond mutual funds and ETFs, a decidedly different reaction from that of portfolio managers (see Exhibit 26).

Exhibit 21: Wage Growth for Low-Skill Service Positions[1]
Year-Over-year Changes
2003 Through Q3 2016



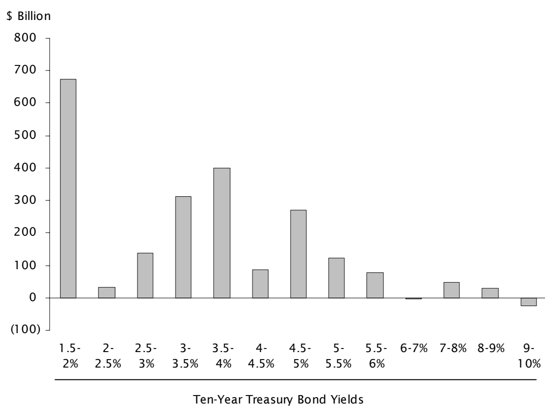
Source: U.S. Bureau of Labor Statistics, Empirical Research Partners Analysis.

Exhibit 22: The U.S.
Contribution of Age-Related Demographic Change to the U.S. GDP Growth Rate
1955 Through 2050E



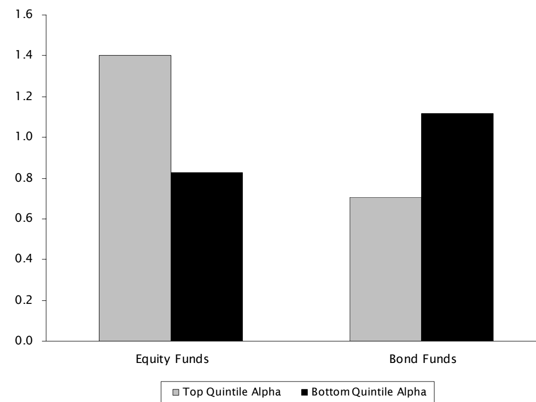
Source: Jinill Kim, 2016. "The Effects of Demographic Change on GDP Growth in OECD Economies," Board of Governors of the Federal Reserve System, IFDP Notes.

Exhibit 23: Bond Mutual Funds and ETFs
Net Flows By Ten-Year Treasury Bond Yields
1987 Through September 2016



Source: Investment Company Institute, Federal Reserve Board, Empirical Research Partners Analysis.

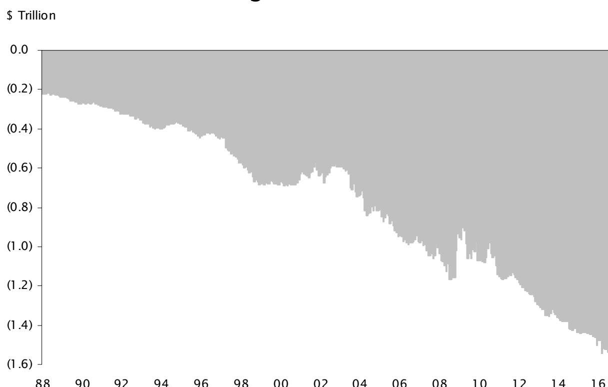
Exhibit 24: Equity and Bond Mutual Funds
Sensitivity of Flows to Trailing One-Year Alpha[1]
Top and Bottom Quintiles
1992 Through 2014



Source: Goldstein, I., Jiang. H. and David T. Ng, 2015. "Investor Flows and Fragility in Corporate Bond Funds," Working Paper.

[1]Slope coefficient of funds flows to alpha.

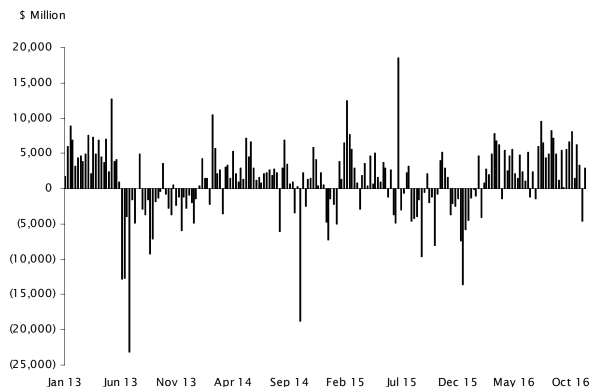
Exhibit 25: The U.S.
Domestically-Held Bonds[1]
Estimated System-wide Capital Loss Created by a +100 Basis Points Rise in Rates[2]
1988 Through Mid-October 2016



Source: Federal Reserve Board, Bloomberg L.P., Empirical Research Partners Analysis.

[1]Debt held by the Fed and foreigners is excluded.
[2]Based on duration of the JP Morgan US Aggregate Index.

Exhibit 26: Taxable Bond Mutual Funds and ETFs
Weekly Net Flows
2013 Through Mid-November 2016



Source: Investment Company Institute.

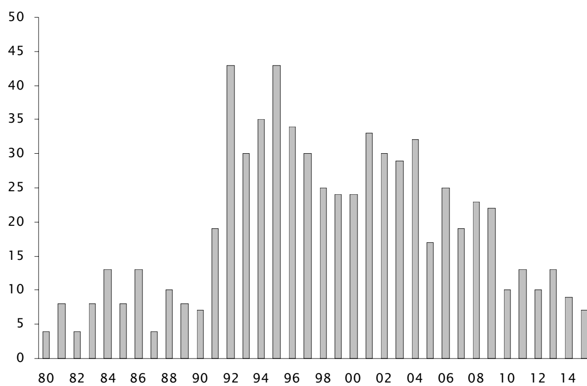
The bottom line is that the bond market was spooked by the prospect of big fiscal stimulus in a setting of little labor market slack. That seems to us a rational response. The fact that the equity market has held up speaks to the risk premium it's long carried.

The Real Threat, to the Bretton Woods II Regime

President-Elect Trump made protectionism a building block of his campaign. If he tries to follow through on his promises we'd expect that the multiple of the equity market would contract, as the Bretton Woods II regime, the product of free trade agreements, comes under siege.

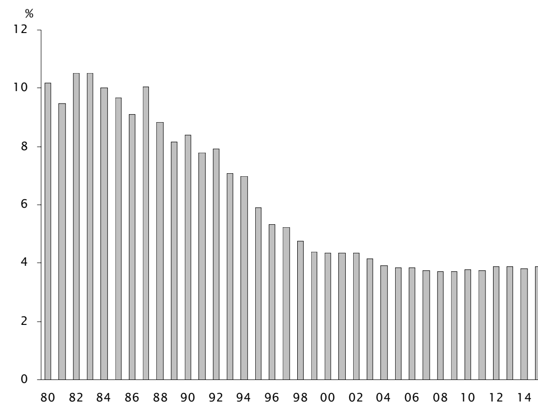
The current era of free trade began in the early-1990s and continued for around 15 years. Exhibit 27 charts the number of free trade agreements signed each year while Exhibit 28 presents the average tariffs on imports in the developed world. The landmark events that set Bretton Woods II in motion were China joining the World Trade Organization and the U.S. granting it permanent normal trade relations status, both of which occurred in 2001.

Exhibit 27: Number of Free Trade Agreements Signed 1980 Through 2015



Source: International Monetary Fund, World Economic Outlook October 2016.

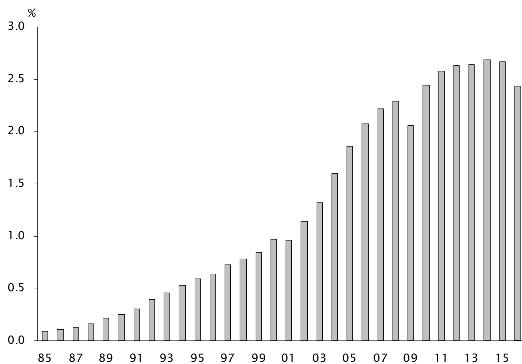
Exhibit 28: Developed Economies Import-Weighted Average Tariffs 1980 Through 2015



Source: International Monetary Fund, World Economic Outlook October 2016.

Up until that time China's position as a most-favored trading partner was subject to an annual review by Congress and the House of Representatives held votes to revoke it every year from 1990 to 2001. After that uncertainty was eliminated trade with China took off, with imports from there growing from 1% to 2.6% of U.S. GDP in a decade (see Exhibit 29). China's penetration into the U.S. market leveled off in recent years but its successes may have led to the loss of around two million jobs over a decade (see Exhibit 30). Hence the belated success of populist appeals. In the past five years manufacturing employment has grown and wage gains picked up this year (see Exhibit 31). That ended up to be too little, too late.

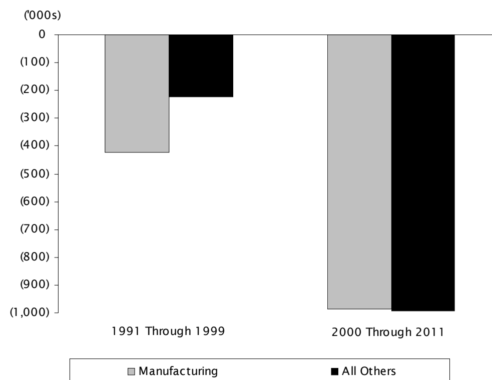
Exhibit 29: Imports from China As a Share of Nominal U.S. GDP[1] 1985 Through Q3 2016



Source: U.S. Census Bureau, Bureau of Economic Analysis, Empirical Research Partners Analysis.

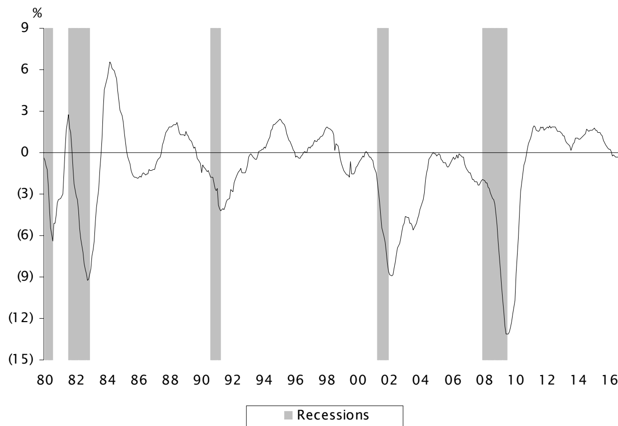
[1]At annual rates.

Exhibit 30: Job Losses Attributable to Chinese Imports Manufacturing and All Other Industries 1991 Through 2011



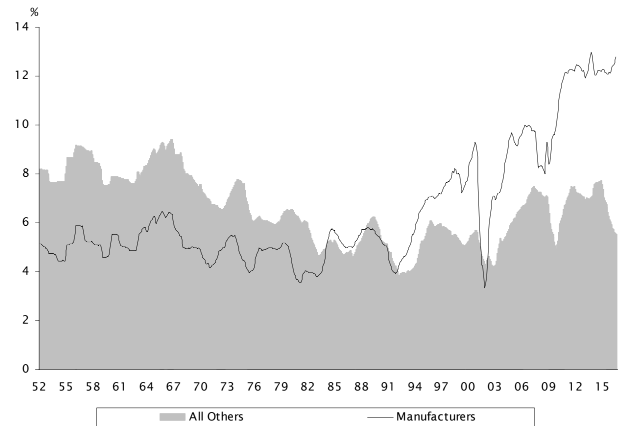
Source: Acemoglu, D., Autor, D., Dorn, D., Hanson, G.H. and Brendan Price, 2015. "Import Competition and the Great U.S. Employment Sag of the 2000s," Working Paper.

Exhibit 31: U.S. Manufacturing Employment Year-over-Year Changes 1980 Through October 2016



Source: Bureau of Labor Statistics, National Bureau of Economic Research, Empirical Research Partners Analysis.

Exhibit 32: The S&P 500 Manufacturers and All Other Constituents Net Profit Margins[1] 1952 Through Q3 2016E

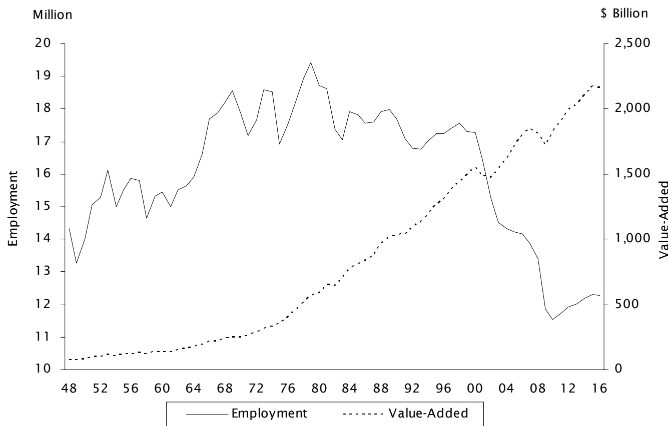


Source: Corporate Reports, Empirical Research Partners Analysis.

[1]Based on trailing four-quarter data excluding financials. Smoothed on a trailing three-month basis.

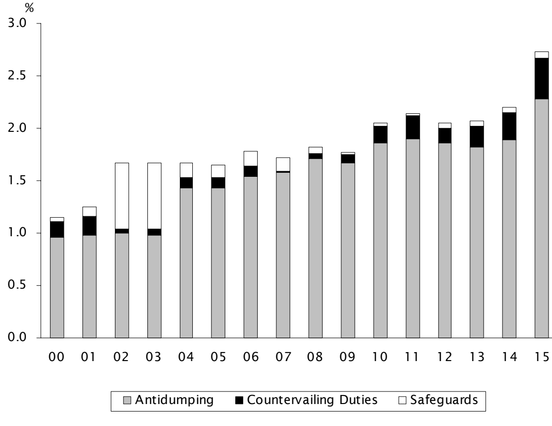
The beneficial effects of globalization are readily apparent in margins. Companies that make something somewhere have accounted for most of the improvement in profitability of the last 15 years, with the technology sector at the heart of what's gone on (see Exhibit 32). Cheap imports boosted gross margins while the labor intensity of the remaining onshore manufacturing collapsed. The value-added produced by U.S. plants has increased by nearly +50% since 2001 even as their employment shrunk by a quarter (see Exhibit 33). The benefits from globalization and automation have gone hand-in-hand, with the former probably the more important of the two.

Exhibit 33: U.S. Manufacturing Employment and Value-Added 1948 Through October 2016



Source: Bureau of Labor Statistics, Bureau of Economic Analysis, Empirical Research Partners Analysis.

Exhibit 34: Share of Products Affected by Temporary Trade Barriers 2000 Through 2015

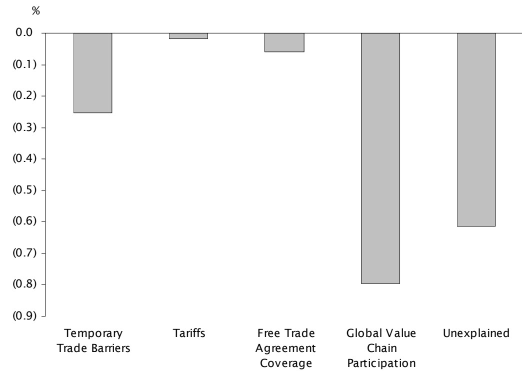


Source: International Monetary Fund, World Economic Outlook October 2016.

Real protectionist policies would threaten the status quo and with it the multiple of the equity market. The era of putting in place new agreements is apparently at an end, and there's been a steady stream of temporary trade barriers erected (see Exhibit 34). Thus far though only a small share of tradable products have been affected by them. Most of the slowdown in trade has been a function of weak demand and the end of the build-out of global production chains (see Exhibit 35). While globalization has already lost momentum, protectionist policies could cause it to reverse, calling the sustainability of margins into serious question.

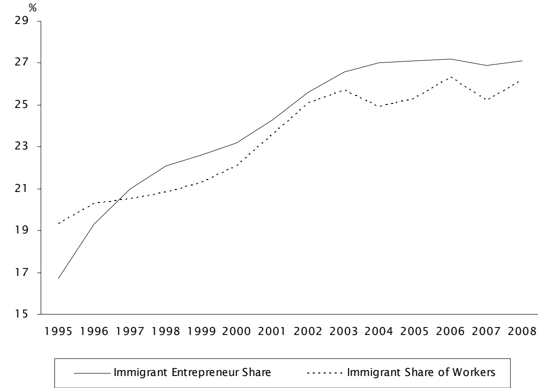
Initiatives designed to limit immigration would also be a negative for growth. Immigrants make up a quarter of the population of entrepreneurs and a like share of the employment of start-ups (see Exhibit 36). They get the job done.

Exhibit 35: Contribution of Trade Policies and Global Value Chains to the Decline in Import Growth 2012 Through 2015 Versus 2003 Through 2007



Source: International Monetary Fund, World Economic Outlook October 2016.

Exhibit 36: Immigrants Role in Entrepreneurship and Employment in New Firms 1995 Through 2008



Source: Kerr, S.P. and William R. Kerr, 2016. "Immigrant Entrepreneurship," NBER Working Paper 22385.

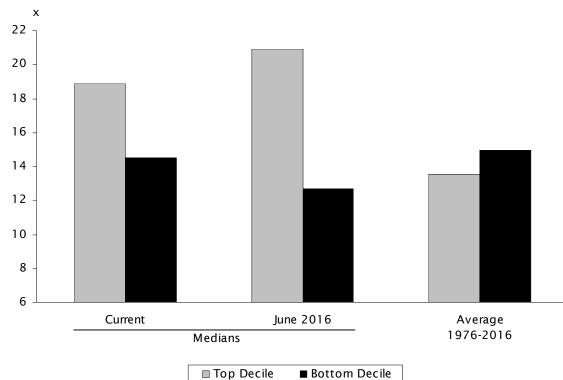
Conclusion: Holding 'Em, Trembling

A literal reading of history would lead us to conclude that the value rotation that began last February has further to run, and the enormity of the move we've already seen tells us something about what could happen from here. The difficulty in relying upon such an interpretation this time around is that sentiment, rather than problems in the real economy, played a large role in forming the opportunity set. Given that, all other things being equal, we'd expect the rotation to have weaker legs than the precedents because in most industries we're not starting from a depressed base. This episode reminds us of the post-1987 crash period, with Donald Trump filling in for Alan Greenspan. The idea is that he is planning to throw gasoline on a smoldering fire started by a tightening labor market and the smoke could asphyxiate the bond proxies. Exhibit 37 presents the forward-P/E ratios of that group along with those of their opposite numbers, today, in the middle of this year, and over the past 40 years. The gap was more than eight P/E points at mid-year, it's now closer to four points and the longer-term average has been around zero.

Our judgment is that the stylistic turning point occurred nine months ago and the results of the election supercharged a trend that was already in place. We're prone to trust our regime indicator and stick with its recommendation of a valuation tilt, even though our spreads have already regressed to the average line. In periods like this one paying attention to the market's reaction to fundamentals will probably do no harm, and as was the case in 1988, it might actually do some good (see Exhibit 38). Appendix 1 on page 12 lists undervalued stocks where the market has already recognized that fundamentals are improving.

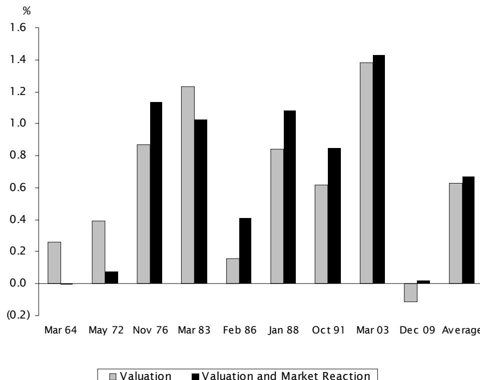
For the past 15 years we've seen the Bretton Woods II era as the defining event for equity investors. Outsourcing and automation changed the profit dynamic and capital intensity and we won by betting *on* the margins and free cash flow yields. Needless to say, the election of a president with protectionist tendencies makes us tremble.

Exhibit 37: Large-Capitalization Stocks Top and Bottom Deciles of Return Correlations with the Performance of Ten-Year Treasury Bonds Forward-P/E Ratios 1976 Through Mid-November 2016



Source: Empirical Research Partners Analysis.

Exhibit 38: Large-Capitalization Stocks Forward One-Year Monthly Relative Returns to the Top Quintile of Valuation Only and with a Market Reaction Overlay from a Starting Point of Neutral Valuation Spreads 1952 Through Mid-November 2016



Source: Empirical Research Partners Analysis.

Appendix 1: Large-Capitalization Stocks
Undervalued Stocks With Favorable Market Reaction Characteristics
Sorted by Capitalization Within Sector
As of Mid-November 2016

			Quintiles (1=Best; 5=Worst)						
					Memo:				
Symbol	Company	Price	Valuation	Market Reaction	Free Cash Flow-to-Enterprise Value	Core Model Rank	Forward-P/E Ratio		Market Capitalization ($ Billion)
Consumer Durables									
HOG	HARLEY-DAVIDSON INC	$58.29	2	1	2	1	14.2	x	$10.3
LEA	LEAR CORP	125.33	1	1	1	1	8.7		8.8
OC	OWENS CORNING	51.71	2	1	1	1	14.2		5.9
Retail and Other Consumer Cyclicals									
GPS	GAP INC	$29.84	1	1	1	1	13.7	x	$11.9
JWN	NORDSTROM INC	58.30	1	1	1	1	18.1		10.1
KSS	KOHL'S CORP	52.86	1	1	1	1	12.8		9.5
RL	POLO RALPH LAUREN CORP -CL A	113.17	2	1	2	1	18.5		9.3
PVH	PVH CORP	108.60	1	1	1	1	13.5		8.7
IGT	INTL GAME TECHNOLOGY PLC	29.74	2	1	3	1	13.0		6.0
Capital Equipment									
CMI	CUMMINS INC	$137.78	2	1	1	2	17.4	x	$23.2
IR	INGERSOLL-RAND PLC	75.92	2	1	1	1	16.0		19.6
URI	UNITED RENTALS INC	94.14	1	1	1	1	11.0		8.1
AER	AERCAP HOLDINGS NV	44.45	1	1	5	1	6.7		8.1
JEC	JACOBS ENGINEERING GROUP INC	59.19	2	1	1	2	18.0		7.2
PWR	QUANTA SERVICES INC	33.04	2	1	2	1	17.5		5.0
Industrial Commodities									
MT	ARCELORMITTAL SA	$7.25	2	1	4	1	14.9	x	$22.2
TCK	TECK RESOURCES LTD	23.15	2	1	4	1	12.8		13.3
WRK	WESTROCK CO	49.65	1	1	2	1	15.8		12.5
STLD	STEEL DYNAMICS INC	33.35	2	1	1	1	16.6		8.1
PKG	PACKAGING CORP OF AMERICA	85.92	2	1	2	1	15.7		8.1
BERY	BERRY PLASTICS GROUP INC	45.56	2	1	2	1	16.5		5.5
Technology									
HPE	HEWLETT PACKARD ENTERPRISE	$23.41	2	1	5	1	11.4	x	$39.0
VMW	VMWARE INC -CL A	78.25	2	1	1	1	17.0		32.4
HPQ	HP INC	15.87	1	1	1	1	9.9		27.2
WDC	WESTERN DIGITAL CORP	59.71	1	1	3	3	7.6		17.0
LRCX	LAM RESEARCH CORP	101.12	2	1	1	1	12.7		16.5
NTAP	NETAPP INC	34.87	2	1	1	1	13.1		9.7
STM	STMICROELECTRONICS NV	9.23	2	1	3	1	23.3		8.4
BAH	BOOZ ALLEN HAMILTON HLDG CP	35.07	2	1	2	2	18.5		5.2
CSRA	CSRA INC	31.42	2	1	3	3	14.9		5.1
Heath Care									
WCG	WELLCARE HEALTH PLANS INC	$128.74	1	1	1	1	21.6	x	$5.7
Banks, Consumer Finance and Other									
BAC	BANK OF AMERICA CORP	$20.16	1	1	na	1	13.1	x	$204.1
DFS	DISCOVER FINANCIAL SVCS INC	66.33	2	1	na	1	11.0		26.3
STI	SUNTRUST BANKS INC	52.38	2	1	na	1	14.4		26.0
FITB	FIFTH THIRD BANCORP	25.67	1	1	na	1	14.6		19.4
KEY	KEYCORP	17.09	2	1	na	2	14.1		18.5
RF	REGIONS FINANCIAL CORP	13.53	1	1	na	1	14.7		16.7
CFG	CITIZENS FINANCIAL GROUP INC	30.94	1	1	na	1	15.2		16.0
HBAN	HUNTINGTON BANCSHARES	11.96	2	1	na	3	14.0		13.0
BAP	CREDICORP LTD	153.46	2	1	na	2	12.1		12.2
CIT	CIT GROUP INC	40.38	1	1	na	1	13.4		8.2
ZION	ZIONS BANCORPORATION	38.76	2	1	na	1	17.9		7.9
LUK	LEUCADIA NATIONAL CORP	20.87	2	1	na	2	21.1		7.5
PACW	PACWEST BANCORP	50.70	2	1	na	2	17.0		6.2
Capital Markets									
MS	MORGAN STANLEY	$40.00	1	1	na	1	13.6	x	$75.1
BK	BANK OF NEW YORK COMPANY INC	47.93	1	1	na	1	14.4		50.7
STT	STATE STREET CORP	79.25	1	1	na	1	14.5		30.6
RJF	RAYMOND JAMES FINANCIAL CORP	71.90	2	1	na	1	15.8		10.2
ETFC	E TRADE FINANCIAL CORP	33.56	2	1	na	1	18.6		9.2
Insurance									
MET	METLIFE INC	$54.47	1	1	na	1	10.2	x	$59.9
PRU	PRUDENTIAL FINANCIAL INC	98.73	1	1	na	1	9.9		42.6
MFC	MANULIFE FINANCIAL CORP	17.14	1	1	na	2	9.9		33.8
SLF	SUN LIFE FINANCIAL INC	38.32	2	1	na	3	11.6		23.5
PFG	PRINCIPAL FINANCIAL GROUP INC	57.71	2	1	na	2	12.4		16.6
LNC	LINCOLN NATIONAL CORP	62.43	1	1	na	1	9.2		14.3
UNM	UNUM GROUP	42.25	1	1	na	1	10.5		9.8
Energy									
MPC	MARATHON PETROLEUM CORP	$43.83	1	1	3	1	14.6	x	$23.1
MRO	MARATHON OIL CORP	15.70	2	1	5	1	NM		13.3
TRGP	TARGA RESOURCES CORP	49.94	2	1	4	2	NM		9.0
MUR	MURPHY OIL CORP	30.91	2	1	4	1	NM		5.3
Telecommunications									
TMUS	T-MOBILE US INC	$53.46	2	1	3	2	30.9	x	$44.1
Utilities									
CNP	CENTERPOINT ENERGY INC	$23.27	2	1	4	1	19.0	x	$10.0

Source: Empirical Research Partners Analysis.