Empirical Research Partners

Michael Goldstein 212 803-8010 Longying Zhao 212 803-7940 Nicole Price 212 803-7935

August 16, 2016

Portfolio Strategy August 2016

Dividend Mania: A Historical Perspective, A Statistic That Matters: The Labor Force Participation Rate, Consumer Borrowing and the Long Cycle

Dividend Mania: Big Numbers

- It takes a dividend yield of at least 3.4% to rank in the market's highest quintile, and stocks with that characteristic have led by almost +11 percentage points this year. That result is among the best of the last 90 years and was only bettered by what went on following the Great Depression, the New Economy era and a few other big events. Moreover, the same return pattern is apparent throughout the developed world. Free cash flow yield strategies have worked too, but less well, and their performance disadvantage versus one based on dividends is just about the widest on record. Usually it doesn't work that way, and potential has outperformed a bird in the hand in two-thirds of all months.
- The absence of a risk-free rate has set off a historic reach for yield, particularly that seen as stable. Experiments show that negative rates supercharge that process, in fact to an irrational degree. High-dividend yielders now populate the market's momentum cohort, an unforgiving place where good has to be followed by great. The jobs and wage growth numbers along with the purchasing managers' survey will influence the Fed, and looks poised to undermine the momentum game. In that game the dogmatic usually fall victim to the pragmatic.

A Statistic That Matters: The Labor Force Participation Rate

- One way that growth can pick up is that discouraged high school graduates rejoin the work force, drawn in by higher wages. That process began about a year ago and those new entrants have replaced retiring baby boomers. The result has been a rise in the participation rate for the first time since the financial crisis. Wage growth has been strongest for low-skill positions, as it's been needed to lure in the disaffected non-participants. The associated mix effects (i.e., high school graduates in, baby boomers out) have impeded the composite wage growth numbers, by at least a percentage point.
- It looks like we're about two-thirds of the way through that reattachment process that could conceivably run for another year or two. Thereafter the driver of the participation rate will be baby boomer retirements, and the supply/demand relationship will shift in the favor of workers, boosting wage growth. The current paradigm in the equity market doesn't acknowledge that scenario, and the stocks most correlated with the bond market sell at an almost unprecedented +10 point P/E premium to those in the least-correlated groups. That differential appears overdone.

Consumer Borrowing and the Long Cycle

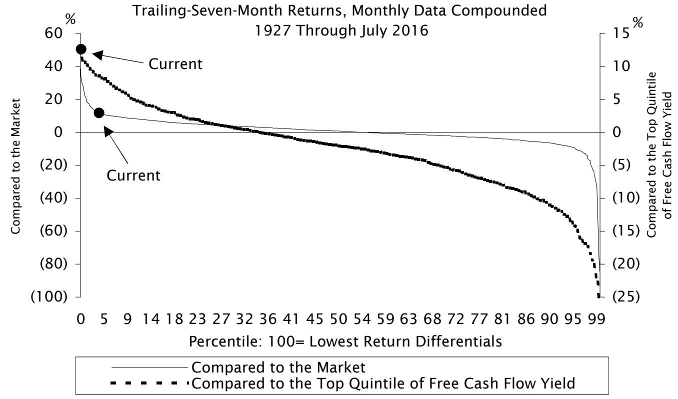
- The consumer is generating free cash flow (i.e., after outlays for new homes and durables) that equates to almost 4.5% of their income, an impressive number, particularly for the seventh year of a business cycle. They've borrowed relatively little in this expansion and most of the new debt has gone to those with 700+ FICO scores. Credit quality is strong with the notable exception of the auto loan category. All of this argues for an extended cycle, our base case. The valuation of the consumer cyclicals stocks already embodies that point of view. In general, we prefer the technology sector that has superior cash flow characteristics.
- Following a financial crisis the impulse is to look for signs of the next one, and that describes what's been going on since 2009. There've been nine correlation events in the equity market, the latest of which occurred in January of this year. All were misbegotten and we've been repeatedly paid to jump in when others duck and cover. We're prone to try to capitalize on risk aversion, learned and genetic. The institutional sponsor community, that holds $9 trillion in assets, now falls into the second bucket.

Sungsoo Yang (212) 803-7925 Yi Liu (212) 803-7942 Yu Bai (212) 803-7919 Janai Haynes (212) 803-8005

Conclusions in Brief

- This year's run in high-dividend-yielding stocks has been among the most powerful in 90 years...

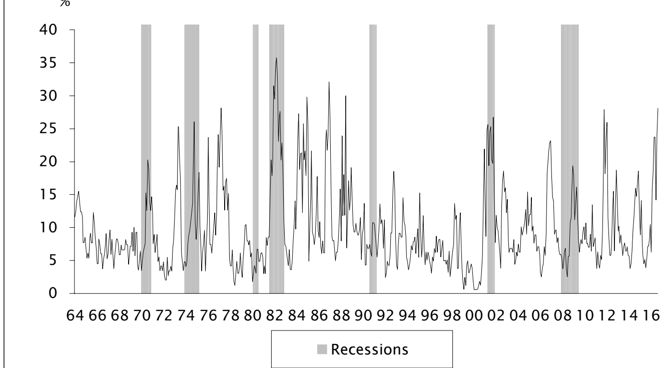
The Top Quintile of Dividend Yield
Compared to the Market and Top Quintile of Free Cash Flow Yield [1]
Trailing-Seven-Month Returns, Monthly Data Compounded
1927 Through July 2016



Source: Empirical Research Partners Analysis.
[1] Since 1952 when compares to the stocks in the top quintile of free cash flow yield.

- …Putting them among the market's momentum leadership, a treacherous club:

Large-Capitalization Stocks
in the Top Quintile of Dividend Yield
Share of the Best Quintile of Price Momentum
1964 Through Mid-August 2016



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

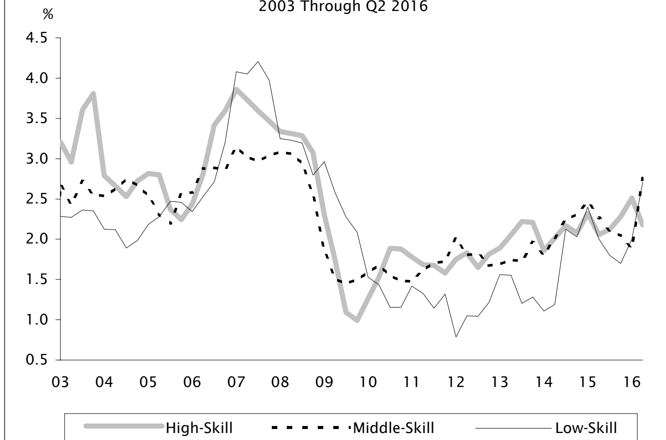
- Less-educated people are returning to the work force…

The Labor Force Participation Rate
Year-Over-Year Change for Those with High School Level Education [1]
2008 Through July 2016

Source: Bureau of Labor Statistics.
[1] Ages 25 and up; data smoothed on a trailing six-month basis.

- …Drawn in by higher wages for low-skill positions:

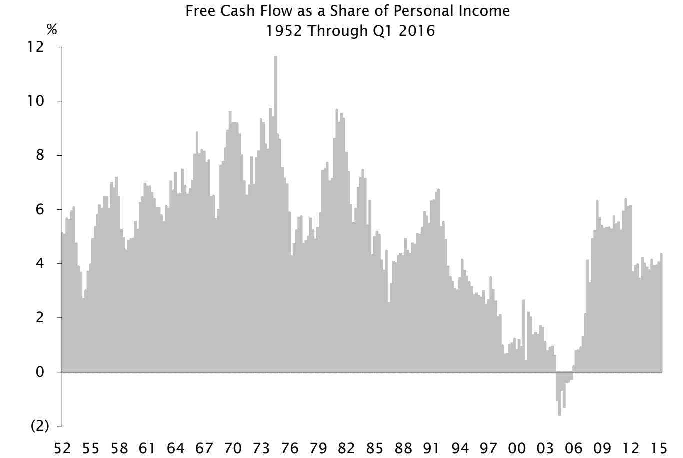
Annualized Growth in Wages and Salaries by Skill Level [1]
2003 Through Q2 2016



Source: U.S. Bureau of Labor Statistics, Empirical Research Partners Analysis.
[1] High-skill includes management, business, professional and related occupations, middle skill includes sales, administrative, production, construction, extraction, maintenance and transport occupations. Low-skill includes service occupations.

- The consumer has lots of free cash flow…

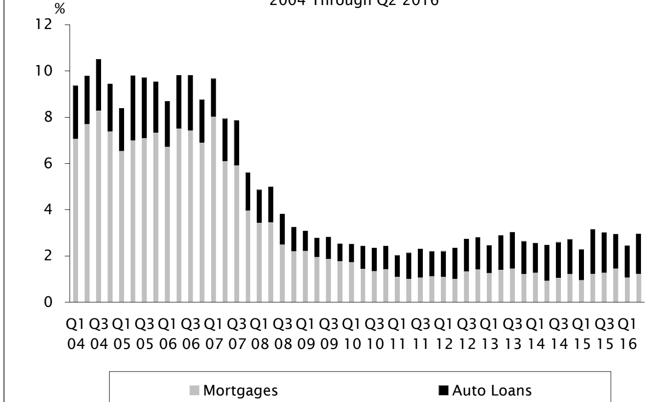
The U.S. Consumer
Free Cash Flow as a Share of Personal Income
1952 Through Q1 2016



Source: U.S. Department of Commerce, Federal Reserve Board, Empirical Research Partners Analysis.

- …And debt has played a limited role in this cycle:

U.S. Consumers with Credit Scores of Less Than 660
Mortgage and Auto Loan Originations
as a Share of Personal Consumption Expenditures [1]
2004 Through Q2 2016



Source: FRBNY Consumer Credit Panel/Equifax, Bureau of Economic Analysis, Empirical Research Partners Analysis.
[1] At an annualized rate.

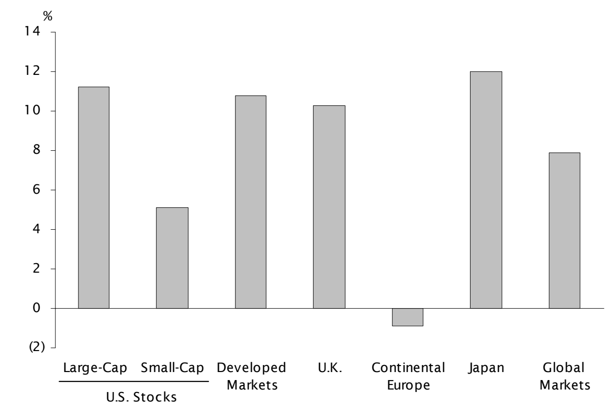
Dividend Mania: A Historical Perspective

Reaching for Yield, Almost Everywhere

Stocks that rank in the top quintile of dividend yield (i.e., yields of 3.4% or more) have this year outperformed the market by almost +11 percentage points on an equally-weighted basis, and by two points more than that on a cap-weighted one. Those premia aren't unique to the U.S. and we see similar results in most of the developed markets (see Exhibit 1). The exception is Continental Europe where the majority of high-yielding issues are financials, that've trailed that market by (18.5) percentage points this year.

What's gone on this year is mostly explained by the global yield blight, and the dividend yield of the U.S. equity market tops that of Treasury Bonds for one of the few times in the past 60 years (see Exhibit 2). From 1930 through the mid-1950s that was always the case, as in the Great Depression and thereafter equities were regarded as an exceptionally-risky asset class.

**Exhibit 1: Developed Market Equities
Relative Returns to the Highest Quintile
of Dividend Yield
Monthly Data Compounded
2016 Through Early-August**



Source: Empirical Research Partners Analysis.

**Exhibit 2: Large-Capitalization Stocks
Dividend Yield Less the Ten-Year Treasury
Bond Yield
1926 Through July 2016**

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

We read an interesting paper that examined how the nominal level of the risk-free rate impacts investors' proclivity to take risk.[1] The authors asked workers from Amazon's Mechanical Turk platform along with Harvard MBA students to allocate money based on various combinations of risk-free rates and expected returns for risky assets. The risk-free rates varied but the return premium of the risky asset stayed constant at +5 points. For example, when the former was zero and the latter was 5% participants allocated 70% of their money to the risky asset (see Exhibit 3). When the numbers were 5% and 10% that share was 57%, while at 10% and 15% it was 50%. The nominals mattered to decision-making, and the non-linear relationship documented in the paper explains how we've arrived at the current point. Retail investors are opting for a bird in the hand while most professional money managers are focused on what's in the bushes. Higher dividend yields, preferably in stable companies, represent the sure(r) thing.

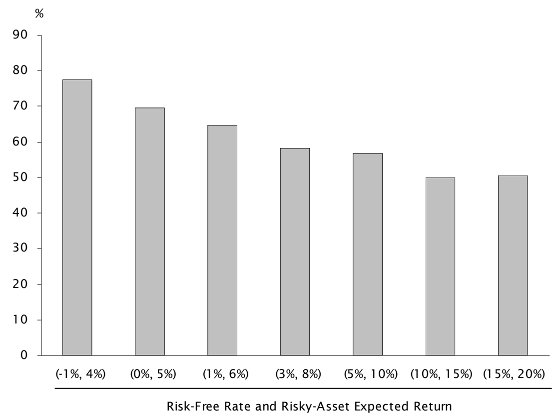
A Big Move, By Any Standard

We wondered how exceptional the performance of high-dividend yielders have been, and Exhibit 4 compares the year-to-date result to all the other seven-month stretches of the past 90 years. This episode ranks in the 3rd percentile of the distribution. The even-better outcomes came during the recovery from the Great Depression, the deep early-1980s recession, in 2000 through 2002, when the New Economy era cracked, and during the 2009 financial crisis.

We also examined the returns of a dividend yield strategy compared to those of one rooted in free cash flow yield. This year the top quintile of free cash flow yield is slightly ahead of the market on an equally-weighted basis and +2.5 points ahead on a cap-weighted one. Even so, the dividend strategy has been dominant. The free cash flow strategy has won in two-thirds of all months since 1952. Potential has trumped the sure(r) thing.

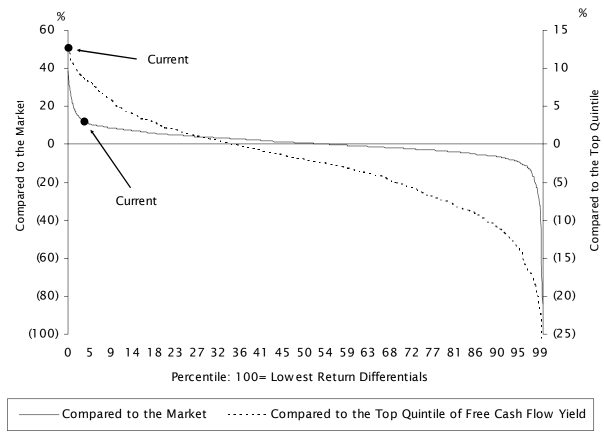
[1]Lian, C., Ma, Y. and Carmen Wang, 2016. "Low Interest Rates and Risk Taking: Evidence from Individual Investment Decisions," Working Paper.

Exhibit 3: Allocations to Risky Assets Depending on Risk-Free Rate and Risky-Asset Expected Returns 2015



Source: Lian, C., Ma, Y. and Carmen Wang. 2016. "Low Interest Rates and Risk Taking: Evidence from Individual Investment Decisions," Working Paper.

Exhibit 4: The Top Quintile of Dividend Yield Compared to the Market and Top Quintile of Free Cash Flow Yield[1] Trailing-Seven-Month Returns 1927 Through July 2016

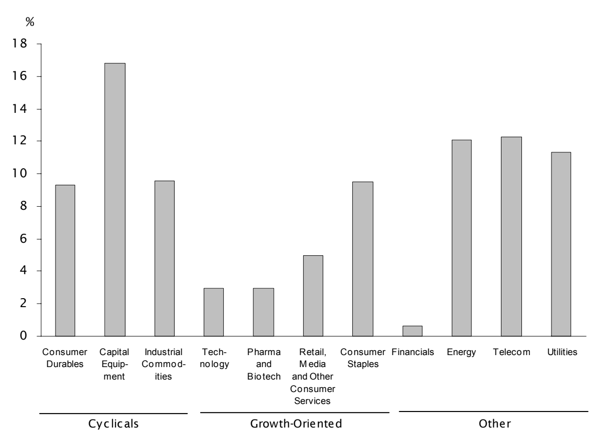


Source: Empirical Research Partners Analysis.

[1]Data since 1952 when compared to the stocks in the top quintile of free cash flow yield.

The big pay-off from a dividend yield strategy has come in staples, telecommunications and utilities, where the return stream is most bond-like (see Exhibit 5). The returns have been good in the cyclical sectors as well.

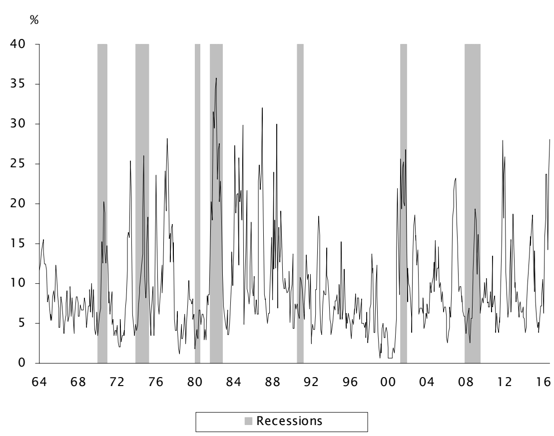
Exhibit 5: Large-Capitalization Stocks Nominal Returns of the Highest Quintile of Dividend Yield by Sector[1] Monthly Data Compounded 2016 Through Early-August



Source: Empirical Research Partners Analysis.

[1]Ranked across the market; equally-weighted returns.

Exhibit 6: Large-Capitalization Stocks in the Top Quintile of Dividend Yield Share of the Best Quintile of Price Momentum 1964 Through Mid-August 2016



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

Conclusion: Yield and Momentum United

High-yielding stocks have just had one of their best runs in a century, as Central Bank easing moves and the resulting low-to-negative yields in the bond markets of the world set off a craze. It emerged in the first four months of the year and lost some steam when the U.S. employment data took a turn for the better. High-yielding issues populate the market's momentum cohort, much as they did during the European debt crisis four years ago (see Exhibit 6). This is an unusual state of affairs. Like any momentum trade we need to see signs that the trend is still developing. Macroeconomics are at center stage and we're watching the jobs numbers, wage data and the new orders component of the purchasing managers survey for evidence that could undermine the dividend mania, particularly the confidence of the late adopters. As discussed ahead, the labor market is poised to do its part, albeit without a sense of urgency. Momentum strategies favor the cold hearted.

A Statistic That Matters: The Labor Force Participation Rate

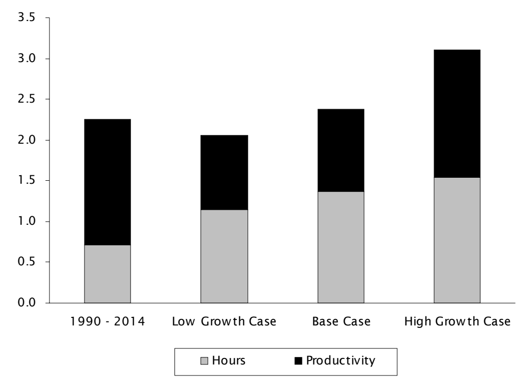
Will the Discouraged Return?

Macroeconomists of all persuasions have weighed in on the secular growth prospects of the U.S. The three basic issues they're debating are the long-lasting consequences of the financial crisis (including the debt it left behind and the discouraging effects that have created the long-term unemployed), demographics, and a dearth of world-changing inventions. For equity investors their arguments are of little value unless they push them into the pessimist camp that puts dividends first.

We read a thought-provoking paper that took a different perspective on the question of growth, focusing on educational attainment and the work force participation rate.[2] A key point the authors make is that since 1947 almost 80% of the U.S. economic growth has come from increases in the capital stock and labor inputs, with productivity a sideshow. Their view is that most of the benefits from higher education have already been seen, and going forward the most important piece of the equation will be drawing less-educated, presumably discouraged workers back into the labor force. That's also the key issue when trying to forecast where wages will go from here.

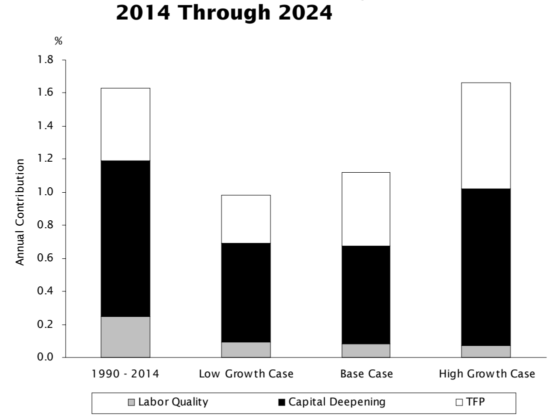
Exhibit 7 summarizes the authors' forecasts for growth in potential output through 2024, compared to the actuals from 1990 through 2014. Their base case matches the historical series but more of the growth rate comes from increases in the number of hours worked. Conversely, improvements in labor quality and new capital will play a smaller role in productivity growth than they have in the past (see Exhibit 8).

Exhibit 7: U.S. Potential Output Projections 2014 Through 2024



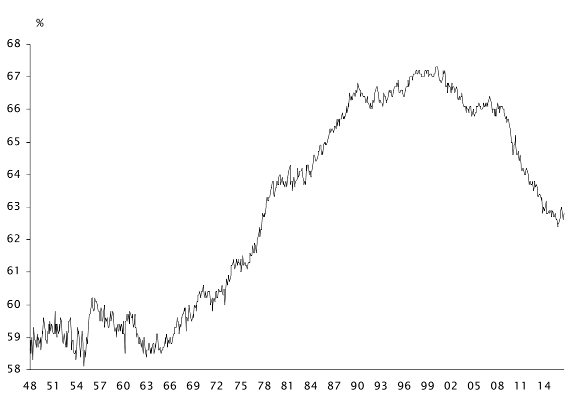
Source: Jorgenson, D. W., Ho, M. S. and Jon D. Samuels, 2016. "Education, Participation, and the Revival of U.S. Economic Growth," NBER Working Paper No. 22453.

Exhibit 8: Labor Productivity Projections 2014 Through 2024



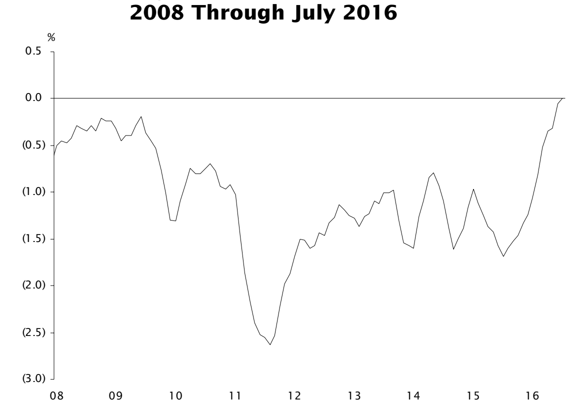
Source: Jorgenson, D. W., Ho, M. S. and Jon D. Samuels, 2016. "Education, Participation, and the Revival of U.S. Economic Growth," NBER Working Paper No. 22453.

Exhibit 9: The Labor Force Participation Rate[1] 1948 Through July 2016



Source: Bureau of Labor Statistics, Empirical Research Partners Analysis.
[1]Ages 16 and up.

Exhibit 10: The Labor Force Participation Rate Year-Over-Year Change for Those with High School Level Education[1] 2008 Through July 2016

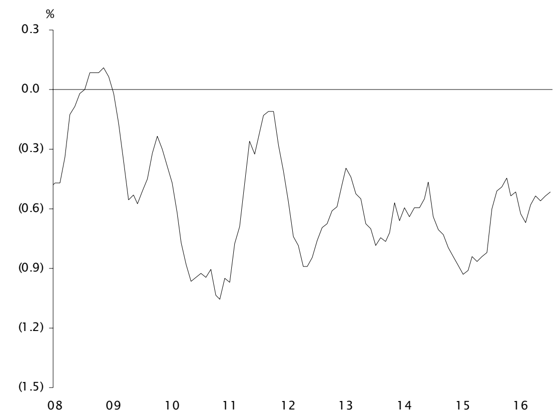


Source: Bureau of Labor Statistics.
[1]Ages 25 and up; data smoothed on a trailing six-month basis.

[2]Jorgenson, D. W., Ho, M. S. and Jon D. Samuels, 2016. "Education, Participation, and the Revival of U.S. Economic Growth," NBER Working Paper No. 22453.

Their projections encompass the idea that the participation rate will turn around and begin to rise as less-educated people are drawn back into the labor market by higher wages (see Exhibit 9 overleaf). There's been some recent evidence for that and the participation rate for high school graduates has stopped falling, even as that for college graduates hasn't shown any sign of recovering (see Exhibits 10 and 11). The big turn in the participation rate for those was in their prime working years, 35 to 44 (see Exhibit 12). Putting the pieces together, the overall participation rate has stabilized as women entered the work force (see Exhibit 13). The wage growth part of the story has been coming true with the strength most pronounced at the lower-end of the distribution (see Exhibit 14). Increases in the minimum wage, both mandated and voluntary, are being picked up in these series. Surveys of small businesses indicate that tightness is developing.

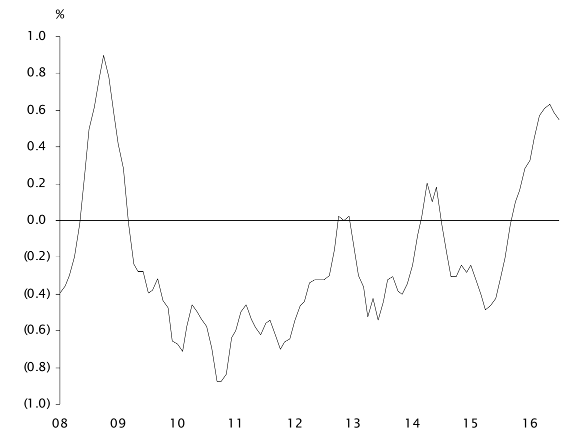
Exhibit 11: The Labor Force Participation Rate Year-Over-Year Change for Those with Bachelor Degree or Higher Level Education[1] 2008 Through July 2016



Source: Bureau of Labor Statistics.

[1]Ages 25 and up; data smoothed on a trailing six-month basis.

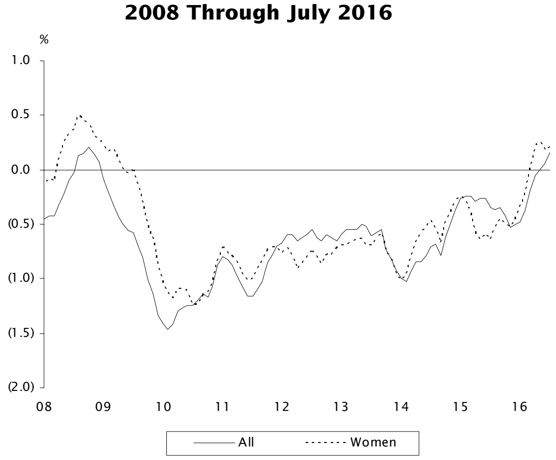
Exhibit 12: The Labor Force Participation Rate Year-Over-Year Change for Those Aged 35 to 44 Years[1] 2008 Through July 2016



Source: Bureau of Labor Statistics.

[1]Data smoothed on a trailing six-month basis.

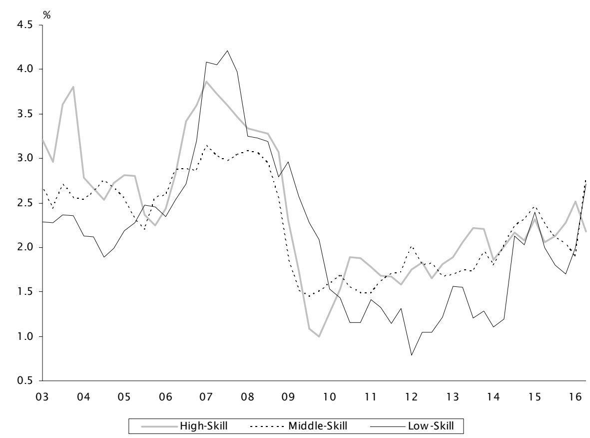
Exhibit 13: The Labor Force Participation Rate[1] All and for Women Only Year-Over-Year Changes 2008 Through July 2016



Source: Bureau of Labor Statistics.

[1]Ages 16 and up; data smoothed on a trailing six-month basis.

Exhibit 14: Annualized Growth in Wages and Salaries By Skill Level[1] 2003 Through Q2 2016



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

[1]High-skill includes management, business, professional and related occupations, middle skill includes sales, administrative, production, construction, extraction, maintenance and transport occupations. Low-skill includes service occupations.

The Retiree Problem

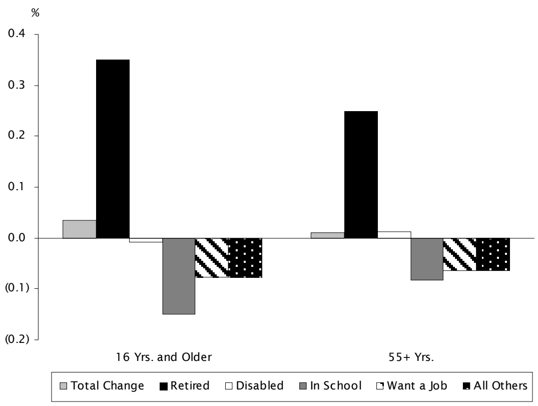
A couple of years ago economists at the Federal Reserve Board studied the participation rate and concluded that most of its decline was structural, and the retirement of baby boomers accounted for almost half of its decline.[3]

[3]Aaronson, S., Cajner, T., Fallick, B., Galbis-Reig, F., Smith C. L. and William Wascher, 2014. "Labor Force Participation: Recent Developments and Future Prospects," Federal Reserve Board Finance and Economics Discussion Series 2014-64,

Young adults were also being driven from the work force as older people traded down and took lower-paid jobs, displacing them. Baby boomers look to be at the heart of what's been going on and in the last four quarters their decisions to retire is what's pushed down the participation rate (see Exhibit 15). All the other rationales for not working have waned in importance.

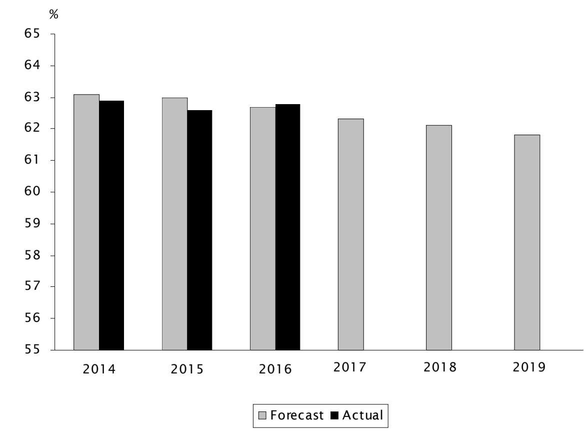
The authors estimated that cyclical factors have depressed the participation rate by between (25) basis points and a point, making a procyclical recovery likely. Lately that forecast has proven to be correct (see Exhibit 16). Looking forward to the next decade they forecast that a (2¼) point decline in the participation rate will cut the economy's growth rate by half a point. Demographics and a shortage of opportunities are the villains in their tale.

**Exhibit 15: Market Non-Participants as a Share of the Population
Changes by Reason for Non-Participation
Q2 2016 vs. Q2 2015**



Source: Census Bureau, Bureau of Labor Statistics.

**Exhibit 16: The Labor Force Participation Rate
Forecasts and Actuals
2014 Through 2019E**

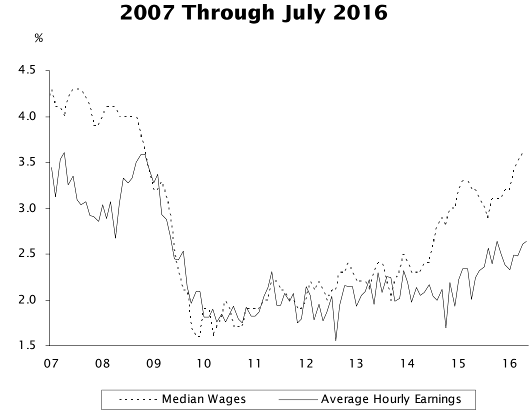


Source: Aaronson, S., Cajner, T., Fallick, B., Galbis-Reig, F., Smith C. L. and William Wascher, 2014. "Labor Force Participation: Recent Developments and Future Prospects," Federal Reserve Board Finance and Economics Discussion Series 2014-64, Empirical Research Partners Analysis.

Wage Growth Depends on the Participation Rate Too

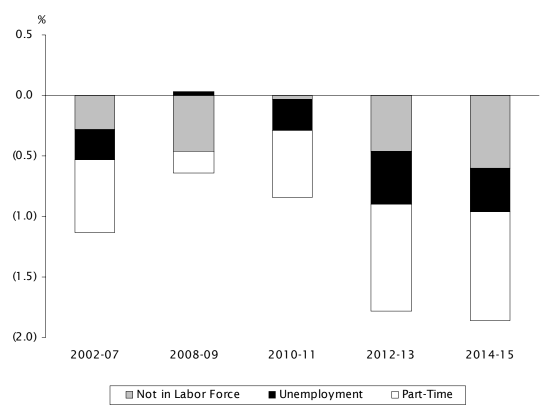
The comings and goings in the labor market are poised to have a sizeable effect on the wage numbers. Exhibit 17 charts *median* wage growth along with that in the hourly earnings composite. The first is running +100 basis points above the second due to mix effects. In the past few years they've been greater than those seen in the last cycle because part timers and people that weren't in the labor force have rejoined it, pushing down the composite wage rate (see Exhibit 18). It looks to us like that reattachment process, that began about three years ago, is about two-thirds complete (see Exhibit 19). Those switching jobs are enjoying wage growth that's +120 basis points above that experienced by those staying put, yet only a modest share of the work force is trading up (see Exhibit 20). Even seven years into the recovery confidence remains in short supply.

**Exhibit 17: Median Wages and Average Hourly Earnings
Annual Growth Rates[1]
2007 Through July 2016**



Source: Federal Reserve Bank of Atlanta, Bureau of Labor Statistics, Empirical Research Partners Analysis.

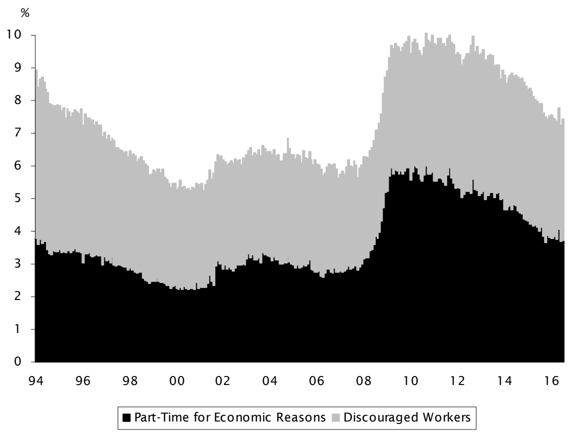
**Exhibit 18: Drag on Median Earnings Growth from Mix Effects
2002 Through 2015**



Source: Daly, M. C., Hobijn, B. and Benjamin Pyle, 2016. "What's Up with Wage Growth?" FRBSF Economic Bulletin, 2016-07.

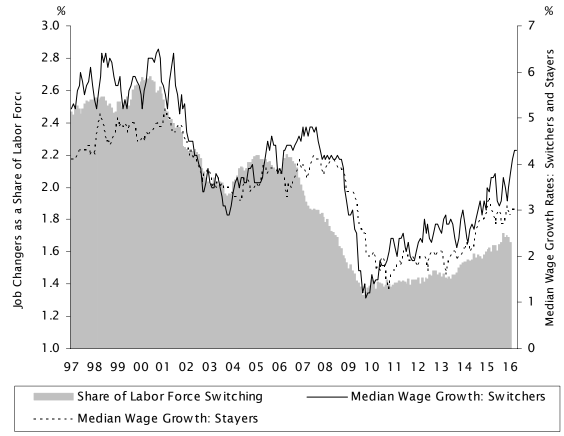
[1]Median wage data through June.

Exhibit 19: The U.S. Discouraged Workers and Those Working Part-Time for Economic Reasons As a Share of the Labor Force 1994 Through July 2016



Source: Bureau of Labor Statistics, Federal Reserve Bank of San Francisco, Empirical Research Partners Analysis.

Exhibit 20: Job Changers as a Share of the Labor Force[1] and the Median Wage Growth of Switchers and Stayers 1997 Through June 2016



Source: Federal Reserve Board, Empirical Research Partners Analysis.

[1]Data smoothed on a trailing six-month basis.

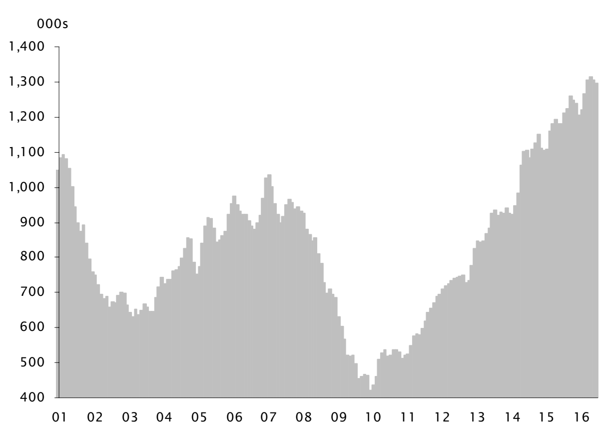
Conclusion: A Loaded Gun

Our guess is that the model created by the Fed economists is right and that ultimately demography will be destiny. Their expectation that we're in the midst of cyclical recovery in the participation rate that holds down wage gains also looks to be on the mark.

That dynamic, so apparent in Exhibit 17, may have a year or two longer to run. The uptrend in low-end wages looks poised to continue or perhaps accelerate as those not in the full-time market must be drawn in. The job openings in lower-paid service positions are at a record level (see Exhibit 21).

All of this economic mumbo jumbo is of unusual important to equity investors because stimulus in Europe and Japan have pushed some relationships in the U.S. equity market to a provocative place. The stocks that move in lockstep with the bond market sell at a +10 point P/E premium to those that don't (see Exhibit 22). The two groups have about the same earnings growth rates and there's only a (45) basis point differential in their dividend yields. The bond proxies have a payout ratio of around 70%, twice that of their opposite numbers. We're far removed from the world of dividend discount models, although we don't think it will take much to shove us back in that direction.

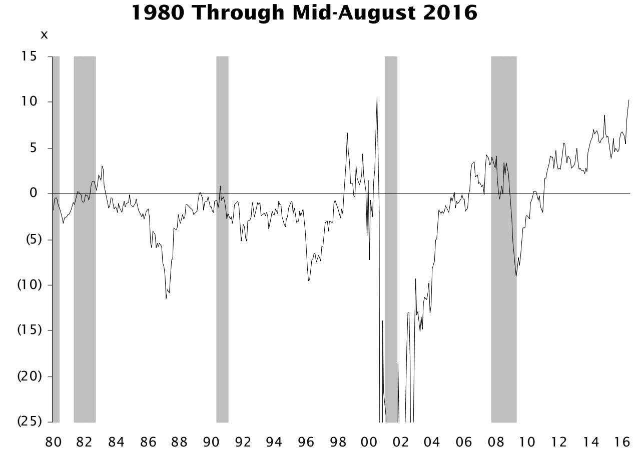
Exhibit 21: U.S. Job Openings at Retailers, Restaurants and Hotels 2001 Through June 2016



Source: Bureau of Labor Statistics.

[1]Data smoothed on a trailing three-month basis.

Exhibit 22: Large-Capitalization Stocks Stocks Most- and Least-Correlated with the Returns of Ten-Year Treasury Bonds[1] Differential in Their Forward-P/E Ratios 1980 Through Mid-August 2016



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

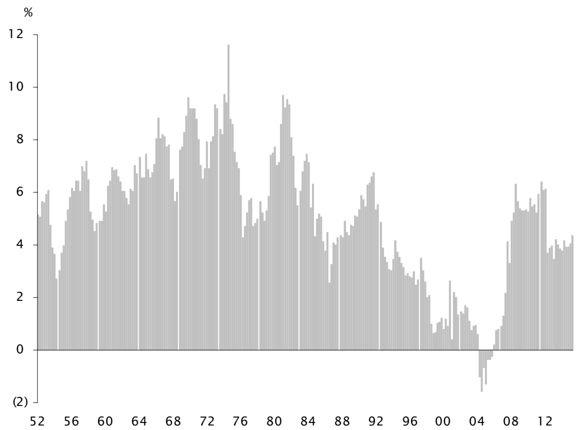
[1]Top and bottom deciles.

Consumer Borrowing and the Long Cycle

Scared Straight

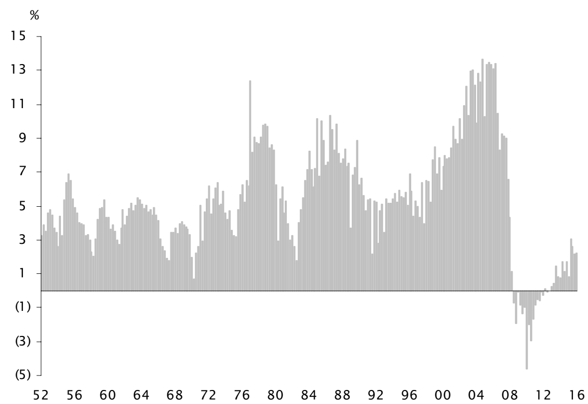
A chart we've taken seriously when thinking about the duration of the economic expansion depicts the consumer's free cash flow as a share of their income (see Exhibit 23). Here free cash flow, that's defined as personal savings + imputed depreciation – outlays for newly-constructed homes and durable goods, stands at almost 4.5% of income, a strong number by the standards of the last 30 years. Also, it hasn't been falling in recent years. Usually the cash flow gets eaten away as the spending on new homes and big-ticket items increases faster than earnings, in part due to rising home prices. Not this time, and the bounty of free cash flow tells us there's firepower left.

Exhibit 23: The U.S. Consumer
Free Cash Flow as a Share of Personal Income
1952 Through Q1 2016



Source: U.S. Department of Commerce, Federal Reserve Board, Empirical Research Partners Analysis.

Exhibit 24: The U.S. Consumer
Net New Debt as a Share of Personal Consumption Expenditures[1]
1952 Through Q1 2016

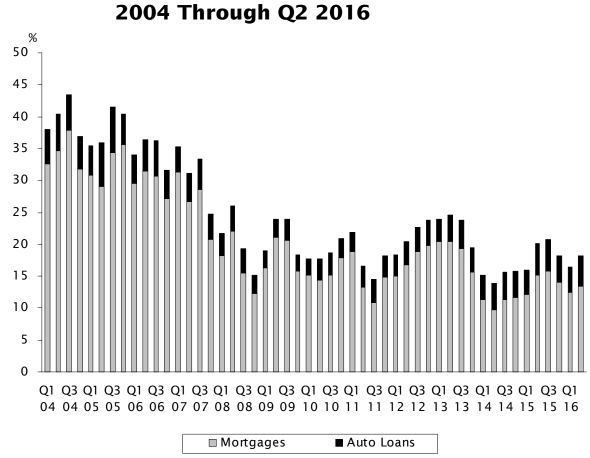


Source: Federal Reserve Board, Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1]Borrowing includes mortgages, credit card and auto loans.

The data on consumer borrowing provides an adjunct to the cash flow analysis. The creation of consumer debt has been minimal in this cycle, impeded by both mortgage write-downs and stricter credit standards (see Exhibit 24). The gross originations of mortgages and auto loans were around 35% of consumer spending in the last cycle and lately the volumes have been running at half that level (see Exhibit 25). Originations to households with sub-660 FICO scores are down by two-thirds (see Exhibit 26). Credit card lending has however picked up in the last two years, led by that to those with sub-660 credit scores (see Exhibit 27). Student loan issuance, that has a different character than the other categories, has been stable (see Exhibit 28).

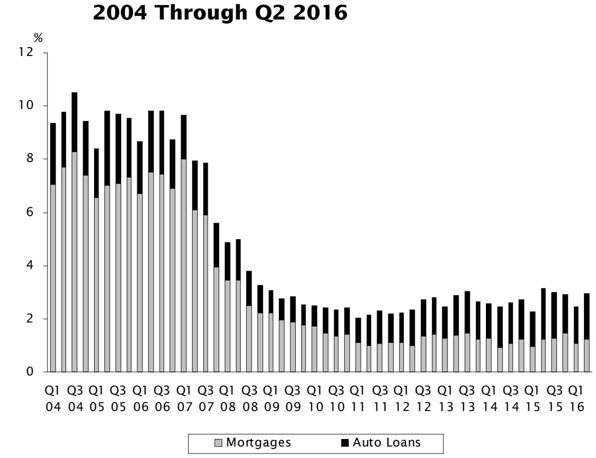
Exhibit 25: The U.S. Consumer
Mortgage and Auto Loan Originations as a Share of All Personal Consumption Expenditures[1]
2004 Through Q2 2016



Source: FRBNY Consumer Credit Panel/Equifax, Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1]At an annualized rate.

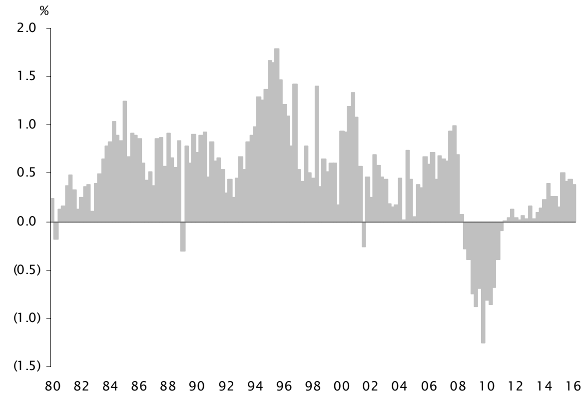
Exhibit 26: U.S. Consumers with Credit Scores of Less Than 660
Mortgage and Auto Loan Originations as a Share of All Personal Consumption Expenditures[1]
2004 Through Q2 2016



Source: FRBNY Consumer Credit Panel/Equifax, Bureau of Economic Analysis, Empirical Research Partners Analysis..

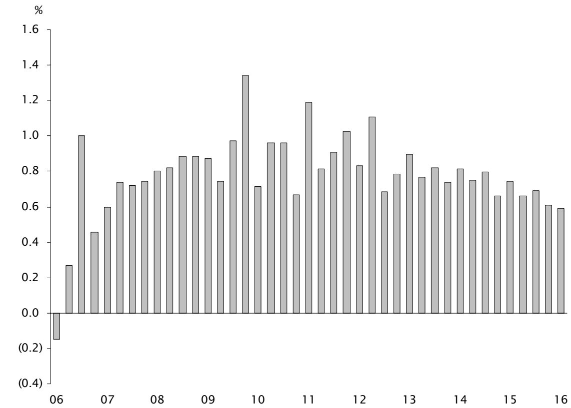
[1]At an annualized rate.

Exhibit 27: The U.S. Consumer
Net Increase in Credit Card Debt as a Share of Personal Consumption Expenditures
1980 Through Q1 2016



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

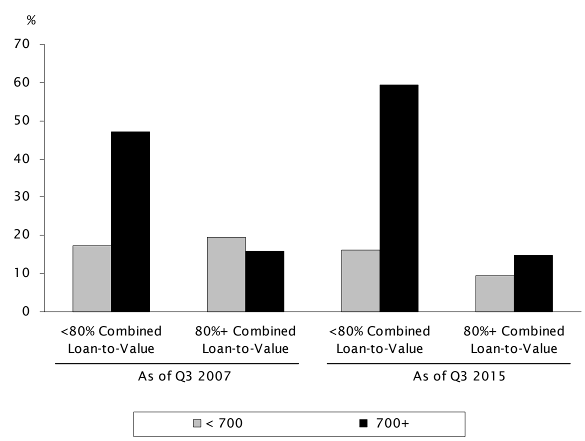
Exhibit 28: The U.S. Consumer
Net Increase in Student Loans as a Share of Personal Consumption Expenditures
2006 Through Q1 2016



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

There's also been a meaningful improvement in the quality of the loan book. Exhibit 29 decomposes the mortgage loan book, including both first and second liens, by the borrower's current credit score and the combined loan-to-value ratio on their home. The share of debt held by households with 80%+ loan-to-value ratios and credit scores below 700 is down by half relative to where it was at the peak of the last business cycle. The delinquency statistics, as reported by the credit agencies, are consistent with the credit score data and have returned to their pre-Crisis levels (see Exhibit 30). After a debacle lenders and borrowers are gun-shy with the exception of the auto loan market, where credit standards deteriorated as the cycle progressed. We don't see signs of material excesses in the consumer sector that are poised to imperil the cycle. Rather, the theme is conservatism.

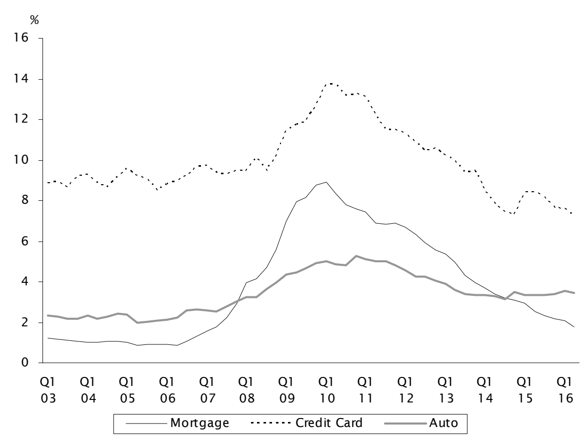
Exhibit 29: The U.S. Consumer
Distribution of Mortgage Balances by Combined Loan-to-Value Ratio and FICO Score[1]
Q3 2007 and Q3 2015



Source: Fuster, A., Guttman-Kenney, B. and Andrew Haughwout, 2016. "Tracking and Stress-Testing U.S. Household Leverage," FRBNY Staff Report No. 787.

[1]Includes first- and second-liens for loans that are not seriously delinquent.

Exhibit 30: Mortgage, Credit Card and Auto Loans
Share More Than 90 Days Delinquent
2003 Through Q2 2016



Source: FRBNY Consumer Credit Panel/Equifax.

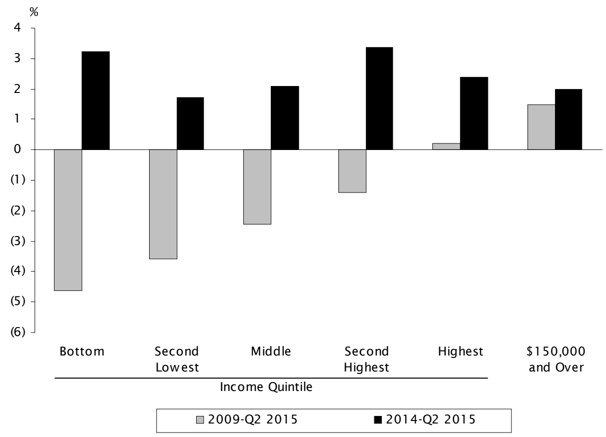
The diminished role of debt means that the employment and wage data is more central to the economy's growth rate than it has been for some time. That's most true for those in the bottom 80% of the income distribution that account for about half of consumption. Their real wages had been falling until about 18 months ago when the labor market tightened (see Exhibit 31). Many have also been cut-off from the mortgage market. We expect their consumption to be sensitive to the trend in their income growth.

The market treats the monthly employments report as the most important economic release and in this cycle that perspective is the right one.

The Stocks Tell the Same Story

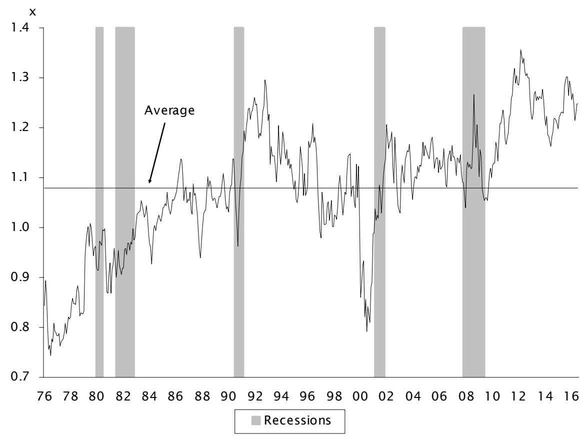
The valuation paradigm priced into the consumer cyclical sectors echoes our view on the duration of the cycle. The relative-P/E ratios of the core consumer cyclicals (i.e., retailers, restaurants, hotels, cruise lines, casinos, luxury goods companies) aren't for the most part low, particularly when we consider the threats to the status quo in retailing (see Exhibit 32). The valuation of the housing-related stocks, the purest cyclical plays, makes the same point (see Exhibit 33).

Exhibit 31: Growth in Real Income
By Income Cohort
2009 Through Q2 2015



Source: Survey of Consumer Expenditures, U.S. Department of Commerce, Census Bureau, Empirical Research Partners Analysis.

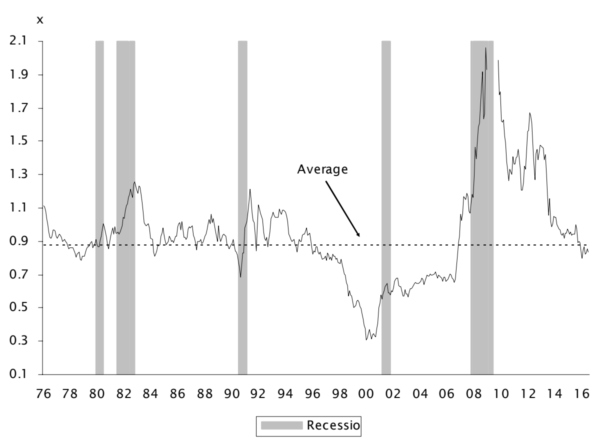
Exhibit 32: Large-Capitalization Core Consumer Cyclicals[1]
Relative Forward-P/E Ratios
1976 Through Early-August 2016



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

[1]Capitalization-weighted data. The core consumer cyclicals include retailers and luxury good makers, as well as restaurants, hotels, cruise lines, casinos and leisure services.

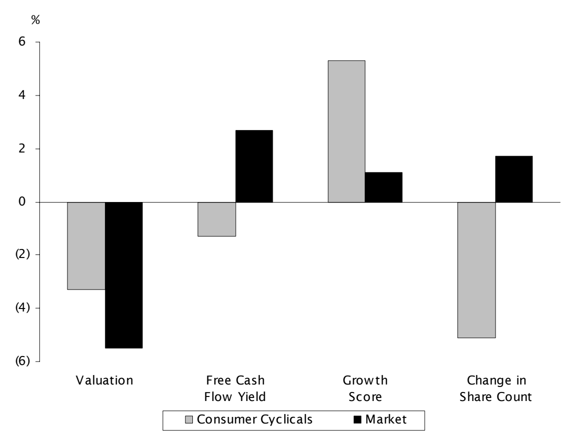
Exhibit 33: Homebuilders and Other Housing-Related Stocks
Relative Forward-P/E Ratios[1]
1976 Through Early-August 2016



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

[1]Drawn from the large-capitalization universe; capitalization-weighted data. Housing-related durables include building product and home furnishing companies.

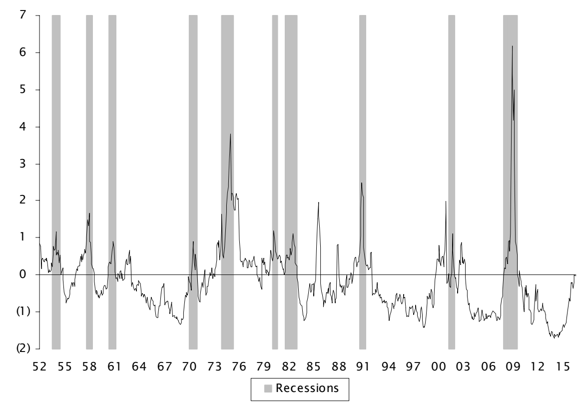
Exhibit 34: Large-Capitalization Consumer Cyclicals
***Sector* Relative Returns to the Top Quintile**
of Select Factors
Monthly Data Compounded
Three Years Ended Early-August 2016



Source: Empirical Research Partners Analysis.

In the last three years the consumer cyclicals have been market performers, and the winning stocks have been those with growth characteristics (see Exhibit 34). The state of the sector's valuation spreads explains much of what's gone on. Back in Summer of 2013 they sat at (1.6) standard deviations below their mean, a 60-year low (see Exhibit 35). They've climbed back to average as the market has concluded that the auto cycle has peaked and the retail sector will be plagued with chronic overcapacity. From this starting point we'd expect low valuation to be less of a burden and stock pickers to fare better. In general we prefer the tech stocks to the consumer cyclicals because they have better cash flow margins (see Exhibit 36).

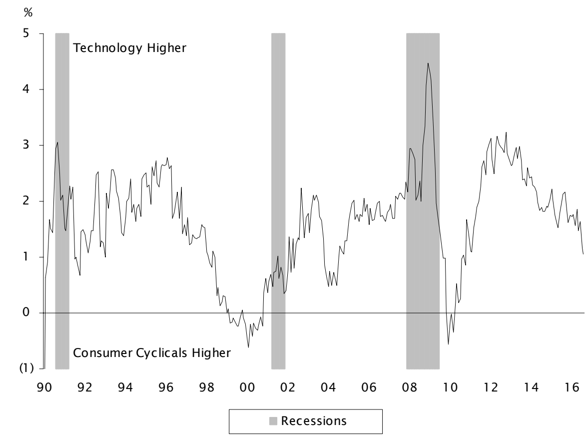
Exhibit 35: Consumer Cyclical Valuation Spreads[1]
Top Quintile Compared to Average
Measured in Standard Deviations
1952 Through July 2016



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

[1]Based on free cash flow and price-to-book ratios.

Exhibit 36: Large-Capitalization Stocks
Technology Versus Core Consumer Cyclicals[1]
Differentials in Free Cash Flow Yields
1990 Through Early-August 2016



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

[1]Capitalization-weighted data. The core consumer cyclicals include retailers and luxury good makers, as well as restaurants, hotels, cruise lines, casinos and leisure services.

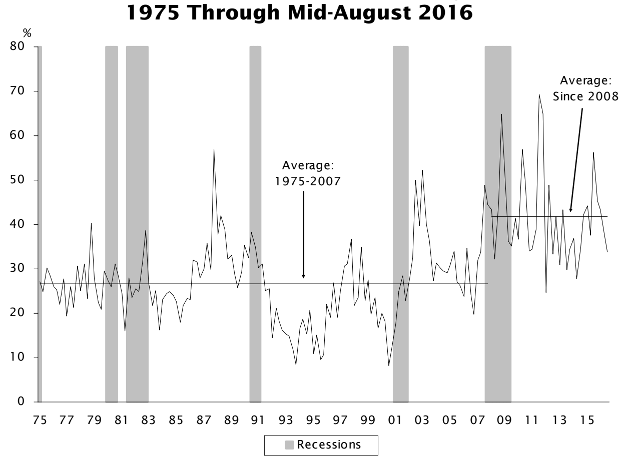
Conclusion: Betting on an Extended Cycle

After the crisis everyone, including regulators, central bankers, consumers, the press, market commentators and all forms of internet cranks, went on the lookout for the next one. The wariness of the crowd has shaped the cycle, extending it. Except in a few small pockets of the economy animal spirits have never taken charge.

The defining ethic of investors in this era has been to duck and cover. That's apparent in the relationship among the returns of individual stocks; since 2009 correlations among the constituents of the large-cap market have spiked above 50% nine times, as investors concluded that the Big One had finally arrived (see Exhibit 37). The latest spike occurred in January of this year after the Fed guided toward four rate hikes for 2016 and a run on the bank in China seemed to be developing. In that one as in most of the others we were being paid to stand and fight. On average the market returned +17% over the next year and there was only one episode when returns were negative (see Exhibit 38). As we've documented many times there's a large group of absolute return investors being paid to control volatility. They have no choice but to duck and cover.

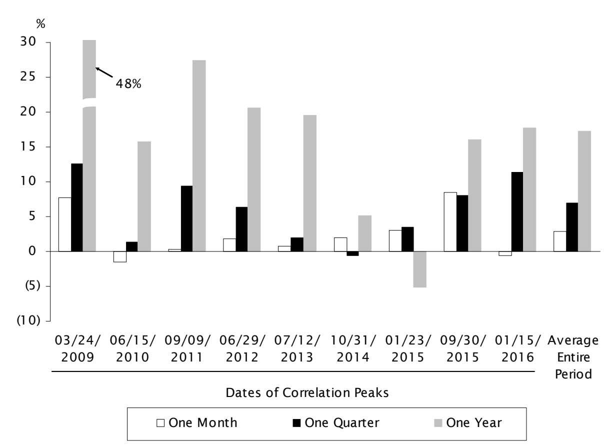
We're still expecting a drawn-out expansion and we're prone to try to capitalize on risk aversion, learned and genetic. The institutional sponsor community, that holds $9 trillion in assets, falls into the second category.

Exhibit 37: The S&P 500
Daily Return Correlations
Expressed as Quarterly Averages
1975 Through Mid-August 2016



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

Exhibit 38: The S&P 500
Returns After Correlation Peaks of 50% or More
2009 Through Mid-August 2016



Source: Empirical Research Partners Analysis.