2016 Mid-Year Economic Update

An MDM Webcast summary, transcript and slides, featuring:

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2016 Mid-Year Economic Update

Executive Summary

- The critical ingredients to economic growth – employment, income and wealth – continue to increase, albeit at a slower trajectory. The last four quarters of GDP growth were 3.9 percent, 2 percent, 1.4 percent and then 0.8 percent in the first quarter of 2016. Instead of breakout growth happening in 2017 or 2018, look for GDP growth to be consistently in the 2 percent range.

- Total revenues of wholesale distributors in 2015 fell by 4.3 percent to $5.3 trillion, reflecting a degradation in commodity prices. After price adjustments, the wholesale distribution industry grew faster than the overall U.S. economy in 2015, growing 2.6 percent for the year and posting gains 0.2 percentage points higher than U.S. GDP.

- Of the 19 wholesale distribution sectors, Oil and Gas Products went from being the largest to being the fourth largest in terms of revenue, and Motor Vehicle and Motor Vehicle Parts moved up a spot to fifth. Industrial Distributors, the fourth largest sector last year, fell to No. 6.

- The largest sectors in the wholesale distribution industry in 2015 were: Pharmaceutical Wholesalers ($613.8 billion); Grocery and Foodservice Wholesale Distributors ($609.1 billion); and Electrical and Electronics Wholesalers ($554.7 billion).

- Twelve of the 19 major sectors registered positive nominal revenue growth in 2015, and 16 recorded positive real rates of growth. For the growing industries, growth rates are moderate, continuing a post-recession trend seen from 2010.

- Fourteen of the 19 major sectors are projected to grow in 2016, and all sectors will record revenue growth in 2017. The fastest growth is anticipated in the Building Material and Construction Wholesale Distributors and the related Hardware, Plumbing, and Heating Equipment/Supplies Wholesalers sector. The slowest growth in 2016 is expected in the Oil and Gas Products Wholesale Distributors and the Agricultural Products Wholesale Distributors sectors.

- Expectations for wholesale distribution are 1.9 percent growth in 2016 and 6.4 percent growth in 2017. The industry has seen a sharp decline due to the negative impact of price fluctuations in 2015, and while that will continue for the rest of 2016, it should start to abate in 2017.

- Employment earnings and productivity in the industry are largely expected to increase in 2016.

This is the full transcript of the MDM Webcast "2016 Mid-Year Economic Update" from June 2016.

The Webcast presentation slides are included at the end of this transcript.

Jenel Stelton-Holtmeier: Welcome and thank you for joining us for today's MDM webcast, the 2016 Midyear Economic Update. Our 60-minute program today is being sponsored by NetSuite.

I'm Jenel Stelton-Holtmeier, editor of Modern Distribution Management Newsletter and the website, mdm.com.

A distributor recently described his view of current conditions like this to me. "The economy is still trying to find its way." Whether that's true or not, there are positive signs. The economy overall has stable GDP growth, strong employment growth and record household growth, but weak commodity prices and slow wage growth continue to be a drag.

While revenue growth in the wholesale distribution industry has outpaced overall economic growth in the U.S. for the past several years, the gap in 2015 was pretty small, and it begins this backdrop that our goal today is to provide you with a bit more clarity on what distributors can expect moving forward.

Without further ado, let's get in to the main program, the reason why you're all here. Most of today's program will focus on the current macroeconomic conditions in the U.S. with some attention to end-market sectors, and then we'll take a brief look at some specific highlights from our just released 2016 Economic Benchmarks for Wholesale Distribution report.

This is the ninth year that Modern Distribution Management has produced an economic forecast as part of our webcast programming schedule. Each year, in addition to a macro outlook, we've also provided a deeper look at the annual benchmarking data published exclusively by MDM. The 2016 Economic Benchmarks for Wholesale Distribution is a comprehensive economic reference guide to the U.S. wholesale distribution industry broken out by 19 major sectors and each with deeper subsector analysis.

The report, formerly known as the Wholesale Distribution Economic Trends Report, is published by MDM in conjunction with the business research division of the Leeds School of Business at the University

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of Colorado Boulder. Each sector report includes trends, quarterly and annual trend data including benchmarks by sector and subsector for revenues, inventories, employment, gross margin and more.

Now, I'm delighted to introduce our speaker today.

Brian Lewandowski is the lead author and analyst for the 2016 economic benchmarks for wholesale distribution. He's an associate director at the Business Research Division of the Leeds School of Business at the University of Colorado Boulder. He is a Leeds MBA and has worked at CU-Boulder since 2006, working on economic forecasts, econometric models, and market research and real estate studies. Brian has a background in banking, international development, mining, and tourism, working for Fortune 500 companies.

Welcome, Brian.

Brian Lewandowski: Thanks, Jenel. It's a pleasure to be here again this year, and this is my sixth year working on an economic and industry forecast for MDM.

I was asked to talk about both the industry and about the state of the economy, and we'll start off by looking at the industry and then transition more into the macroeconomic environment. I think Jenel really kicked this off with a nice summary especially when talking about kind of this mixed data sets that we see in the market right now. I get these questions every day. Are we at peak economy? Are we nearing the end of the expansion?

I know this is on the minds of business leaders as they consider if they should expand investment and business, hire more workers, move locations, and it's also on the minds of policymakers as they're deciding if they should increase programming or reel in spending. It's also on the minds of residents nationally as they're deciding if they should move or go back to school or expand their families or all of those pivotal questions that we're really faced with when looking at the economic expansion or a possible contraction.

I can tell you that employment, income and wealth, those critical ingredients to economic growth are all continuing to increase. The trajectory has gone a little bit slower, but they're all still improving. There are a lot of economic metrics that are showing mixed signals, and we will touch on those especially near the end of the presentation today. The question is really how far out are we from the next recession and what will cause it?

The Economic Benchmarks for Wholesale Distribution report provides revenue, inventory, employment and many other metrics on the 19 industry sectors. More than half of the industry revenue in 27 percent of the industry employment is concentrated in a fourth of the sector, including pharmaceutical wholesalers, grocery and food service wholesale distributors, electrical and electronics wholesalers, oil and gas products wholesale distributors, and motor vehicle and motor vehicle parts wholesale distributors.

What's interesting about this mix of the top five is that it's fluctuated a little bit from 2014 to 2015. Industrial distributors dropped out of the top five. Oil and gas products went from being the largest to being the fourth largest in terms of revenue, and motor vehicle and motor vehicle parts joined the list of the top five.

Overall, we saw a contraction in the industry in 2015, falling 4.3 percent, but when looking at core wholesale trade or trade excluding the volatile oil and gas and agricultural commodity sectors, the industry expanded for the year by about 1.9 percent. Overall, this is a $5.3 trillion industry as of 2015.

For 2016, we're still expecting growth. Expectations are for about 1.9 percent growth in 2016 and 6.4 percent in 2017. This will occur as prices improve. We just saw a really sharp decline, negative impact from the price fluctuations in 2015, and that'll continue in 2016, but would start to abate a little bit and getting better in 2017.

Employment earnings and productivity in the industry are largely expected to increase in 2016. When we take a look at the revisions, though, a lot of this data comes from the census report on the monthly and annual wholesale trade. Just to give you some insight into some of the revisions that have come out of the census, there was an abnormally large one for the year. The total revisions for 2014 were $126 billion. That's from looking at 2014 and early 2015, and then taking a look at 2014 again and early 2016. That magnitude of change was a $126 billion and it affected sectors both positively and negatively. The biggest increases were in the electrical and electronic goods, the petroleum and petroleum products. That's still when prices were fairly strong in 2014 for commodities.

The machinery equipment and computer and computer electronic products were impacted on the negative side, so they had negative revisions up to about $50 billion each. The percentage changes were similar in the ranking. Just keep in mind as we go through this forecast that we're forecasting off the new revised numbers that census provided us.

In this slide, we're showing the 2015 performance by sector. We have these ranked by their respective industrial sizes, and so pharmaceutical wholesalers became the largest in 2015. They grew by the largest percentage. From talking to those people in the industry, this is largely that there was an expansion in health care access nationally as people have more access to a health care business, but then they're also getting more prescriptions as a result of that.

Grocery and food service wholesalers are No 2. Electrical and electronic wholesalers are No. 3. A few thing that we noticed in here is some of the decline in 2015, so oil and gas wholesaler distributors fell by about 35 percent in total revenue. Agricultural product wholesalers fell by 14 percent and metal service centers fell by 15 percent. Those fluctuations are really largely due to price. In fact, if you'd take a look at these industries in real terms, they're either positive or only slightly negative.

I have three columns on here which are actual revenues, real revenues and then the revenue GDP gap. That GDP gap was largest for oil and gas products wholesalers. When we turn to inventory, we've seen a flattening in inventory. During the recession, this is very typical of what companies do during recessions, they cut back on their inventory of goods, they become a lot leaner and then, during expansions, we see an inventory buildup. From this chart, you can see that drop that really reached in late 2009 and then we started to build our wholesale distribution inventories again in 2010. Now, we're at this point in late 2015 where inventories started to level off and they actually had decreased. They pulled back a little bit in 2016. The latest monthly data that I put in here is April.

We saw a slight increase in inventory values, but it's still on a downward trend, which will be interesting to watch going forward to see if this is foretelling for some reason, if it's the price impact that's going down, and we'll see some sort of increase in inventory values. We'd also take a look at the inventory-to-sales ratio, which provides a little bit more clarity into what's going on within inventories. Again, look at that steep drop-off that happened during the recession. We went from about a ratio of 1.5 down to about 1.25 and, now, we've built that back up to about 1.44, 1.45. Perhaps, this is a leveling spot. Maybe this is where we're kind of done building that inventory that we've spent the last six years or so building up.

Now, let's turn to the macro environment a little bit. In the 1990s, our average GDP growth was about 3.4 percent, so that's the average quarterly rate. The average quarterly rate dropped to about 1.7 percent in the 2000s and, now we're averaging about 2 percent in the 2010s. What's concerning about the trends here is during the recession, we expected this to snap back in, the GDP growth to get back to the 3 percent range or some economists were even expecting a 4 percent range. The reality was that we're in a much slower growth environment right now and witnessed the last four quarters of GDP growth where we went from 3.9 percent down to 2 percent down to 1.4 percent and then, Q1 2016, was revised up to somewhat 0.8 percent.

I don't necessarily think this is a trend that'll continue, but it is certainly reflective of a slower growth environment that we've been in post-Great Recession. Economists are broadly coming to terms with this expectation that it's a slower growth environment and, instead of that breakout growth to be next year or the year after, we're starting to see GDP expectations more in the ... consistently in the 2 percent range going forward.

Nonetheless, when we take a look at the GDP gaps, this slide shows potential GDP and real GDP. This data is produced by the nonpartisan Congressional Budget Office. Potential GDP is at the cap that we're on if all of our capital is really put to full use. The blue line, the real GDP line, shows what actually happened. We dropped to low the potential GDP during the recession, and it's just a matter of time before we get back to our potential. That shaded line, that shaded area between "potential" and "real GDP" amounting to about $6.4 trillion in loss of economic activities that we'll just never recoup. It's just gone.

The good news is we're reaching the end of that GDP gap. The Congressional Budget Office expects to close that gap in the early 2017. I think there are a lot of signs in our economy that points to that gap being closed. We should start to see a little bit faster wage growth as a result of this.

Turning to employment. During the recession, we were losing jobs at a pace of about 800,000 per month. That's just an astounding figure when we take a look at our overall economy. In 2010, we started to add jobs again. We averaged about 88,000 per month for the year. In 2011, that grew to 174,000, in 2012, 186,000 and then, in 2014, it really peaked at 251,000. We had these five years of accelerating employment growth, and our best year for that ended up being 2014. In 2015, we slowed down to about 229,000 jobs per month and, in 2016, we were at about 150,000 jobs per months so far through May.

The May jobs report came out about two weeks ago. If you saw it, it was a dismal number. It was 38,000 jobs for the month. Part of that slow growth was attributed to the Verizon strike. Then April was revised. I think part of it is signalling a leveling off in employment growth. I think that it's hard to sustain fast employment growth if you have a decreasing labor force participation rate, which we had for many years that was partially caused by the recession and partially caused by baby boomers exiting the workforce.

We're seeing a positive signal from the labor force right now, and that labor force participation rates increased for a handful over the past six months. It wasn't increasing just among the oldest age cohorts. It was actually increasing for all of the age cohorts, which is a really good signal because there's a long period where we just saw that oldest age cohort increasing participation, and that was because they perhaps couldn't retire due to the recession. They found that they didn't have as much money as they thought they were going to have to be able to stay retired. Having increased participation in the workforce is a really important metric for future employment growth.

The recovery hasn't been shared everywhere. It has been far from equal. We have about four-fifths of our states that have recovered their employment from the recession, so about four-fifths have reached the pre-recession peak. What's interesting right now is we have about six states that are losing jobs again year-over-year. Five of those states include Wyoming, Alaska, Oklahoma, West Virginia, North Dakota. Louisiana is one of them. Kansas was another one. Five of those are direct energy producers, so our largest employment loss is nationally year-over-year are our largest energy-producing states.

To provide some clarity on that, mining GDP in Wyoming is 27 percent of their real GDP. That's in 2015 terms, the data that was released this morning. Alaska is 24 percent of their economy. Oklahoma is 16 percent of their economy. West Virginia is 66 percent, and North Dakota about 15.5 percent.

Taking a look at these states that are losing jobs, we can see how the downward spiral in oil and gas prices is impacting the broader economy in those states. Colorado and Utah and Texas are also big energy producers. What's different in those places is that there's enough other things within their economies to keep energy from driving those states into recessions.

Taking a look at employment by industry nationally, we can use this as a proxy for the health of the overall industries. We'd take a look at professional and business services, so this includes things like architecture, engineering, research and development, a lot of administrative jobs and temporary employment jobs. The sector has produced the most jobs year-over-year or actually over the last three years, followed by trade, transportation and utilities, education and health services, and leisure and hospitality.

You can relate those to the wholesale trade industry to what we've seen perform well within those industries, especially sectors like construction, but then, on the downside, we're seeing mining and logging lose jobs year-over-year, as heavily as oil and gas, and also includes coal and some of our heavy metals that we mine in the U.S. The information sector is growing very slowly.

When we take a look at the wholesale distribution sectors where we're adding the most jobs in percentage terms, that can look a little bit different. Beer, wine and liquor wholesale distribution has been the largest growth sector in percentage term, followed by building materials and the apparel wholesalers, which tend to be smaller sectors when you take a look at absolute jobs. Office products and agricultural products have been really slow growth sectors over the past year. Most industries within this industry have not recovered their job losses from the Great Recession. Only beer and wine, grocery and apparel have recovered their job losses, but you have some sectors like building materials, even though they're growing a great pace right now and there's a lot of demand, they're still well below peak employment. The same with electrical and electronics wholesalers. There's a large jobs deficit that we don't necessarily expect to come back or certainly not come back quickly, and a lot of that has to do with the productivity increases that we've seen broadly within the wholesale trade industry.

What's our unemployment rate been doing nationally? I talked about labor force participation, so both the numerator and the denominator, when it comes to unemployment, both of those move. The denominator includes your labor force, and so, as we get people re-entering the labor force, that moves that bottom number and then the top number depends on how many people are not working. Our unemployment rate went from 10 percent nationally down to 4.7 percent in May. Some people say, "Well, you should be taking a look at the labor utilization rate." That's the U-6 rate if you look at the top of the Bureau of Labor Statistics. These are people that are underemployed. Maybe they're working part-time, but would like to be working full-time. That rate went from over 17 percent down to 9.7 percent in May.

What's interesting about both of those number is they're both below their 22-year average. Their long-term average is partially inflated by the Great Recession, but, even if you remove the recession, our core unemployment rate, the U-3 rate, is still below our 20-year average. Our employment market is healthy and is pretty strong even though we're seeing some new growth as of late.

We take a look at some of the potential things that could slow down the market in general, and interest rates are something that always comes out and what the Fed is going to do and how that'll impact the economic growth. The reality has not matched the perception of what would happen with interest rates at least so far. The Fed has increased interest rates one time, but the federal fund rate is the shortest term, the lowest rate in our market, so that has a bearing on the 3-month Treasury, but it does not directly have a bearing on the 10-year Treasury for instance. They don't explicitly move the long-term interest rates.

After they did that, we saw a little bit of a jump in the short-term rate. In fact, it was not dramatic, and the long-term rate has actually come down. I also threw a forecast up here from Moody's Analytics, and so there's this expectation that prices could go up by about 150 to 157 basis points for the short-term rate. They're reacting to the market. They're reacting to what's happening internationally with the China growth, with Britain's question on if they're going to exit the Euro or not and then, of course, the pace of growth nationally with slower employment growth rates.

Stelton-Holtmeier: Going back to the unemployment numners, people who have left the workforce and no longer or that are no longer looking for a job, are those included in any of the numbers that you were looking at there?

Lewandowski: Yes. When you take a look at the unemployment rate and the labor utilization rate, the denominator, that is the labor force participation number, and since about about 2000, we saw a decreasing labor force participation rate, and part of that was driven by people exiting because they were aging out of the workforce. During the recession that was perpetuated because of the recession and people couldn't find jobs. Once they exit the workforce, once they stop looking, they're no longer counted in the labor force. The Bureau of Labor Statistics gets this through household surveys. They call the households and ask them if they have a job and if they want a job and a handful of other questions.

Once they decide that they are interested in working again, once they start to look again, then they show back up in those numbers. When you're not looking ... and they're not working, they're not in there, but at at least, when they start to look again and they start to apply for jobs again, they do show up there.

Turning to household debt growth, during the recession, we went through this massive deleveraging nationally. We went from building over $1 trillion in home mortgage debt leading up to the recession. That's really an unprecedented figure. That was a $1 trillion per quarter. During the recession, we reversed that, and some of that was not by choice. Some people were forced to walk away from their homes, foreclosures and bankruptcies. We saw home mortgage that decreased through that, but also through people refinancing at extremely low interest rates. We also saw people stop using their credit cards as much, so revolving credit decreased from quarter to quarter. Now, starting in 2011, we saw a resurgence in that revolving credit, that credit card debt, and, now, we're actually at higher levels for that consumer credit growth than we were leading up tot he recession. Home mortgage debt came back over the last four quarters, but it's a far cry from where we were leading up to the recession. We are seeing some building in both mortgage debt and consumer credit.

A slightly different view of this is our financial obligations ratio and our debt service ratio. Even though we're taking on more debt, what percentage of our overall income is it? Financial obligations ratio takes a look at all that we have to spend money including things like rent where the debt service ratio just tends to look at mortgages and the auto loan debts. The true debt that we take on and more financial obligation is more of that implied debt that includes things like rent.

For both of these though, our debt ratios are below where they were back in the early 80s even. We're still very far from being over-leveraged in relation to where we were maybe after the recession. Household balance sheets are on a much more stable footing even still now than we were leading up to the recession. That metric has not gone worse as of late.

Looking at delinquency rates for some of those debts, if you trendline these from 2009 to current, almost all of these trended downward. Credit card debt certainly trended downwards, auto loan debt, mortgage debt. Home equity was not quite as deep, but it's come down. Student loan, that is the only one that increased over this period and even over the last two quarters it's been on a slight downward decline. So, again, just making that case that households are on a much better financial footing.

When we take a look at household wealth, let's take a look at things like real estate and mutual funds and corporate equities and many other financial assets that household have, we are at record levels for household wealth, over a $100 trillion, and we hit that mark for three of the last four quarters. This can fluctuate a little bit with the equity market, with the stock market, but the largest components here are really real estate and investment.

I think the concern when taking a look at this chart is, even though we're up over a $100 trillion, this rebound hasn't been shared equally. If we can take a look at the people behind this data, there are indications that it could be some sort of bimodal recovery. There's a lot of people in this country that don't have any assets. They don't have the financial assets, they don't own their homes, so this recovering household wealth is something that they're not able to ride up with the recovery.

Regardless, disposable personal income and wages have been increasing. They're at a very slow rates, but personal income and wages increased. Per capita personal income increased 2.5 percent in Q1 in 2016. Personal income increased 4.4 percent and wages increased 3.1 percent for the year in 2015. There is upward movement there. It's not a real aggressive wage growth. We've seen a little bit of faster growth. I think as I we have a shortage of workers nationally, some employers are starting to have to compete on price, and you see those price changes more dramatic in select industries such as software programmers. That's an industry where they've had faster wage because of the shortage of workers.

With the increasing employment, increasing income, increasing wealth, we've seen consumer confidence come back to pre-recession level. The Conference Board asked a lot of interesting questions about how they feel today and how they feel six months out, and consumers are still feeling bullish on buying a home six months out, which I think is a positive signal about the future of our economy. Consumers aren't feeling shaky or too shaky about the economy yet. With consumption being 70 percent of our overall economy, it's important that consumers have that expectation that things are still going to be better off in the future. If you take a look at the tail of this chart, we do see a little bit of waning optimism. It's a volatile series. It goes up and down, but the past four months have been a little bit more bearish.

We've got increasing confidence responding to the increasing employment income and wealth. Consumers have re-entered the vehicle market. We've seen vehicle sales even with record levels. If you take a look back through time, expectations are the vehicle sales will slow a little bit next year as demand for vehicle sales is met. Also, we've seen a little bit of concern with the subprime auto loans and for the vehicle sales going forward. Still, 16-17 million new units sold both this year and next year.

Retail and food services sales are also still expanding. This is a fairly weak number, but it's still increasing. We're seeing interesting dynamics with growth in e-commerce far outpacing growth in bricks-and-mortar sales. We're also seeing e-commerce driving some new market segments that were previously somewhat unattainable because of the market structure. What I'm talking about there are the grocery store sales and being able to order groceries online and really needing some sort of local distribution center to be able to get those out to the consumers rather quickly. That's somewhat of a new area of growth for e-commerce. Personal income and personal consumption are expected to continue to increase in 2016 and 2017, again, more in that 2-3 percent range instead of a 3-4 percent range.

Home prices nationally have done fairly well, but like the employment recovery, it's fragmented where some areas have been recovering more slowly than other areas. Colorado, for instance, has had the fastest home price appreciation in the nation for the past ... I think it's five over the last six quarters, and so some negative impacts from such high home appreciation where the shortage of housing segments in some markets are causing really high home prices and those homes are becoming unattainable for some of the population. The question is are we reaching some sort of bubble in some of these markets again? I think it's just a little lack of supply that develops during the recession.

You can see that really, if you take a look at building permits leading up to the recession and then building permits following the recession, we went from over 2 million building permits, both single family and multi-families combined, down to about 600,000. While the building permits are coming back, we're still far from where we were at the pre-recession peak. In some of these sub-markets, there's really much greater demand than we've been able to supply with our infrastructure being that we simply don't have enough construction workers to build in those markets.

Manufacturing, this is a segment that has experienced some slowing over the past year. Part of that has to do with our exchange rates and some slowing demand globally, but the ISM manufacturing index, if this is something you follow, below the 50 trend line mark, denotes contraction in the industry and then above 50 is an expansion. The ISM manufacturing index has come back for the past month or two, so that's a positive signal about the expectation or the future of manufacturing. The ISM non-manufacturing index remains at strong levels nationally.

I'm going to delve into a couple of sectors and then talk about recession. Take a look at the oil and gas industry. This was the most impactful industry driving down growth for the wholesale distribution sector over the last year. We saw a huge ramp up in our ability to produce oil and gas in this country, making us the largest oil producer in the world and also went into record levels of inventory, crude oil storage, when you take a look at the strategic petroleum or at our inventory excluding strategic petroleum reserves.

We were on this 30-year average of about 340 million barrels and, seemingly overnight, we shot up to 500 million barrels and, as of June 3, we were at 532 million barrels. Even though we had the price at that time that impacted drilling, we thought that there would be this depletion curve that would then help us absorb some of those extra inventory that we have. We're back up at record levels again as of late May and early June and the prices, while they recovered from their lows, we got into the 20s, if you'd take a look at where we were a year ago and two years ago, we're still very far from some sort of healthy equilibrium where we can still get a good amount of oil and gas development.

In June this year, we were at about $50 a barrel. June a year ago, we were at about $60 a barrel, and June two years ago we were at about $103 a barrel, and so it's a really steep decline. We saw producers get much more efficient over this time period where productivity has been key. When the industry rebounds, I think it will look differently than it did heading into this downturn because of this productivity. I don't think we'll need as many workers in the industry as we needed five years ago working in this industry.

Price expectations, we looked to the Energy Information Administration for some price forecast, and those, too, are fairly similar right now. The expectation is that, by 2018, we'll get back to about the $60 a barrel range, and this will trend out into the $70s by 2020, but the EIA price forecast is really wide. The EIA has it essentially between $25 and $100 a barrel a year out. There's some consistency around that $50 range, and I think for a $50 a barrel, we'll see some resurgence in drilling rates. The drilling rates right now are down about 77 percent from two years ago, and about 80 percent of our drilling rates are in oil, 20 percent are drilling for natural gas.

Business cycles. Post-World War II, we've had 11 recessions. If you look at this chart, I included the 1944 recession that was really overlapping with the end of World War II. Beyond this, we have 11 recessions. If you take a look at the last five, we had the Great Recession, which was a financial recession. We have the tech bust in 2000. We have the savings and loan prices back in the 90s and interest rate crisis in the early 80s and the Iranian oil embargo prices in 1980. If you take a look at all of these business cycles, all of these recessions, the only thing that they really have in common is that they're all very different.

I talk with people about their economies, and they say, "Well, um, how can we engineer our economies to be more resilient?" I think that we can learn from these prior business cycles in that it's really hard to predict and hard to forecast, and you can't really engineer your way around it.

Looking back over these last 11 cycles, from peak to trough, the average employment loss was about 3 percent. This last recession, we lost 6.3 percent of our employment. The time to recovery from these recessions averaged 29 months, so that's about a two and a half years. The last recession took us about 74 months to recover our employment losses. If you take a look at the last five employment cycles, our employment recovery is getting slower and slower. It's only five data points, so it's hard to say if this is really some sort of trend in our economy, but there are indications that we are having more and more jobless recoveries than we had in our short history, so that's something to watch out for, to see how labor markets tend to respond.

There's a couple of leading indicators that we can look to. The S&P 500 is one of those. The hard thing when taking a look at the stock market is we have way more fluctuations in here than we have recessions. With every little downturn in the stock market, it's not necessarily an indication that we have a recession pending, but every recession does have a steep downturn in the stock market. The question is how is this impacted as the Fed increases the interest rates? Will it have some sort of inverse effect on the stock market overall?

When we take a look at some of these other metrics of economic growth and recessions, the gray bars indicate recession, and what we can say is that, during recessions, we do see a decrease in the stock market. We see a decrease in personal consumption expenditures and business investments and net exports. What we're seeing right now is three consecutive quarters of slowing personal consumption expenditures. They're not negatives, but just they're growing at a slower rate. Fixed business investments has decreased for two consecutive quarters. Fixed investments overall has decreased for three consecutive quarters. Corporate profits have decreased for two consecutive quarters. Goods exports have decreased for two consecutive quarters.

To me, these are some warning signs out there. It's not certain if we're starting to peak out on our recovery, but these are some of those metrics that we need to keep an eye on to see where we are starting to head in this country.

What could an underlying cause be? It certainly could be the strengthening of the dollar. We've seen it negatively impact our goods exports. The value of the dollar has gotten stronger as the U.S. has outperformed the global growth. We've seen more weakness in some of the developing countries and, now, we see some uncertainty in Europe and that'll just drive the dollar stronger.

Could it be growth in China? Could it be energy bust that we're experiencing right now? I mention that the Baker Hughes rig count is down about 77 percent. It's a huge amount of investment and spending and income that comes with the energy industry. If that turns off as quickly as it has and doesn't rebound, could that be something that causes the next recession? Or could it be interest rates? As the Fed ponders how quickly and by how much to increase rates and how that can influence even longer term rates, is that something that can pull our economy down? Or will it be something different, even just the presidential election, or could it be consumers just getting a little bit shaky in their confidence and pulling back on consumption, deciding not to move or not to buy another vehicle? All of these sentiments can also impact recovery.

When I take a look at the basket of data and when I read what other economists are saying about our likely of a recession, it seems very unlikely in 2016. The likelihood increases in 2017, in 2018, but there are some things to keep an eye on, but, overall, with the income rising, employment rising and wealth increasing, I think that there are a lot of positive signals that remain in our overall economy.

With that, I'm going to turn it back to Jenel.

Stelton-Holtmeier: Thank you, Brian. That overview provided a lot of valuable information. You'll note that Brian provided some nice industry overview slides in his presentation drilling down to the 19 segments that the 2016 economic benchmark for wholesale distribution report covers.

That's useful for a broad picture, but, for many of you in the audience, I know it might lack some of the nuance in your sectors, so, for example, miscellaneous durable goods include eight distinct subsectors with very little product overlap and the industrial sector includes 19 different subsectors, each with its own data picture that has a broader impact on this. The economic benchmark reports actually break down select data to reflect the nuances of each sector and what's happening in these subsectors. Here's a sampling from the industrial sector.

You can see that while the overall average of sales per employee for this sector is $604,800. The range amongst subsectors has a low of $313,300 for custodial and janitorial equipment up to $1.4 million for aircraft and aeronautical equipment and supplies. This drilldown is available in the economic benchmarks report for gross margins, the number of companies, share of revenue by end-market and more for each sector. With that, this drilldown into the subsectors and the nuances that reveal can really help you benchmark your company's performance against your peers.

We've left some time for questions here, and we have a few to start with.

The first question we have, Brian, is about the drop in the prices that you were talking about earlier in the presentation. How much of this is due to decreased commodity prices?

Lewandowski: It's really mostly due to decreased commodity prices. With the decrease that we saw in oil and gas and agriculture really are apparent in those industries. We can easy take a look at what's happened with the WTI oil price and with the Henry Hub price and the agricultural industry, but it's a little bit more obscure when taking a look at some of these other sectors that have decreased.

Really, a lot of it is prices and not production or not output. Okay, so here's the slide. I think we have nine sectors that decreased, eight sectors that decreased in nominal terms, but only three sectors that decreased in real term. What that means is nominal dollars is today's dollars or current dollars, their real revenues or the real dollars, those are adjusted for the prices changes and, after adjusting for the price changes, we went from eight or nine decreasing sectors down to three, so most of that has to do with the price movement.

Stelton-Holtmeier: Thank you. Onto when you were talking about household income growth, what are the household income growth ratios as compared to household debt growth? How do those two work together?

Lewandowski: I don't know if I have a direct answer for that. When we take a look at income growth, and debt growth. I look at these aggregate baskets, so we're not taking a look at income growth by income cohorts. People may be earning zero to $20,000, $20,000 to $40,000, $40,000 to $60,000. There are some data out there on that that we can look at which is important to understand how balanced wage increases are.

The problem is that if you're a trained engineer or a trained architect or you have a lot of experience in sales or any of these other professions that really take skill and education and years of experience, you have a lot more market power in increasing your wages. But if you're more of a commodity in your employment, so there are a few barriers to entry relatively to enter in these jobs and to train those workers, then there's less ability for those workers to demand higher wages. That's why we end up seeing an imbalance when it comes to income growth where the low end of the income earners end up staying at the very low end while the higher end ends up getting higher faster because they have that ability to command higher wages. I think that the disparities in income growth have impact on our broader economic growth, too, on the goods and services that are consumed and that ability to buy homes and rent homes and to move.

I think those are great questions, but it's a rich data set that you have to mine to try and understand how those are moving in a real-time basis.

Stelton-Holtmeier: The Economic Benchmarks for Wholesale Distribution Report that we used throughout this webcast is available for purchase at the MDM store if you visit mdm.com/2016/ebwd.

This program is available for purchase at mdm.com.

Thank you, Brian. This concludes our program.

2016 Mid-Year Economic Update

Featuring:

Brian Lewandowski, University of Colorado Boulder
Jenel Stelton-Holtmeier, Modern Distribution Management

Sponsored by: NETSUITE

June 14, 2016

Agenda

- Introduction
- Macroeconomic Overview
- 2016 Economic Benchmarks for Wholesale Distribution
- Q&A

Speakers

Brian Lewandowski
Associate Director, Business Research Division
Leeds School of Business, University of Colorado Boulder

Jenel Stelton-Holtmeier
Editor
Modern Distribution Management

Speakers

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Modern Distribution Management

The 2016 Mid-Year Economic Update: Economic Headwinds or Tailwinds?

Brian Lewandowski
Associate Director, Business Research Division
June 14, 2016

Economic Benchmarks for Wholesale Distribution and the Economic Outlook

Today's Discussion

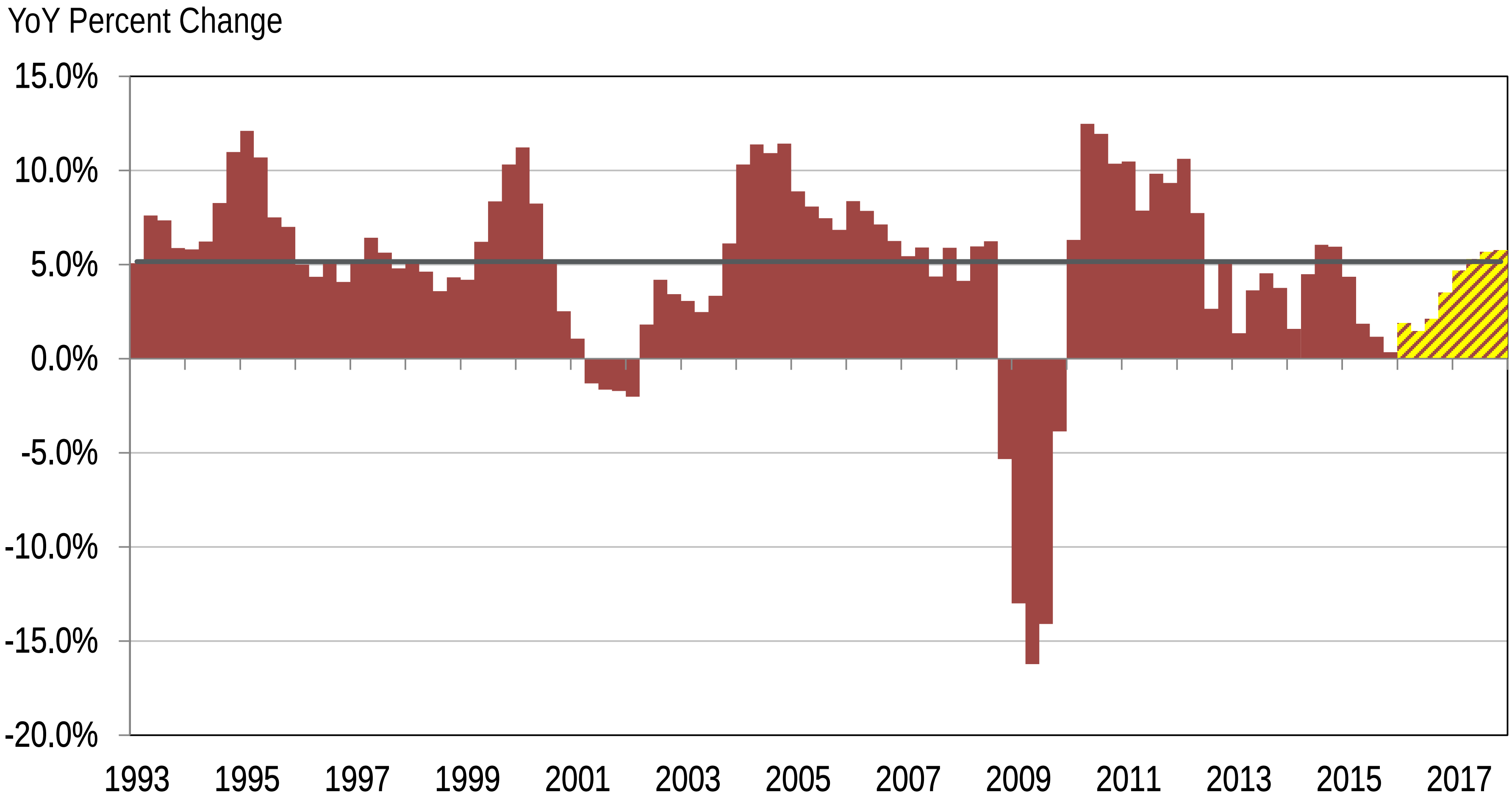
- Economic outlook
- Sales and inventory trends
- Specific industries
- Highlights from the 2016 Economic Benchmarks report

About the Economic Benchmarks for Wholesale Distribution report data

- Foundational data from U.S. Census Bureau, Bureau of Labor Statistics and Bureau of Economic Analysis
- Based on latest Wholesale Trade Survey and Economic Census
- Include revenue growth forecasts

Core Wholesale Distribution Revenue Growth

1994-2016

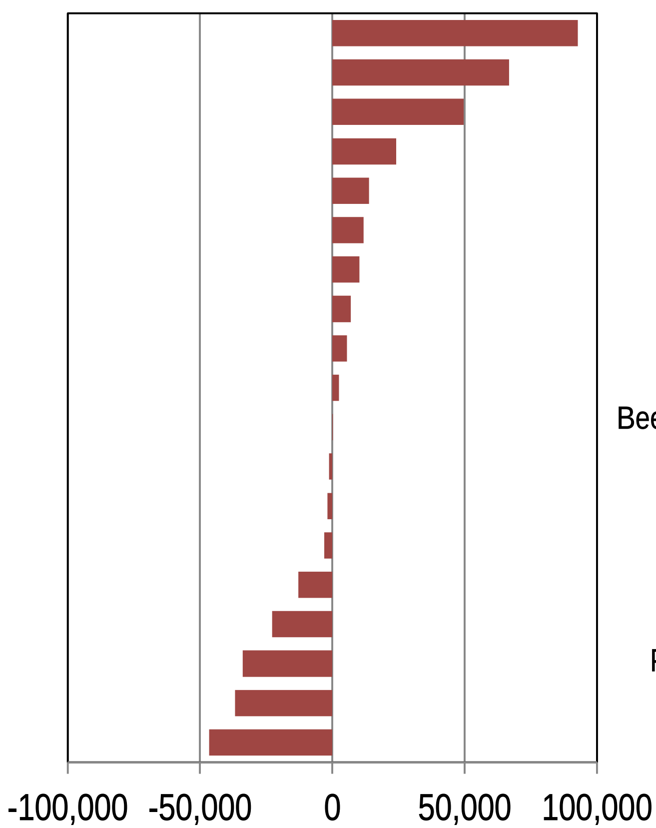


Note: Core excludes the agriculture and the oil and gas sectors.

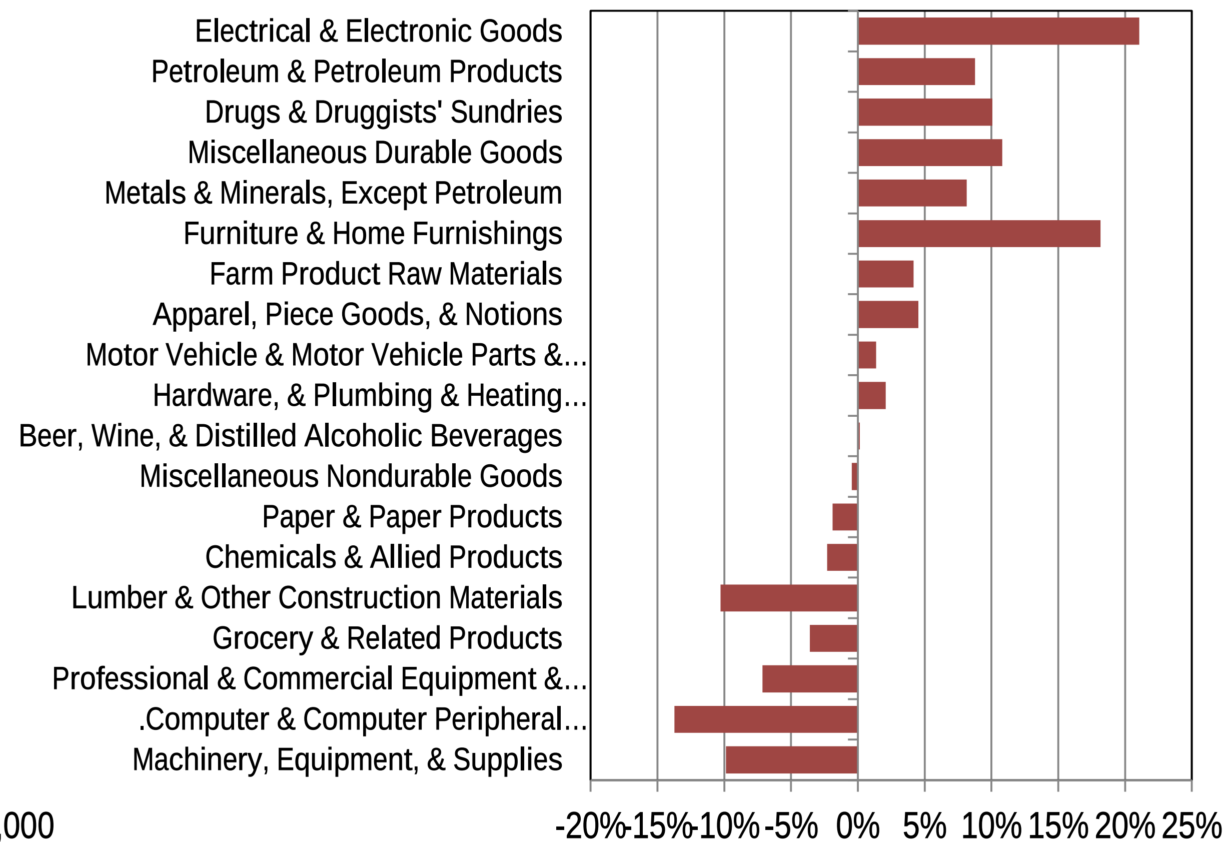
Revisions to Wholesale Trade

2015 and 2016 Estimates for the Year 2014

$Millions **Change in Sales Estimates**



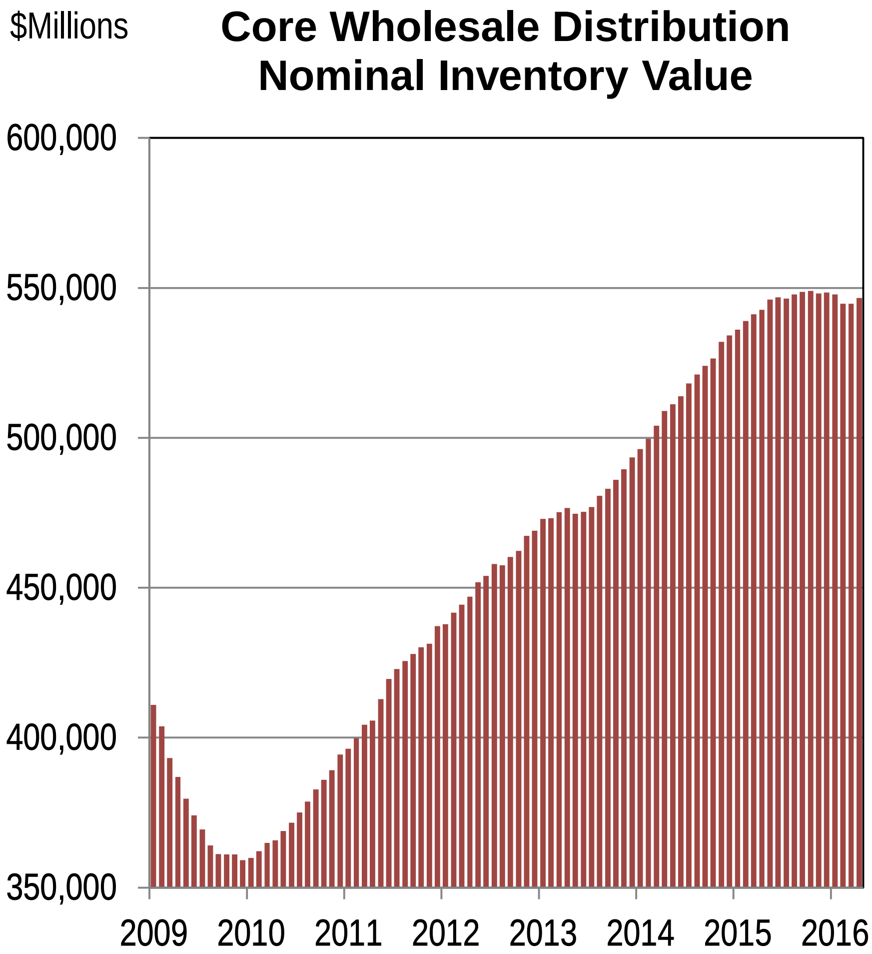
Percentage Change

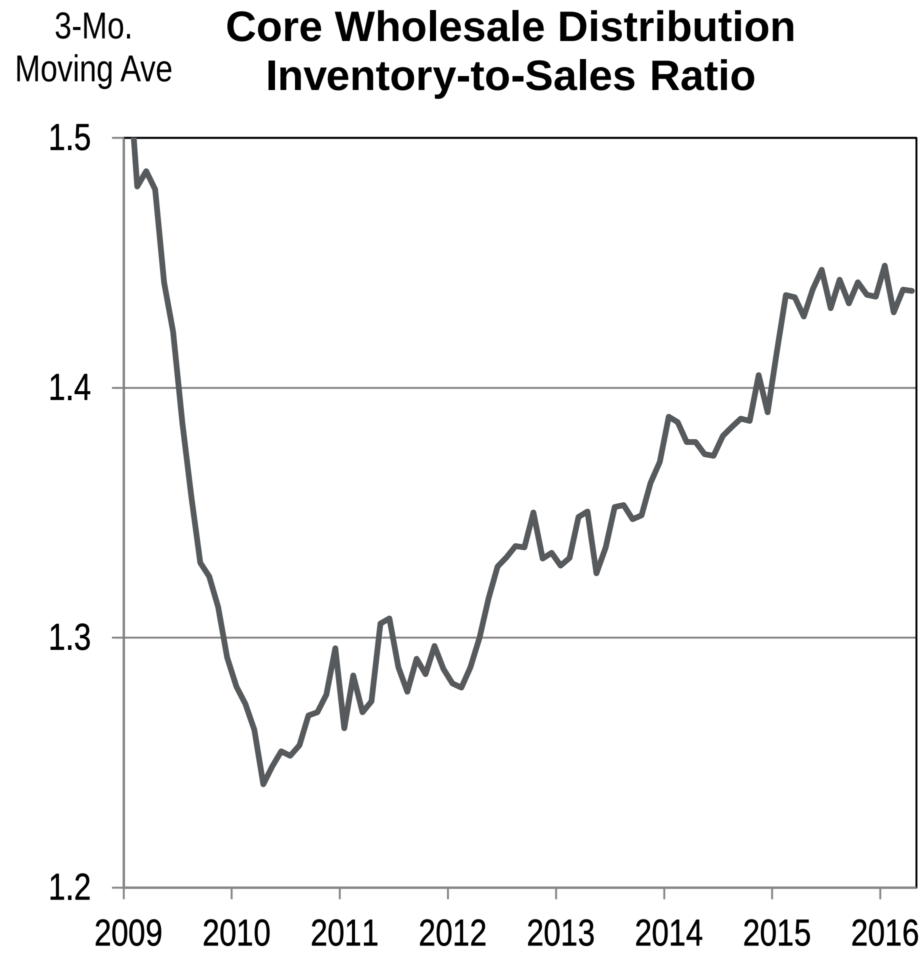


Summary of 2015 Performance by Sector

Major Sector (Largest to Smallest Sector Revenues)	Actual Revenues (2015)	Real Revenues* (2015)	Revenue Gap (Actual - Real)
Pharmaceutical Wholesalers	13.2%	8.0%	5.2%
Grocery and Foodservice Wholesale Distributors	0.3%	1.3%	-1.0%
Electrical and Electronics Wholesalers	3.9%	4.3%	-0.4%
Oil and Gas Products Wholesale Distributors	-34.8%	7.3%	-42.1%
Motor Vehicles and Motor Vehicle Parts Wholesale Distributors	5.2%	4.1%	1.1%
Industrial Distributors	-2.4%	-2.8%	0.4%
Other Consumer Products Wholesale Distributors	3.6%	5.8%	-2.2%
Computer Equipment and Software Wholesale Distributors	-1.2%	1.6%	-2.8%
Agricultural Products Wholesale Distributors	-13.5%	1.0%	-14.5%
Miscellaneous Durable Goods Wholesale Distributors	-11.2%	-4.4%	-6.8%
Commercial Equipment and Supplies Wholesale Distributors	1.9%	3.3%	-1.3%
Apparel and Piece Goods Wholesale Distributors	2.5%	2.2%	0.2%
Metal Service Centers	-15.4%	-2.3%	-13.1%
Beer, Wine and Liquor Wholesalers	4.0%	3.7%	0.3%
Hardware, Plumbing, and Heating Equipment/Supplies Wholesalers	5.2%	4.2%	1.1%
Chemicals and Plastics Wholesale Distributors	-3.5%	6.1%	-9.6%
Building Material and Construction Wholesale Distributors	3.4%	5.8%	-2.4%
Office Product Wholesalers and Paper Merchants	3.1%	4.2%	-1.2%
Furniture and Home Furnishing Wholesale Distributors	7.5%	6.2%	1.4%
Total	-0.7%	2.6%	-3.3%

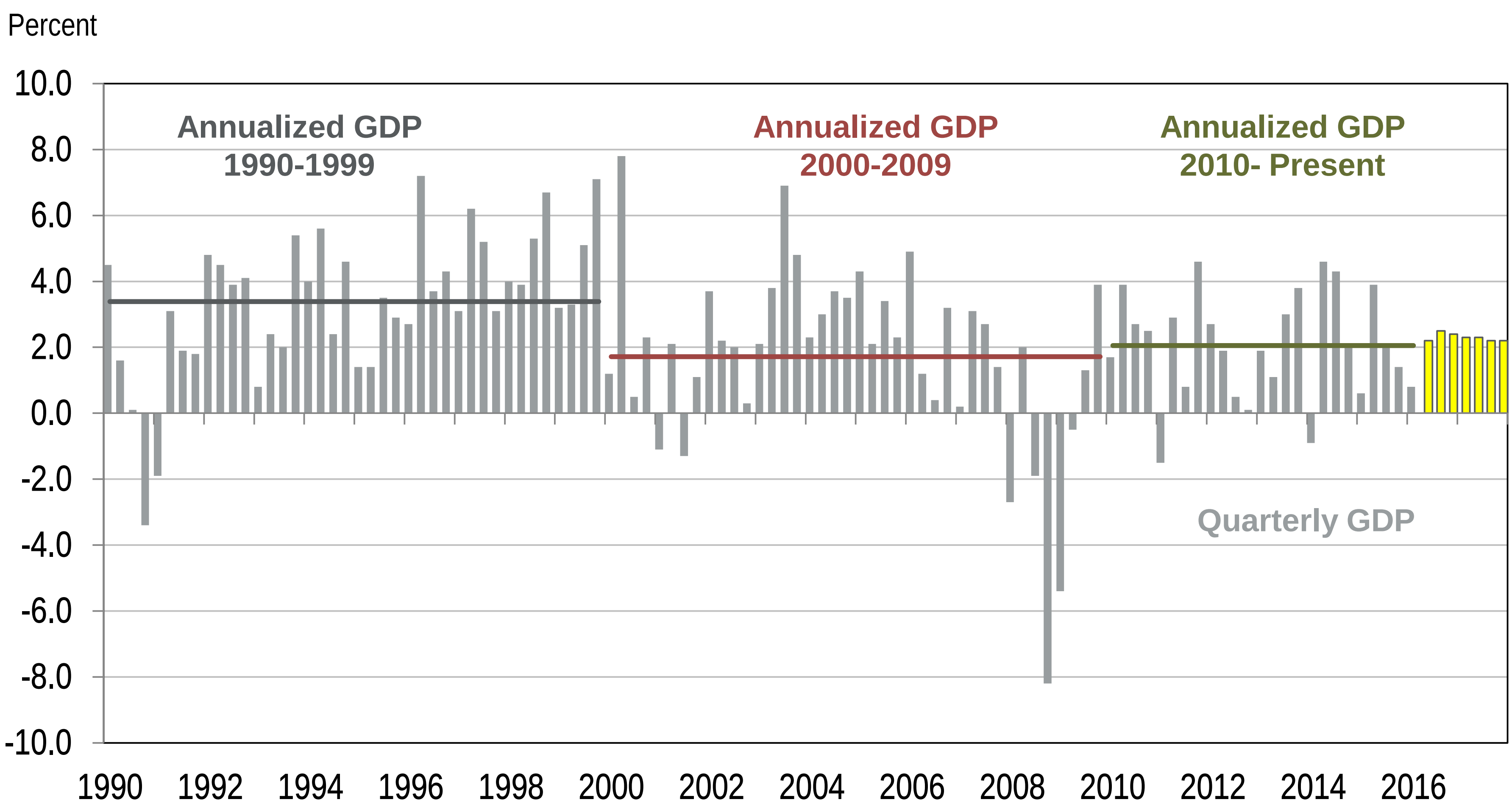
Inventory


$Millions
Core Wholesale Distribution
Nominal Inventory Value
600,000
550,000
500,000
450,000
400,000
350,000
2009
2010
2011
2012
2013
2014
2015
2016


3-Mo.
Moving Ave
Core Wholesale Distribution
Inventory-to-Sales Ratio
1.5
1.4
1.3
1.2
2009
2010
2011
2012
2013
2014
2015
2016

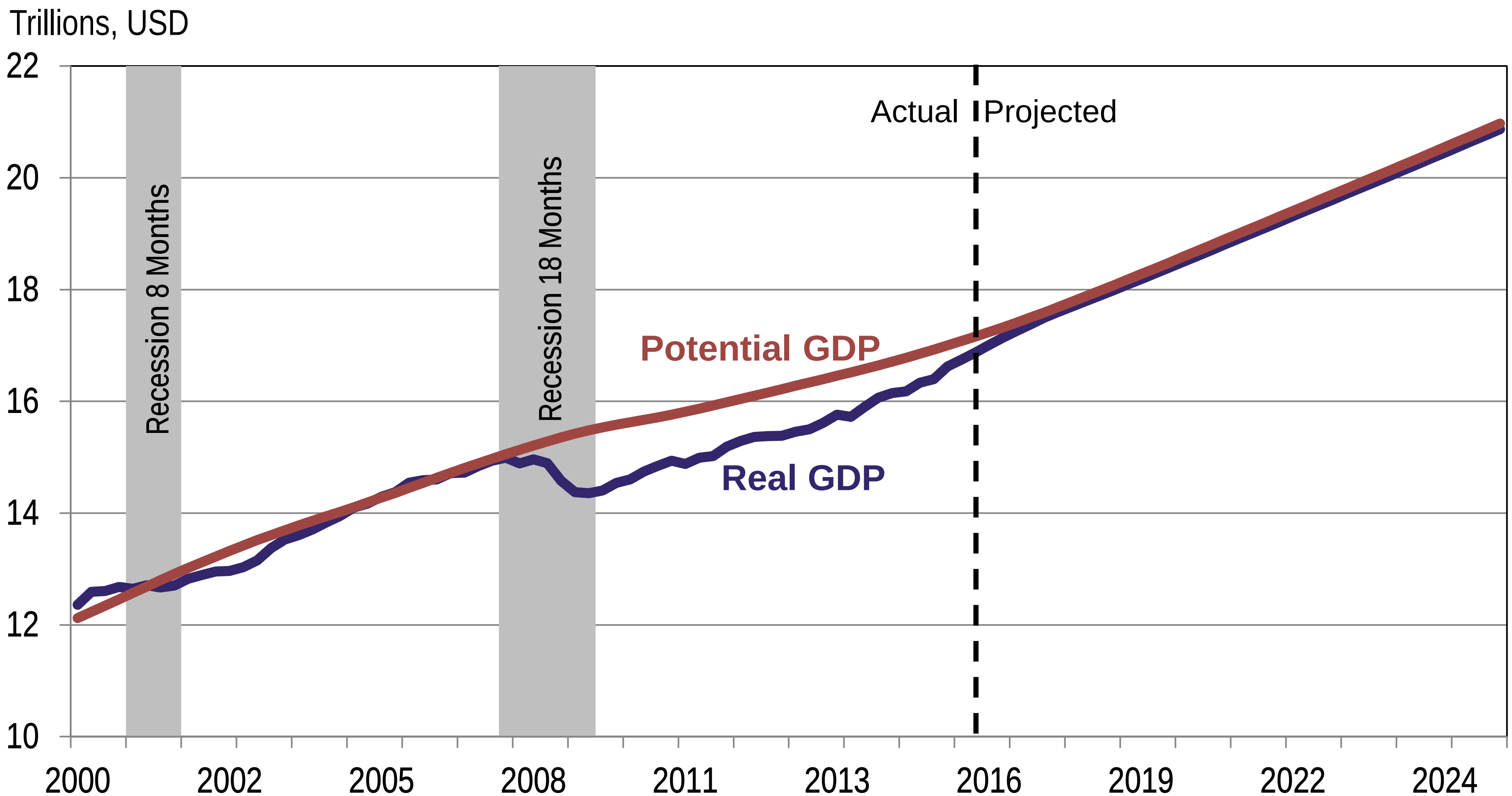
Real GDP Growth

Quarterly and Annualized Real GDP 1990-2016



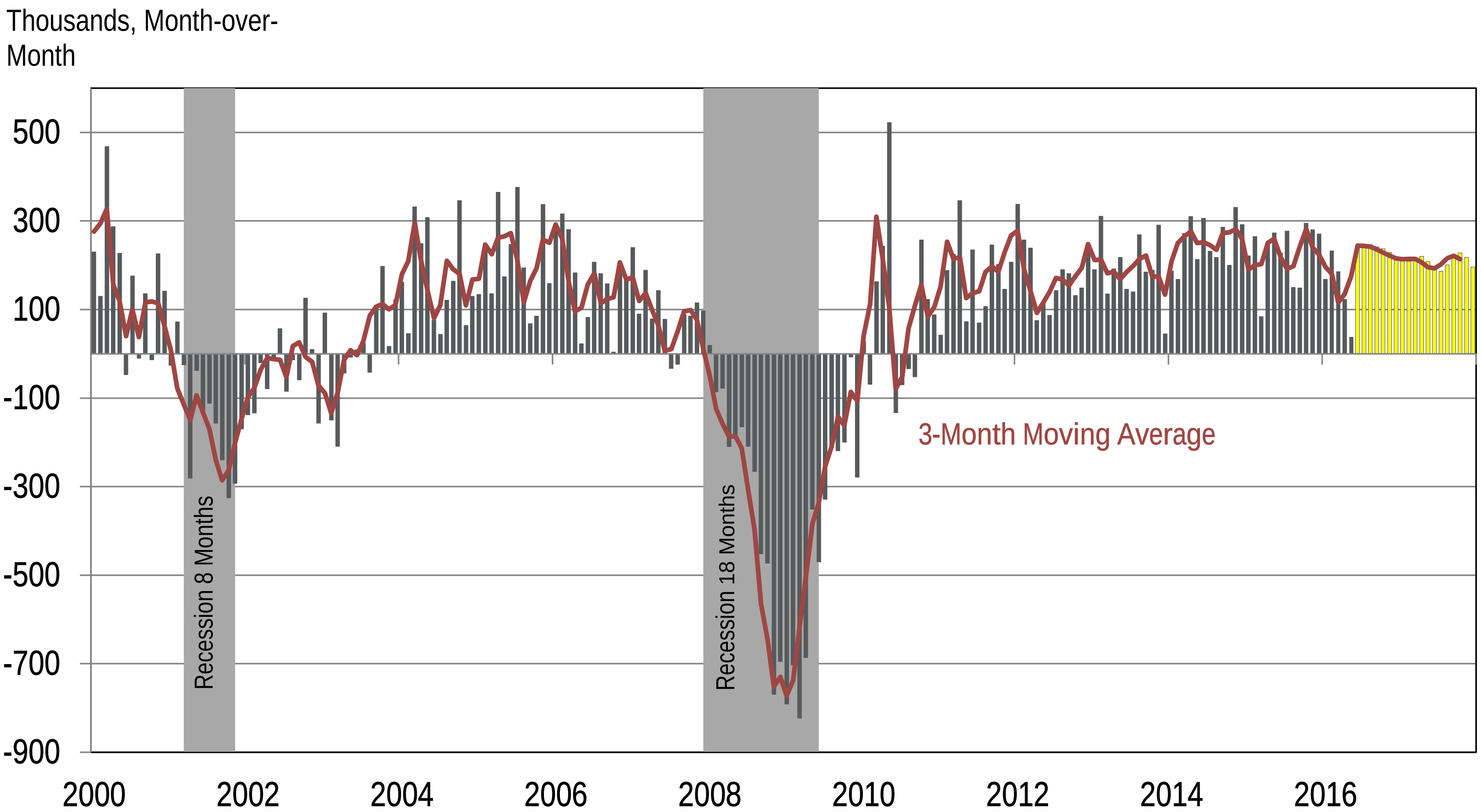
Sources: Bureau of Economic Analysis and June 2015 NABE Forecast.

Real GDP and Potential GDP



Source: Congressional Budget Office, Budget and Economic Outlook, Fiscal Years 2015 to 2025.

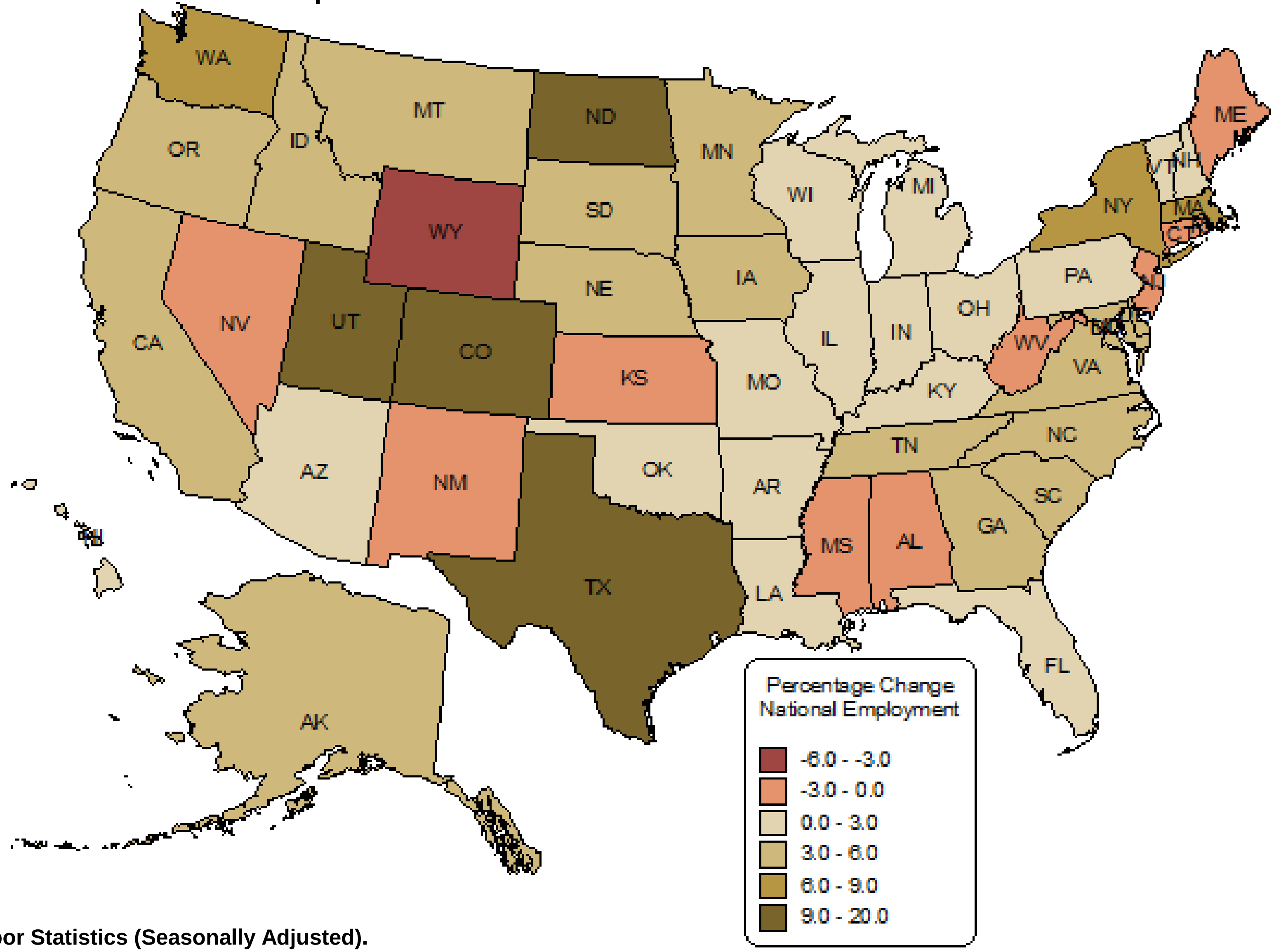
National Employment



Sources: Bureau of Labor Statistics (Seasonally Adjusted), National Bureau of Economic Research, Moody's Analytics, and the BRD.

Employment Recovery

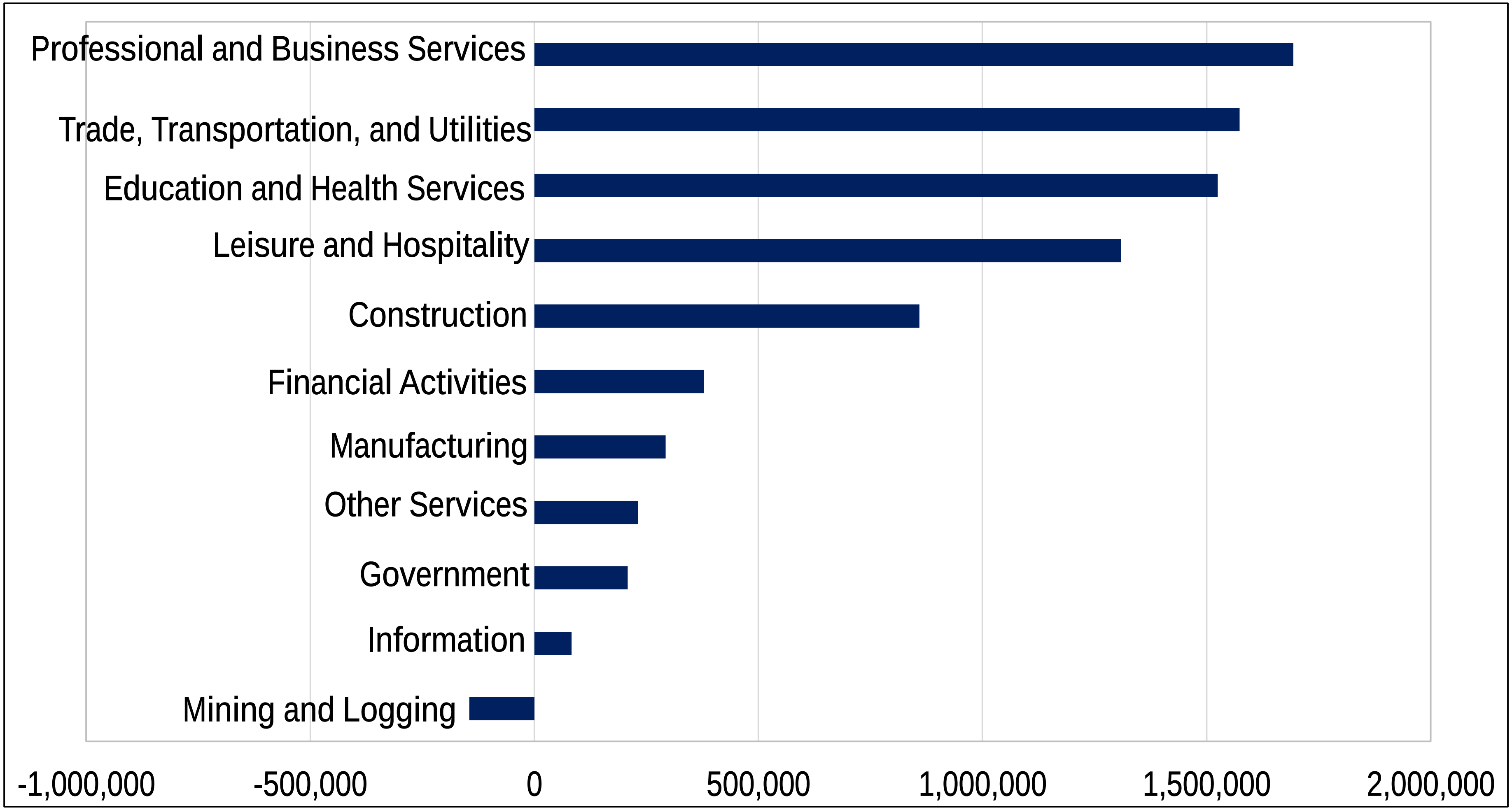
Pre-Recession Peak to April 2016



Source: Bureau of Labor Statistics (Seasonally Adjusted).

Employment Losses and Recovery

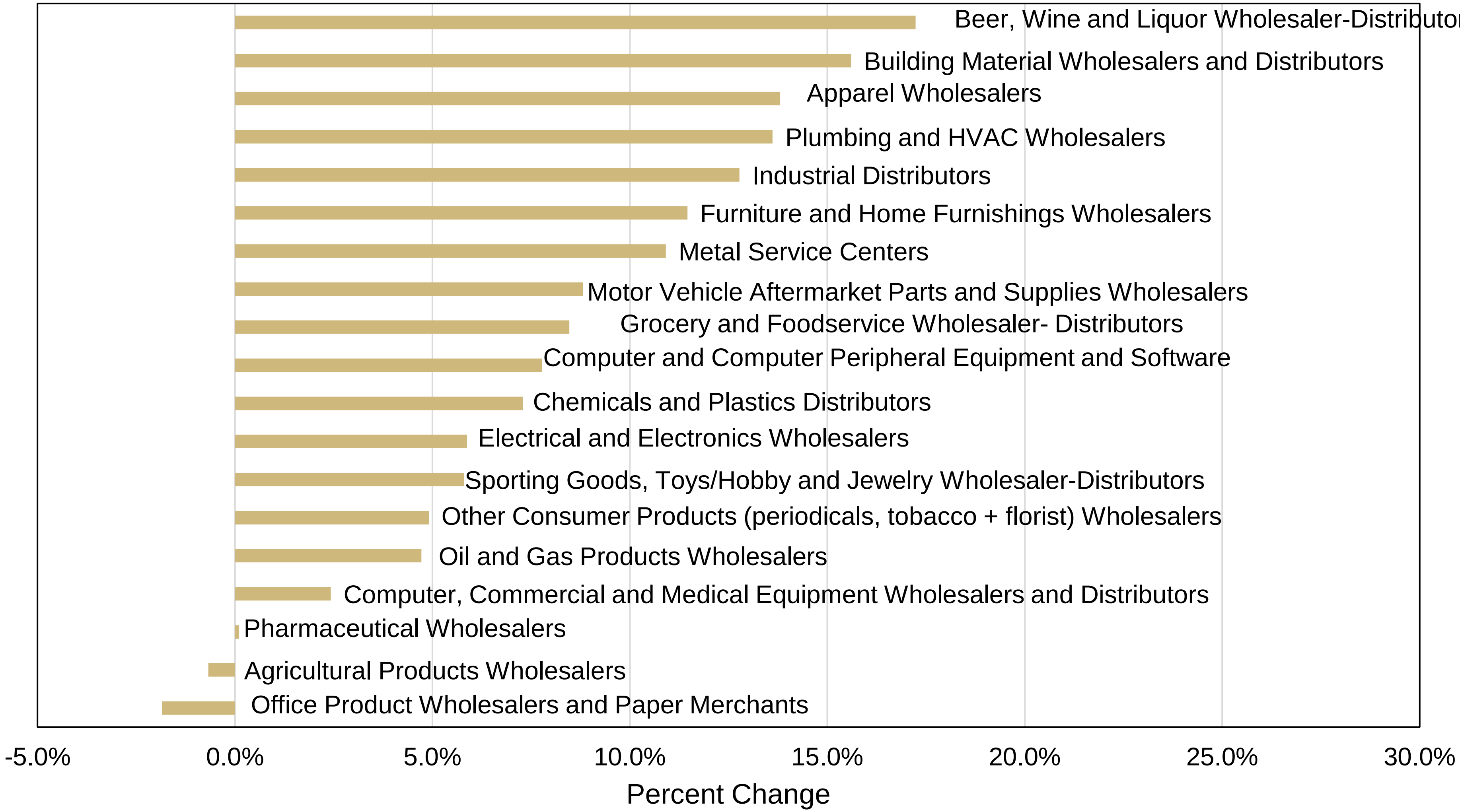
3-Year Growth



Sources: Bureau of Labor Statistics (Seasonally Adjusted).

Job Gains by Wholesale Distribution Sector

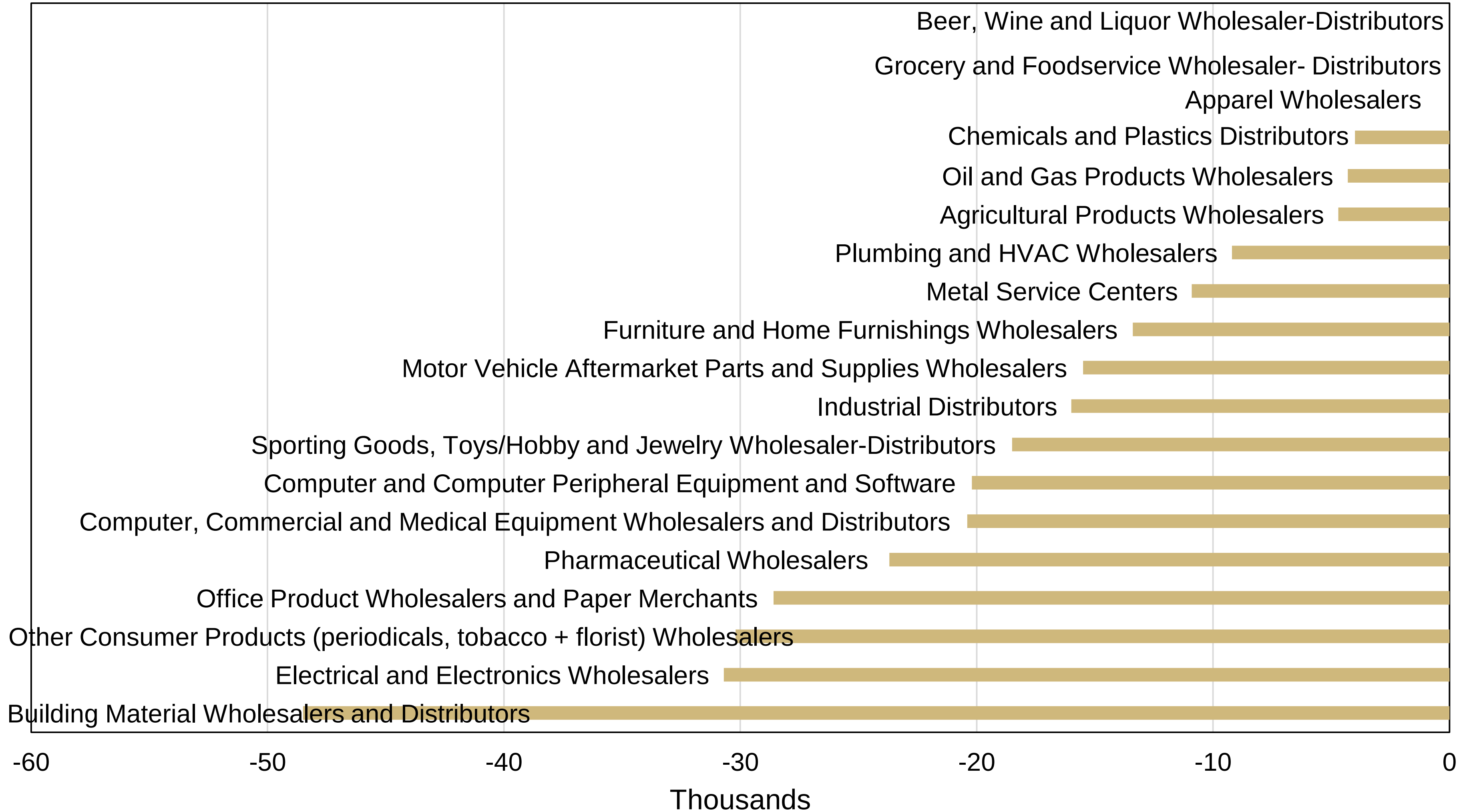
June 2010 – April 2016



Source: Bureau of Labor Statistics (Seasonally Adjusted).

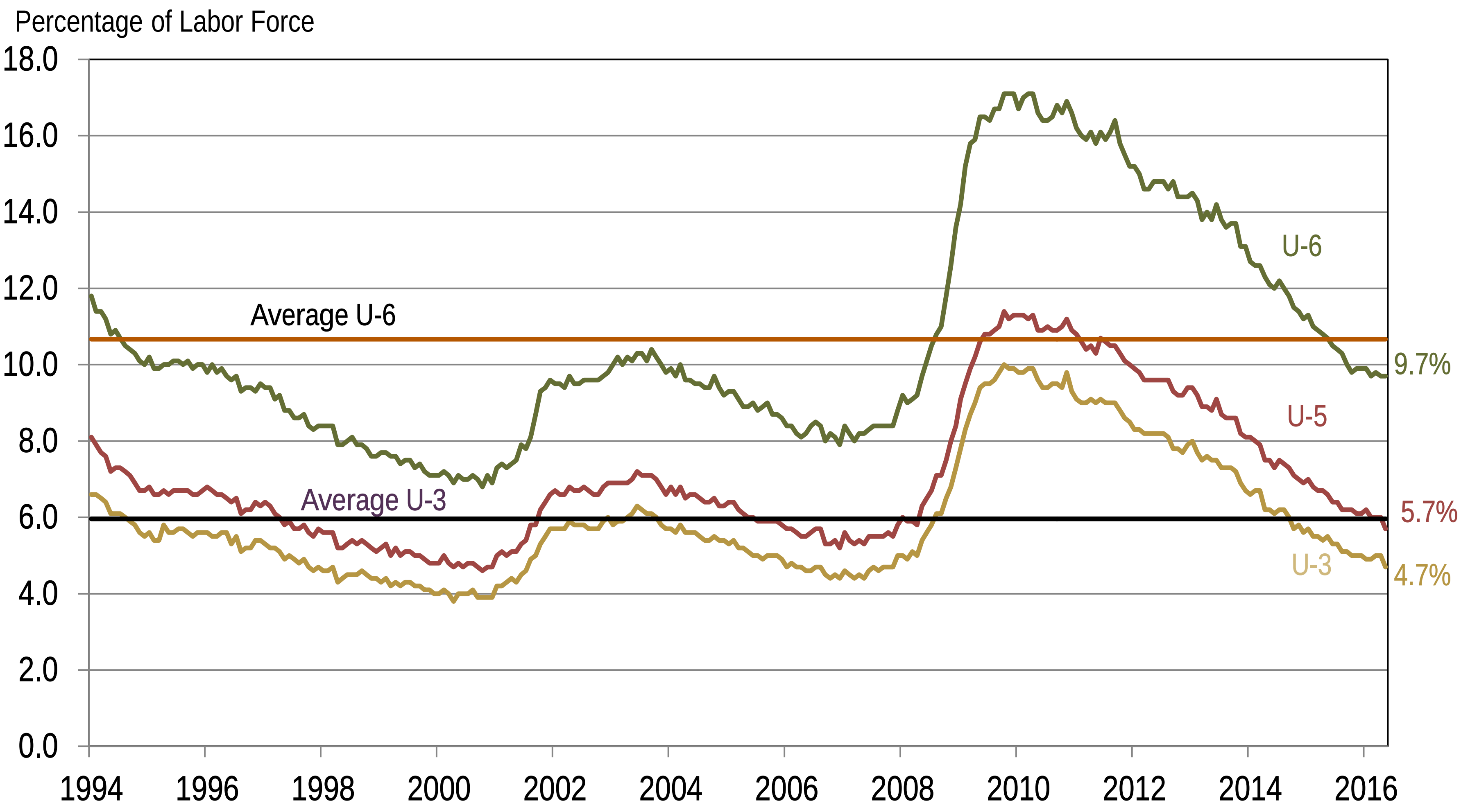
Jobs Deficit by Wholesale Distribution Sector

From Pre-recession Peak



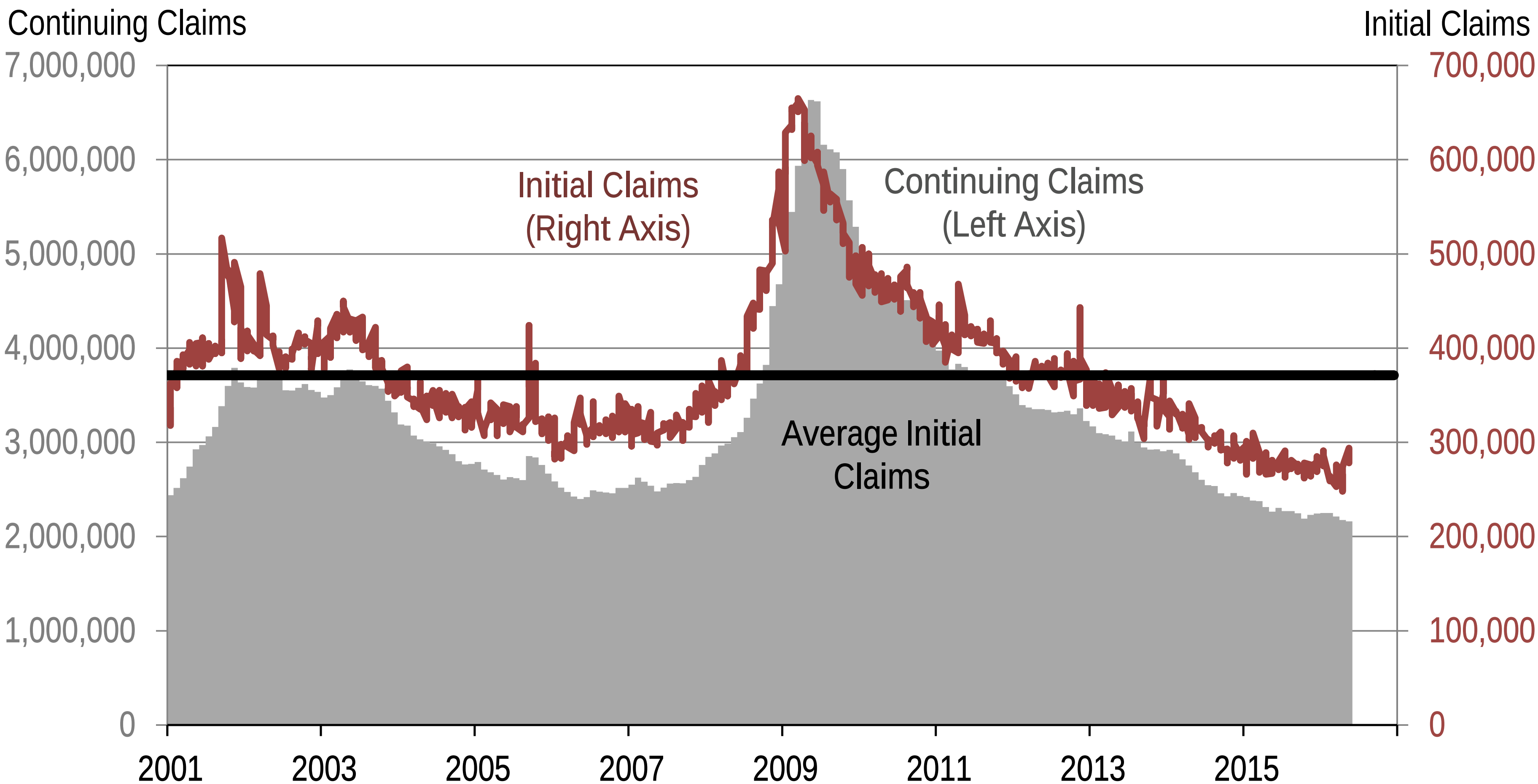
Source: Bureau of Labor Statistics (Seasonally Adjusted).

Labor Underutilization



Source: Bureau of Labor Statistics (Seasonally Adjusted).

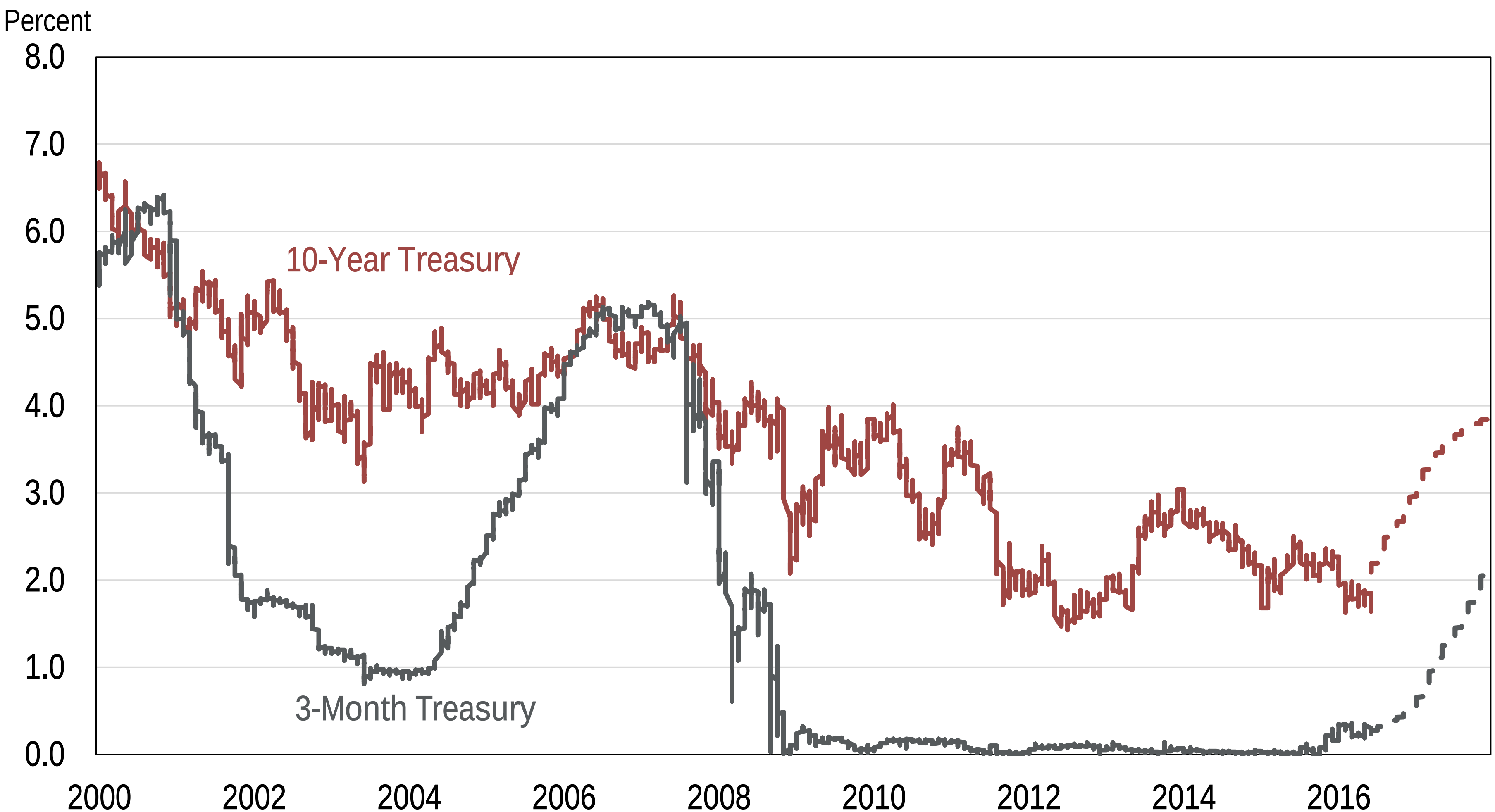
Initial and Continuing Claims



Source: Bureau of Labor Statistics.

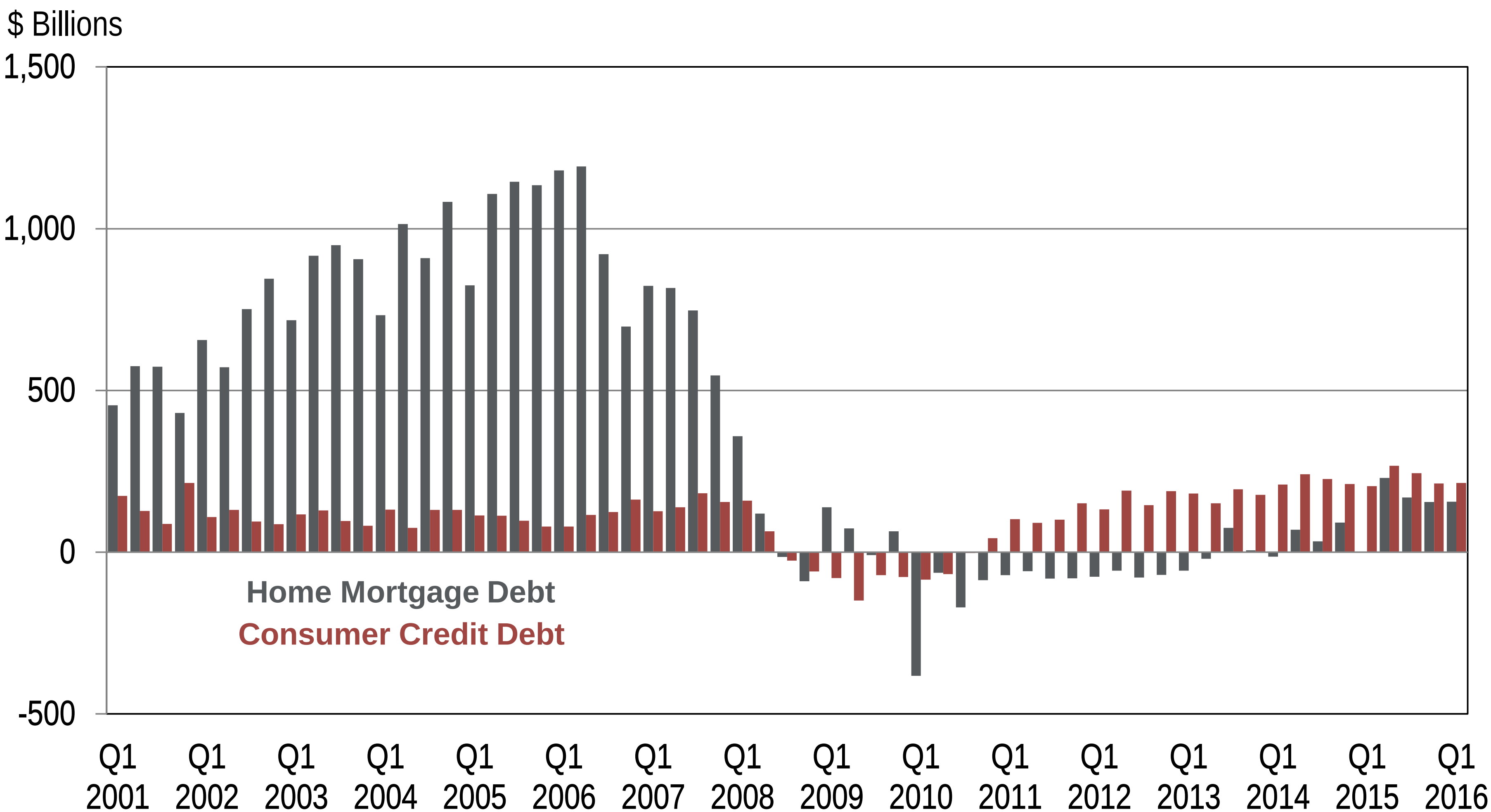
Interest Rates

2001-2017 (Forecast)



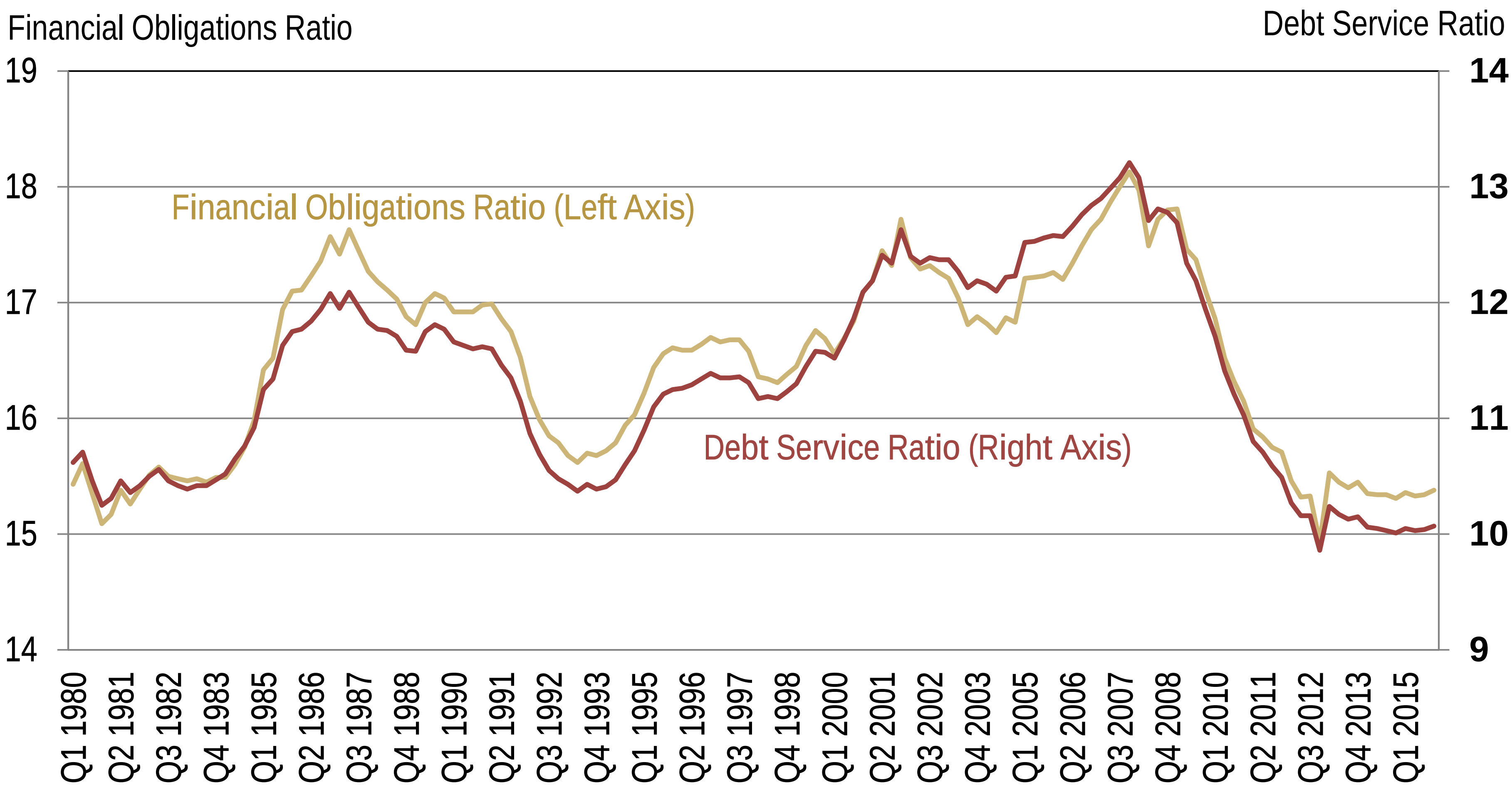
Source: Moody's Analytics.

Household Debt Growth



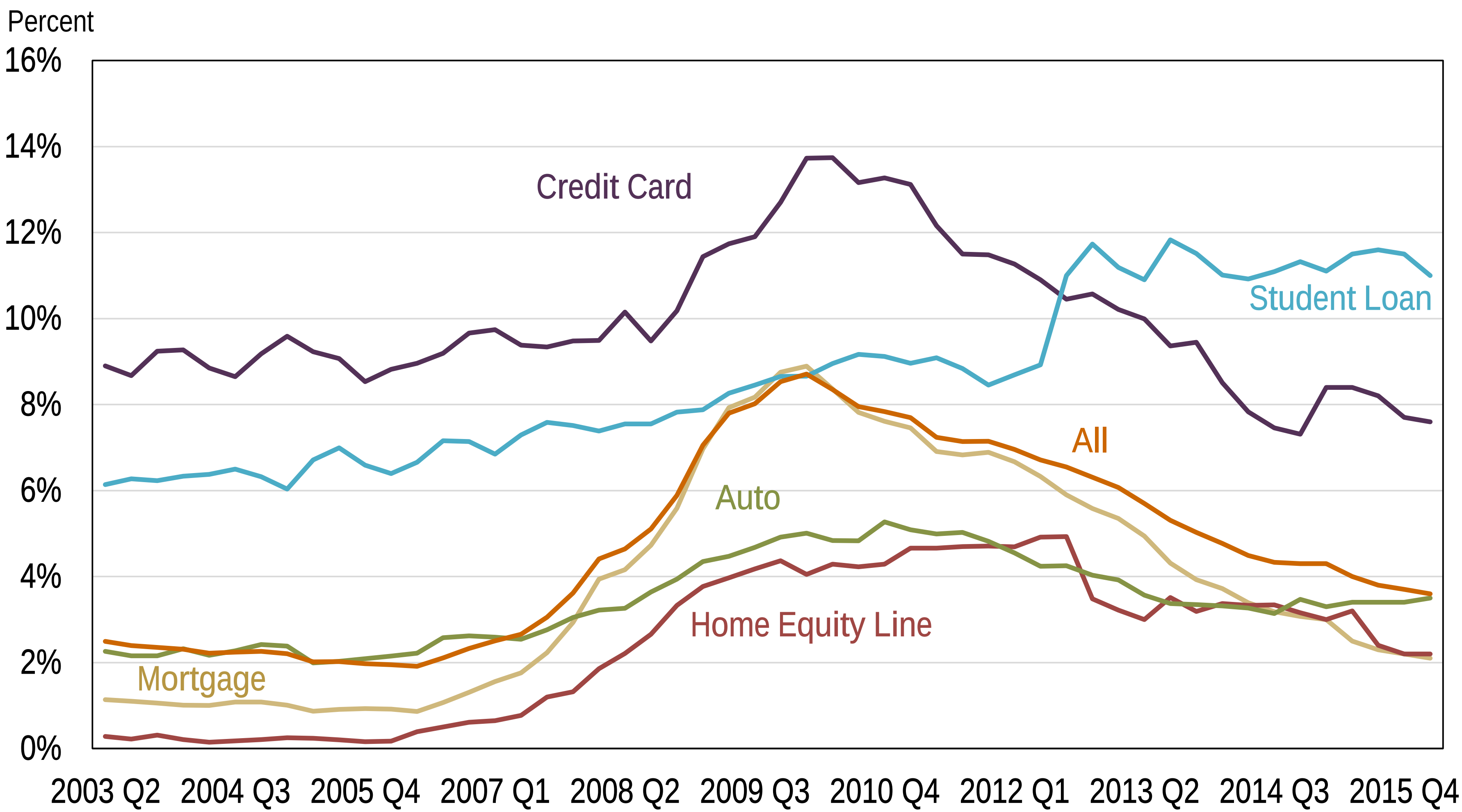
Source: U.S. Flow of Funds Account, Z.1 data release.

Household Debt Growth



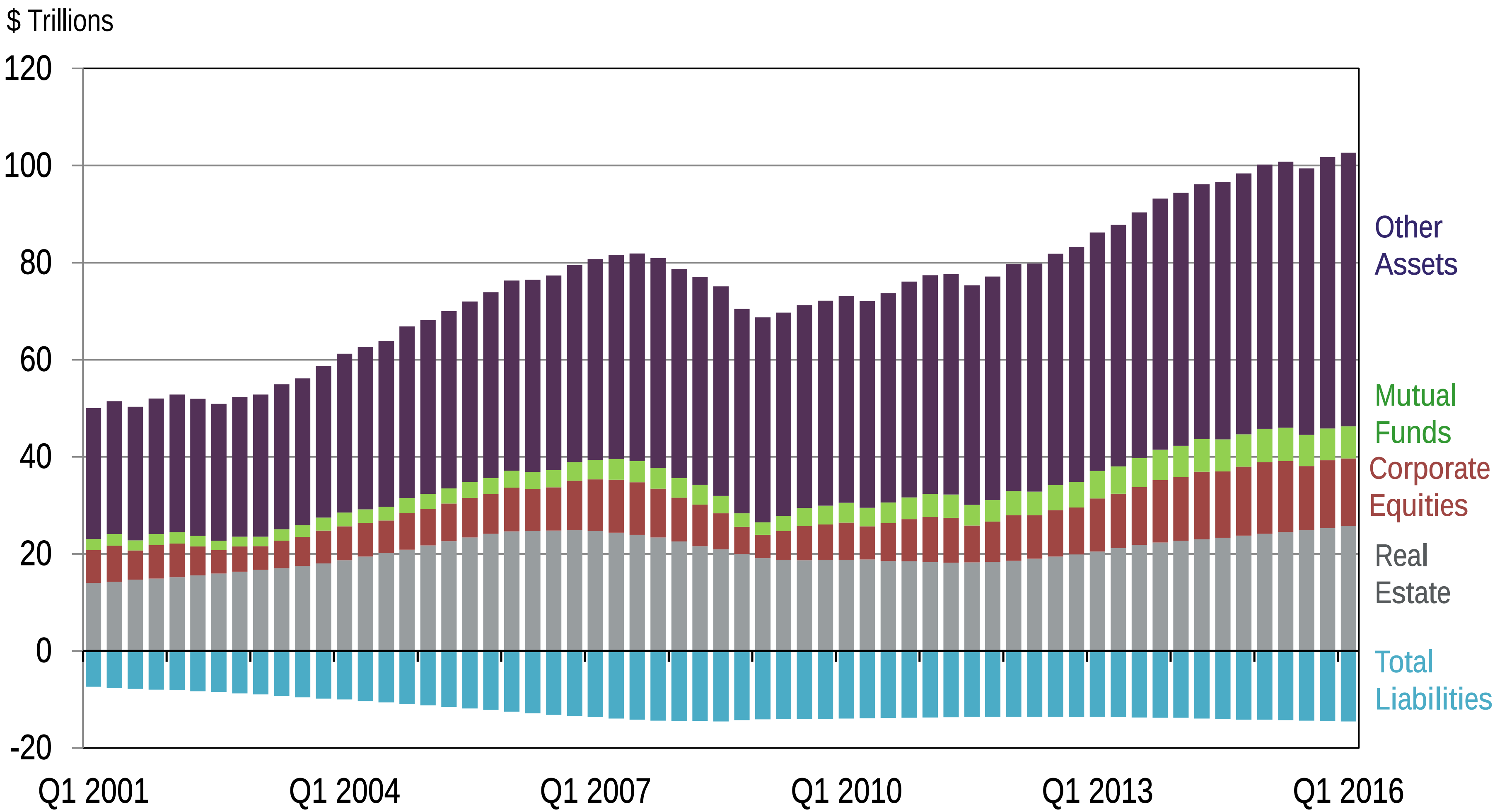
Source: Federal Reserve Board.

Percent of Balance 90+ Days Delinquent by Loan Type



Household Wealth

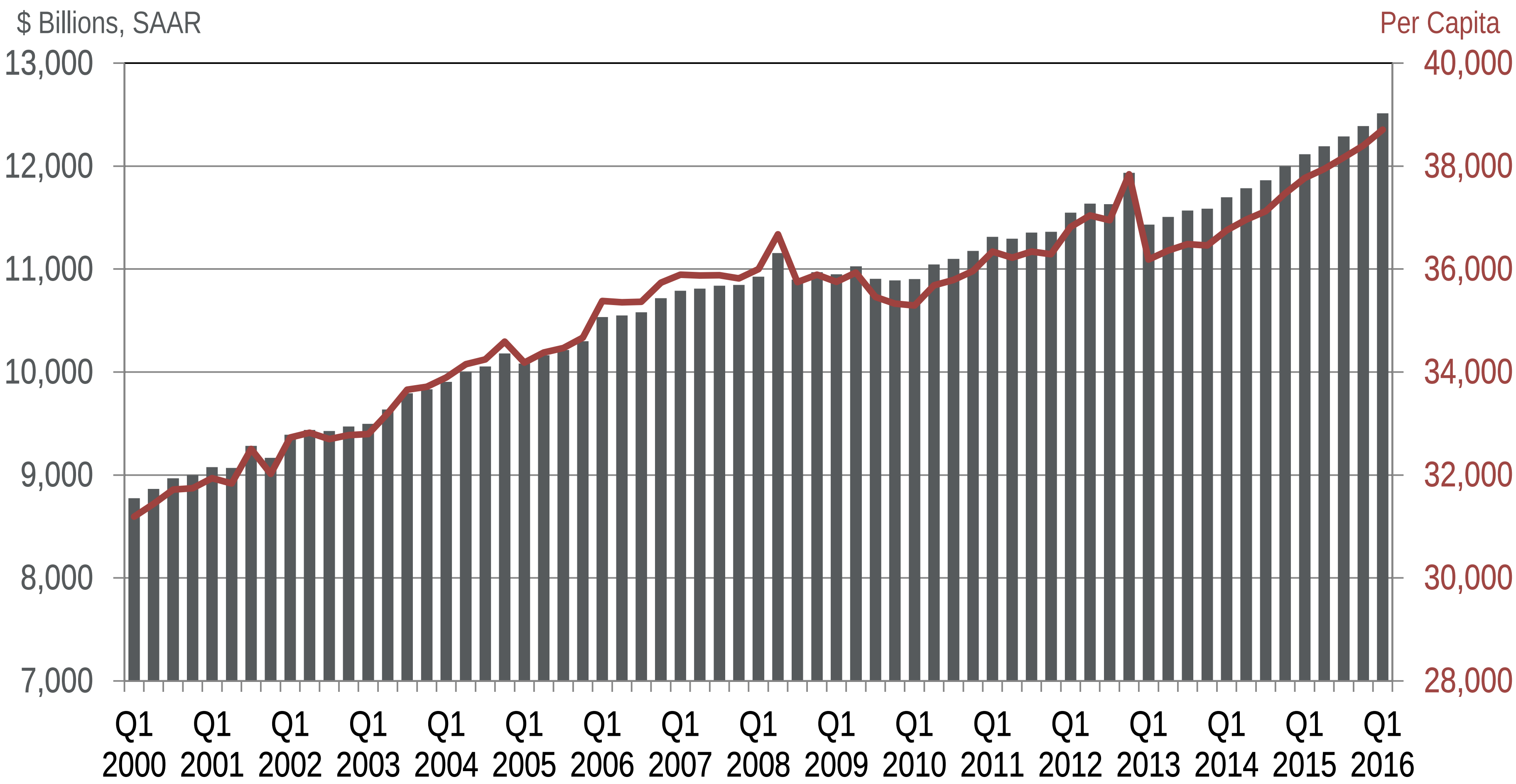
Q1 2001-Q1 2016



Source: Federal Reserve Board, Balance Sheet of Households and Nonprofit Organizations (B.101) (Not Seasonally Adjusted).

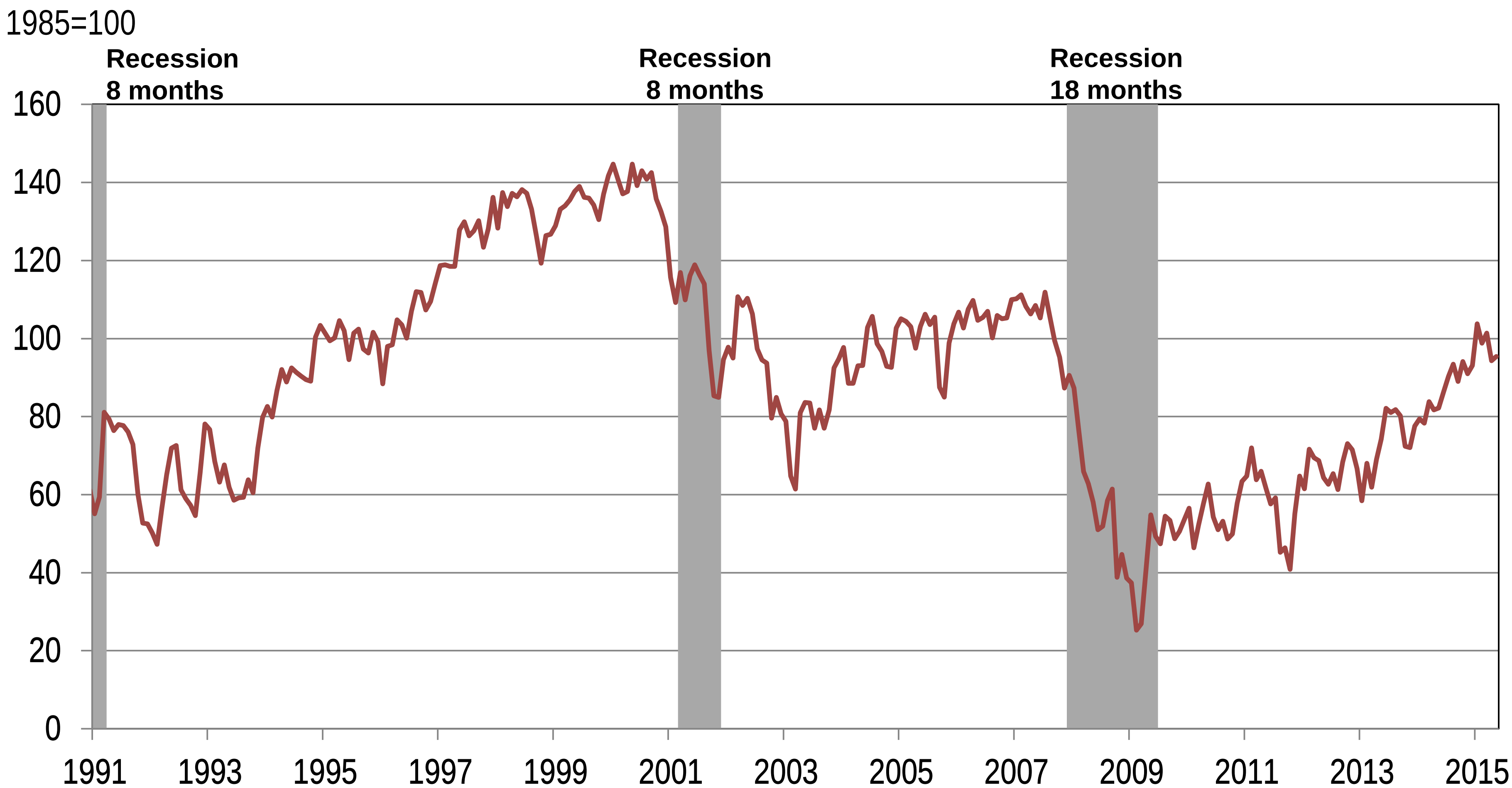
Real Disposable Personal Income

U.S. Total



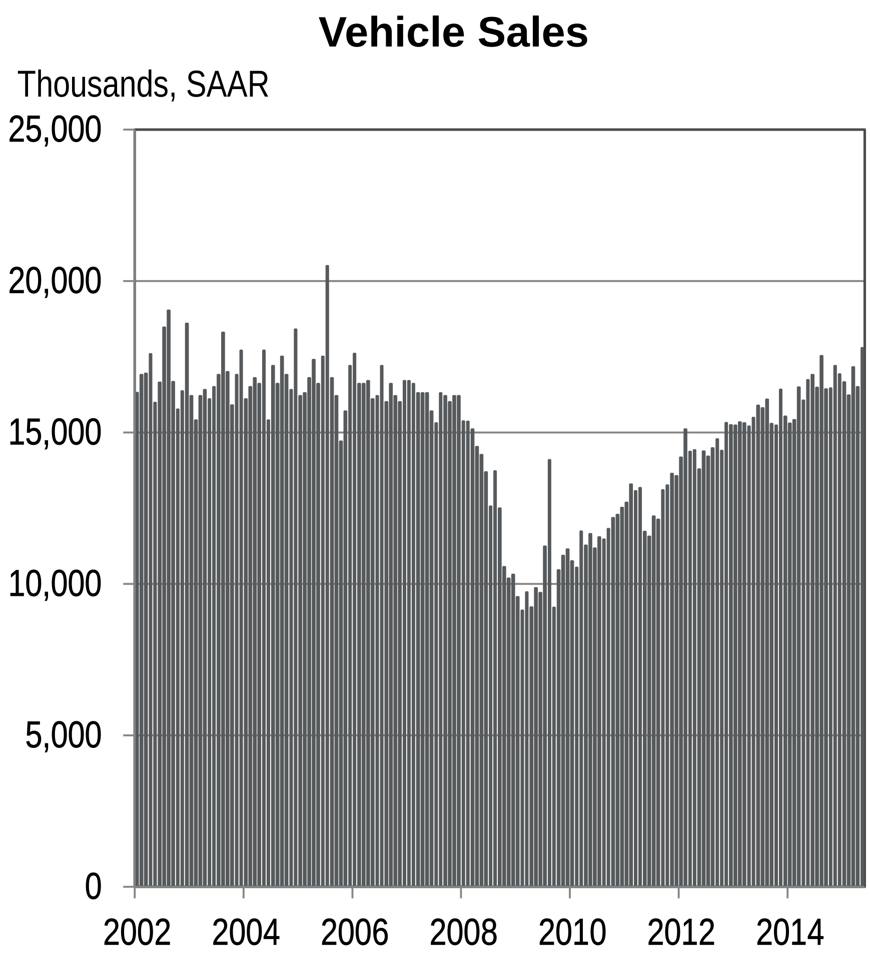
Source: Bureau of Economic Analysis, Personal Income and Its Disposition, SAAR (Chained 2009 dollars).

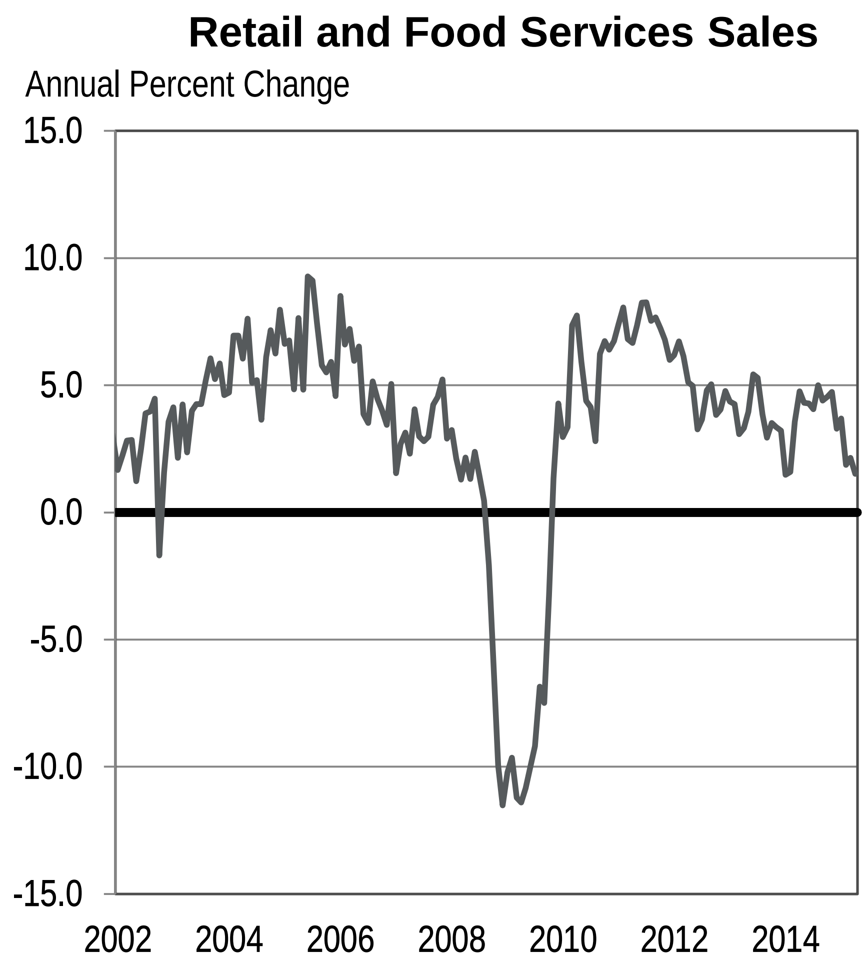
Index of Consumer Confidence



Sources: The Conference Board and National Bureau of Economic Research.

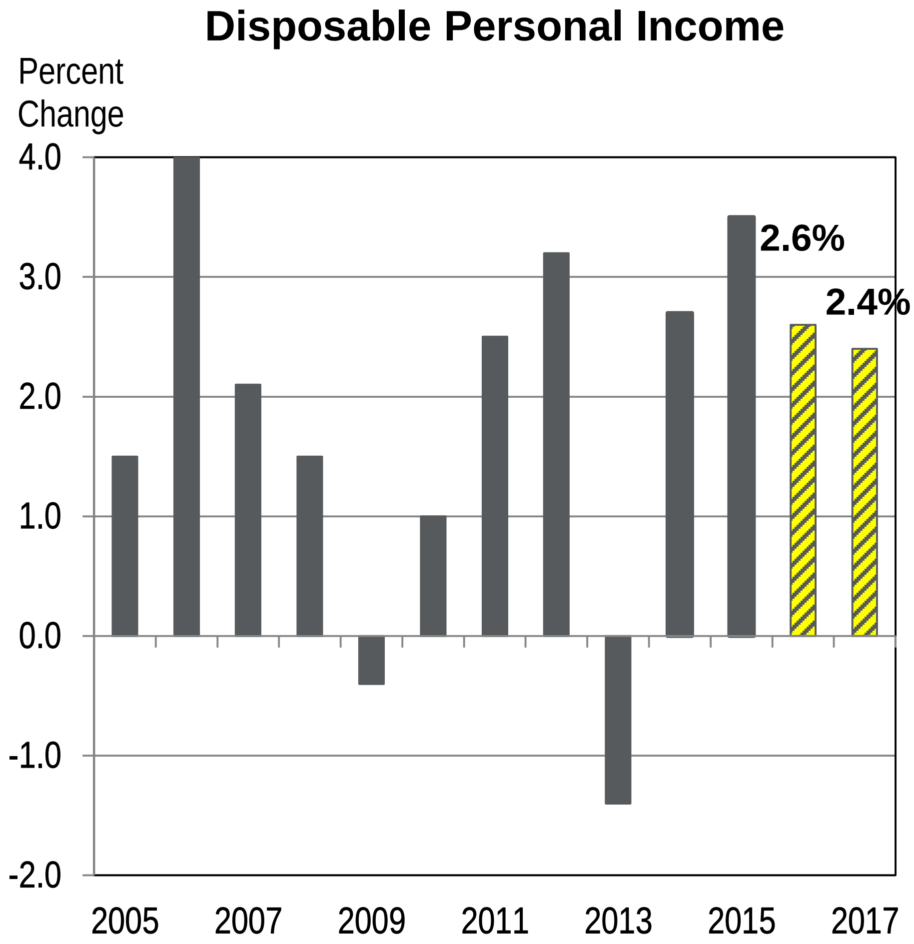
Vehicle Sales and Retail Sales

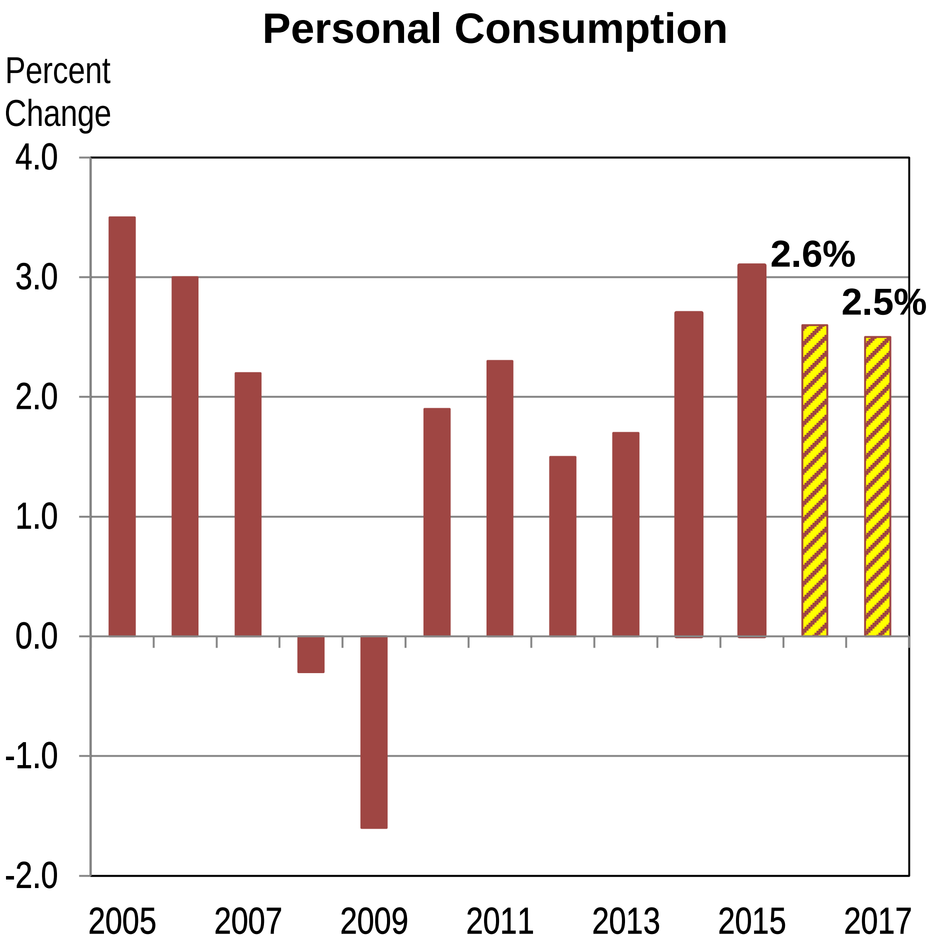




Sources: Autodata Corp., Motor Intelligence, U.S. Census Bureau (Seasonally Adjusted Annual Rate).

U.S. Income and Consumption

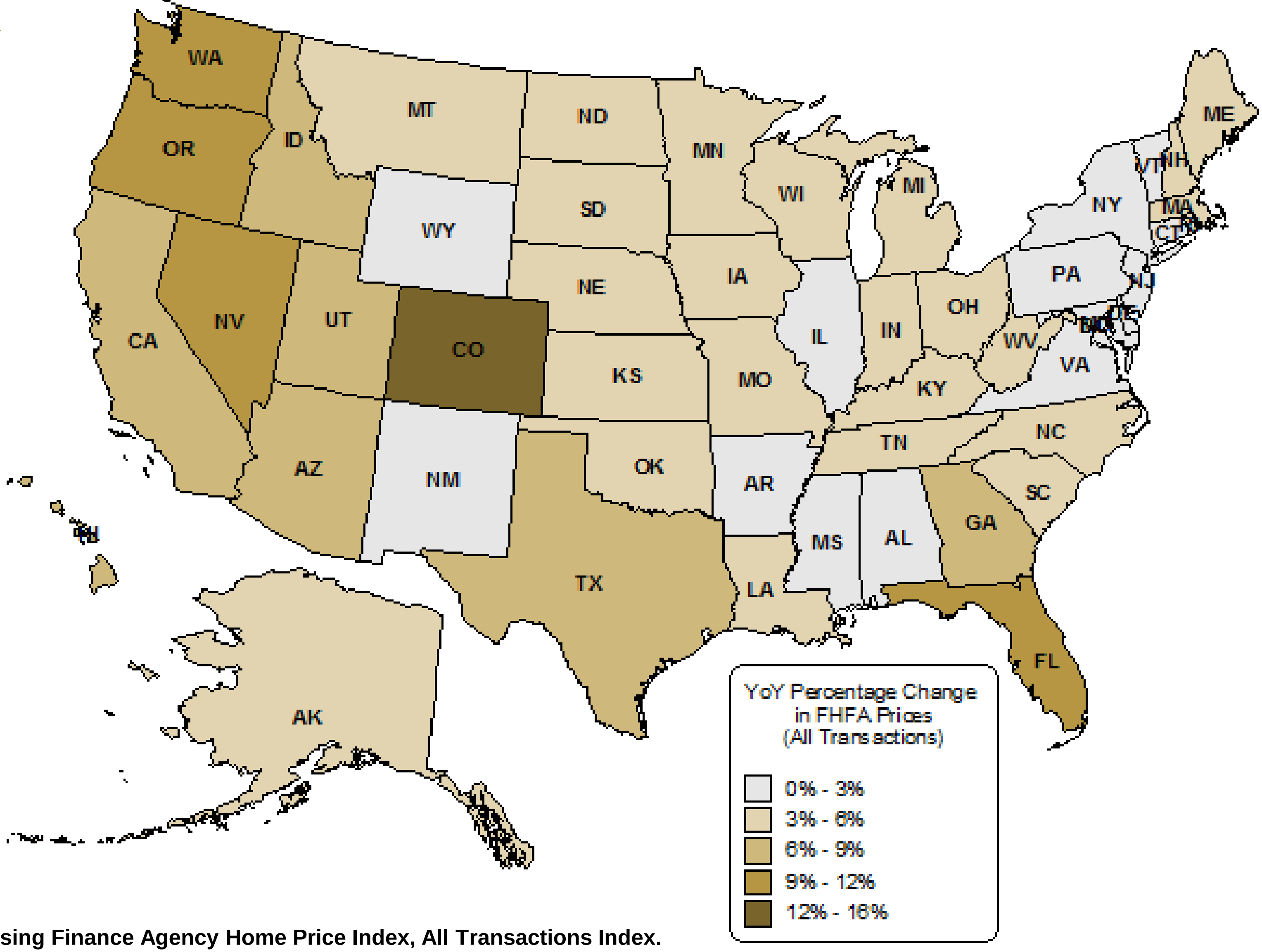




Sources: Bureau of Economic Analysis and Blue Chip Economic Indicators.

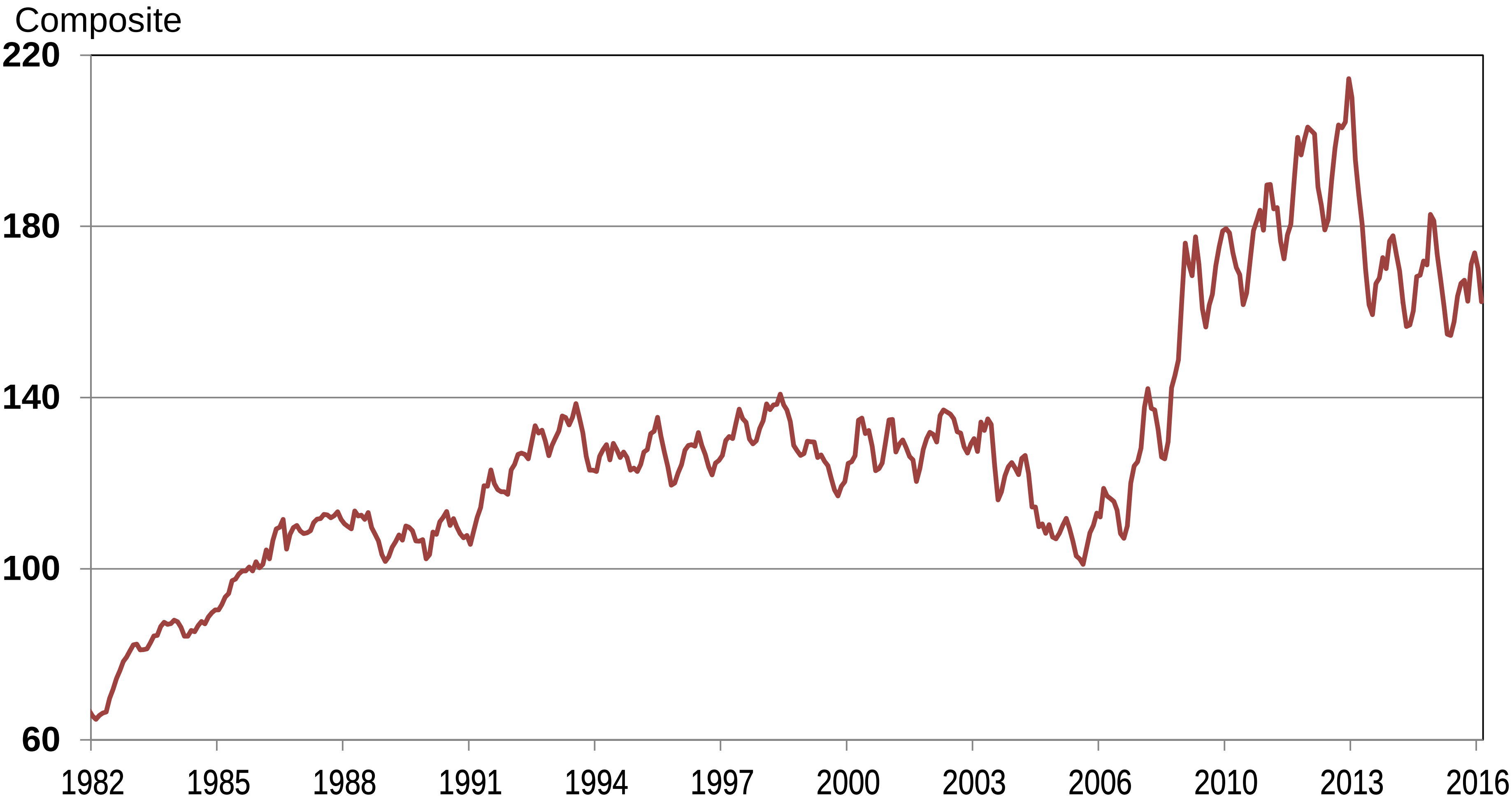
National FHFA Home Price Growth

Year-over-Year Q1 2016



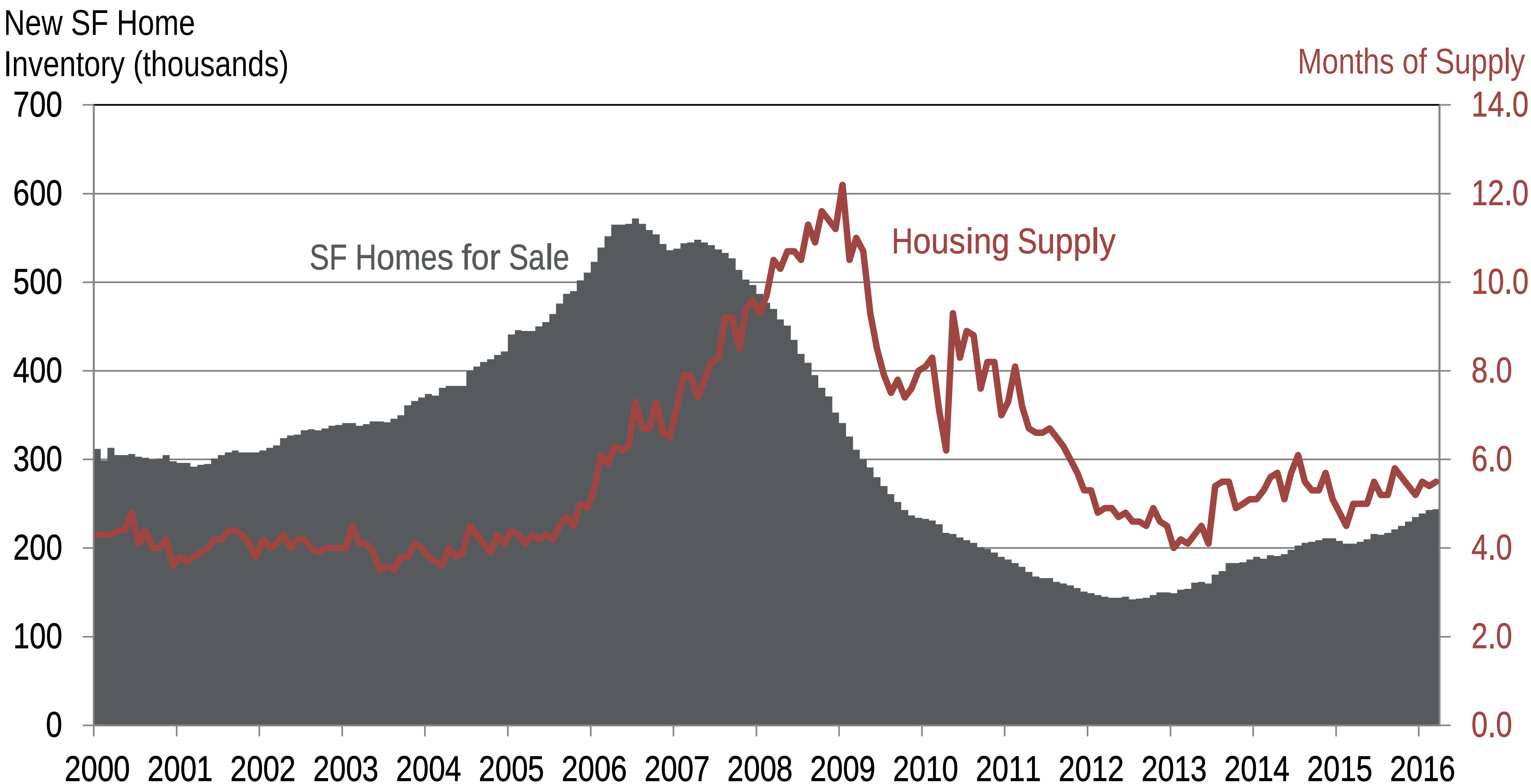
Source: Federal Housing Finance Agency Home Price Index, All Transactions Index.

Housing Affordability Index



Source: National Association of Realtors, Composite Index.

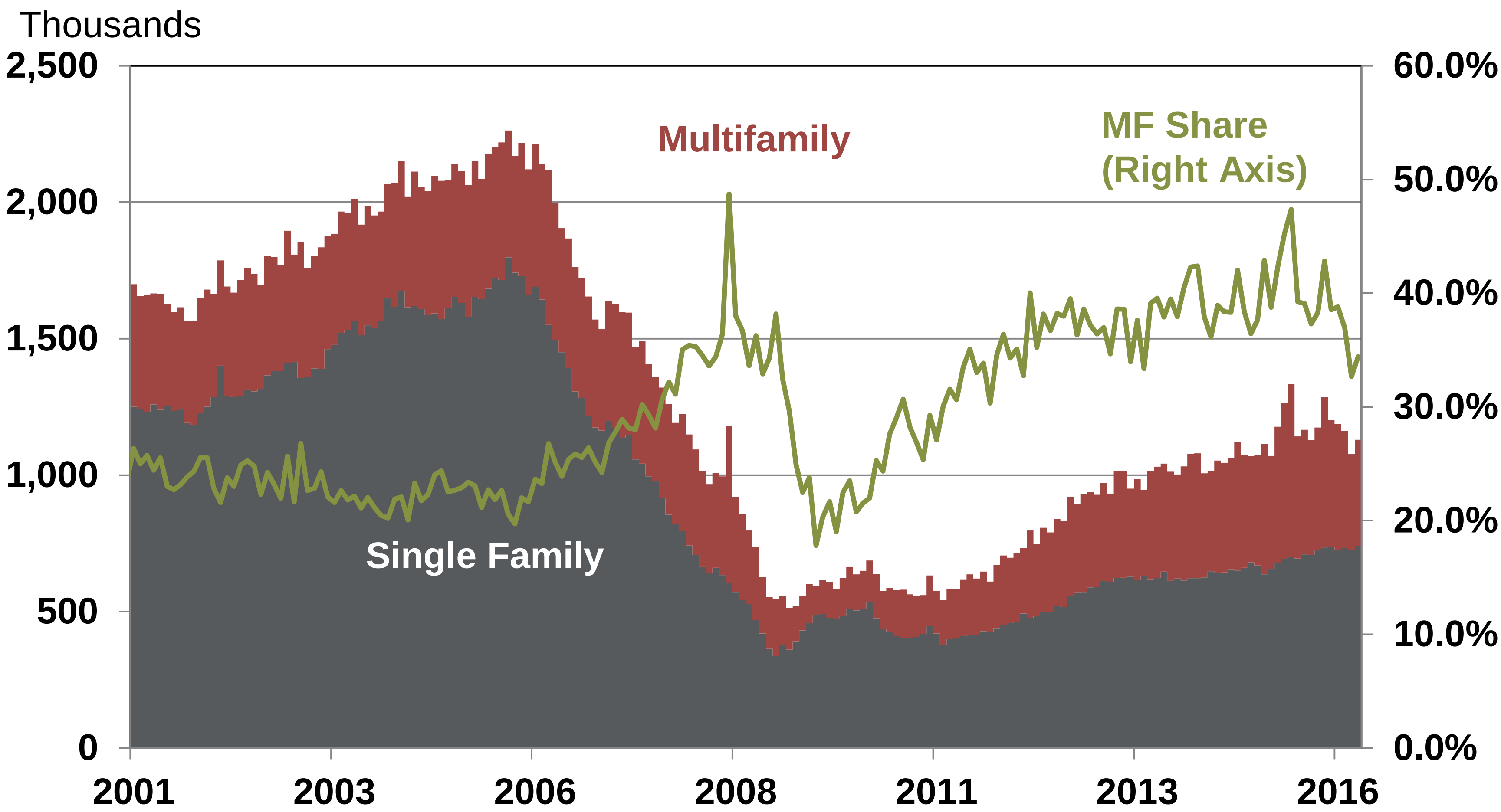
Houses For Sale and Months' Supply



Source: New Houses Sold and For Sale, U.S. Census Bureau.

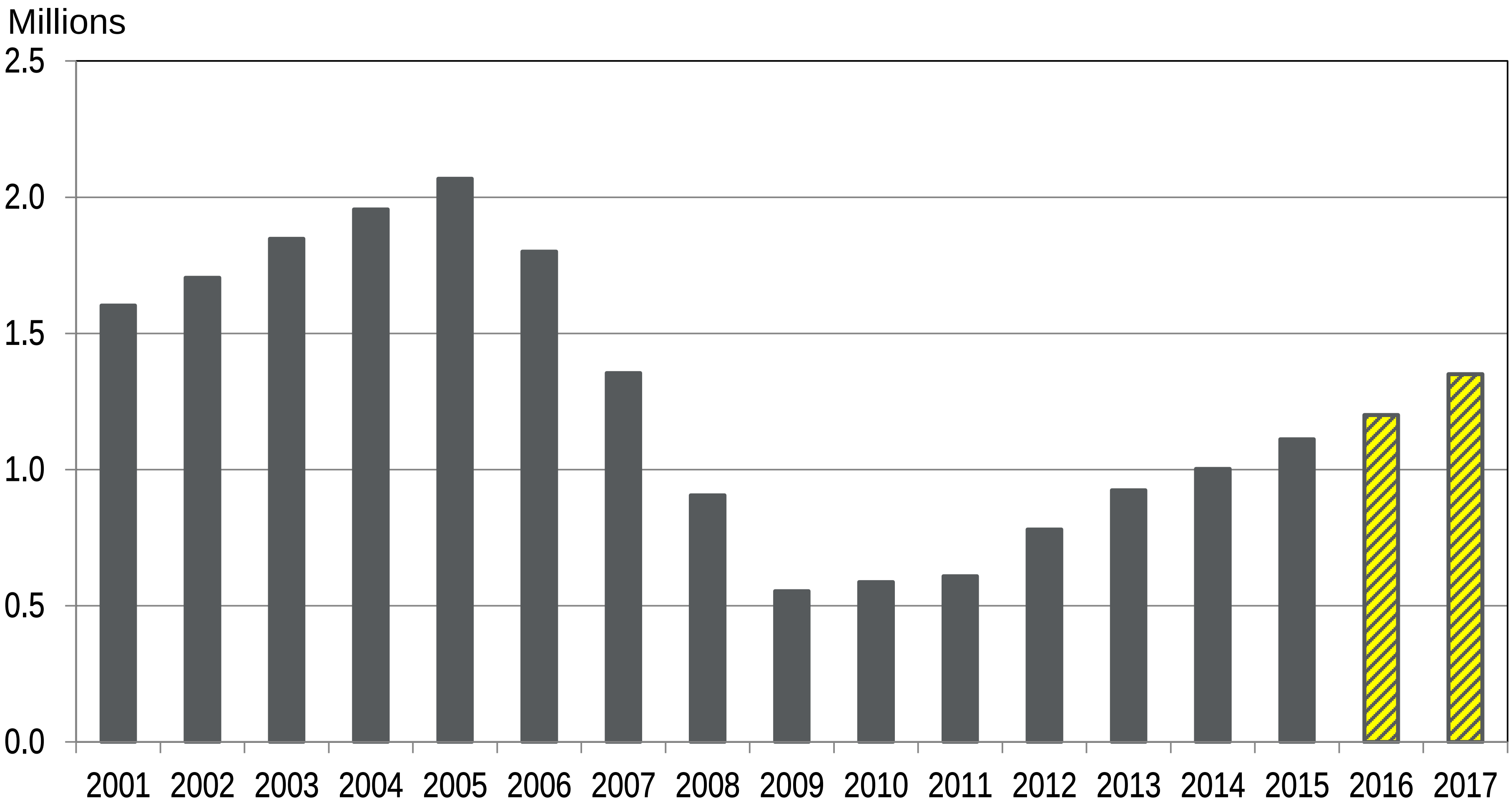
U.S. Building Permits

Seasonally Adjusted Annual Rate



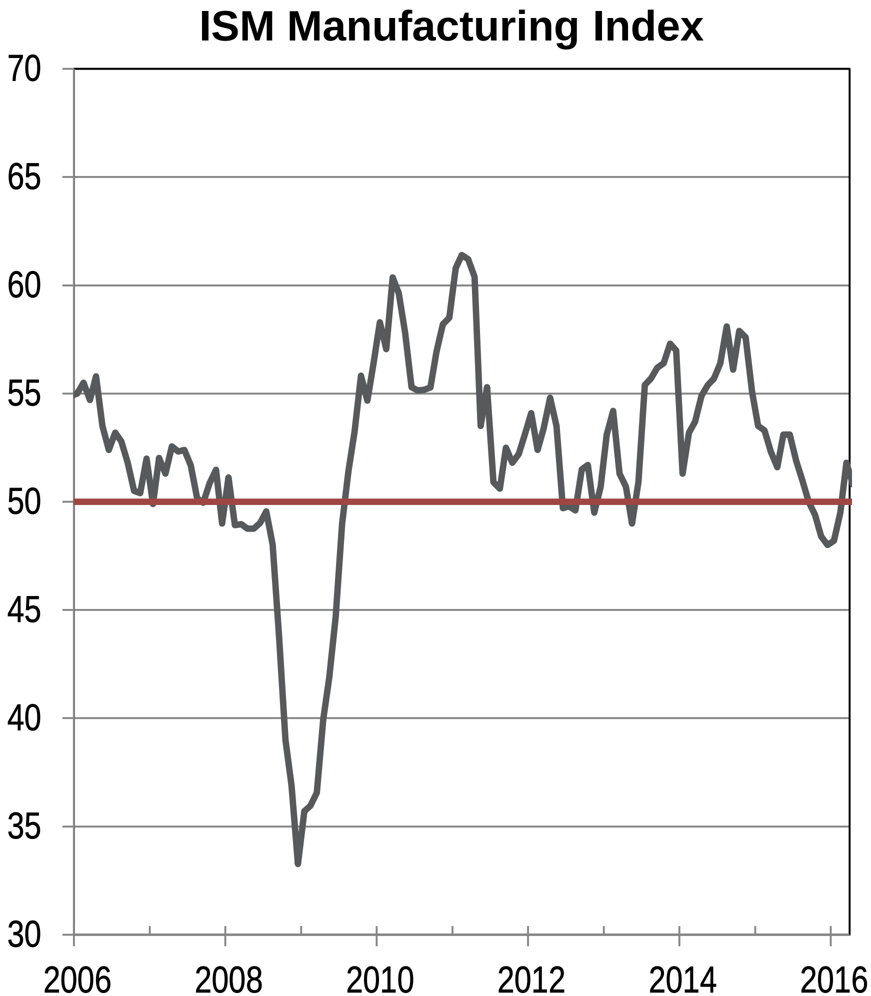
Source : U.S. Census Bureau, New Privately Owned Housing Units Authorized by Building Permits in Permit-Issuing Places (SAAR).

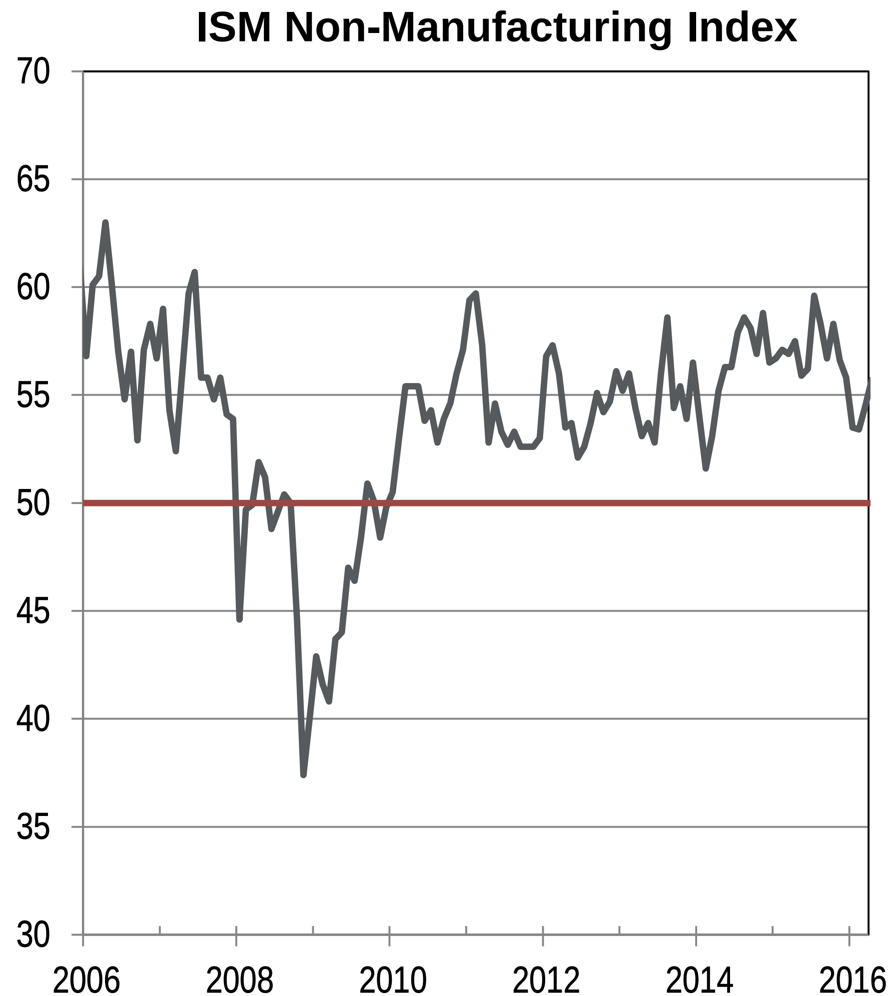
National Housing Starts



Sources: U.S. Census Bureau and Consensus Forecasts.

ISM Indices

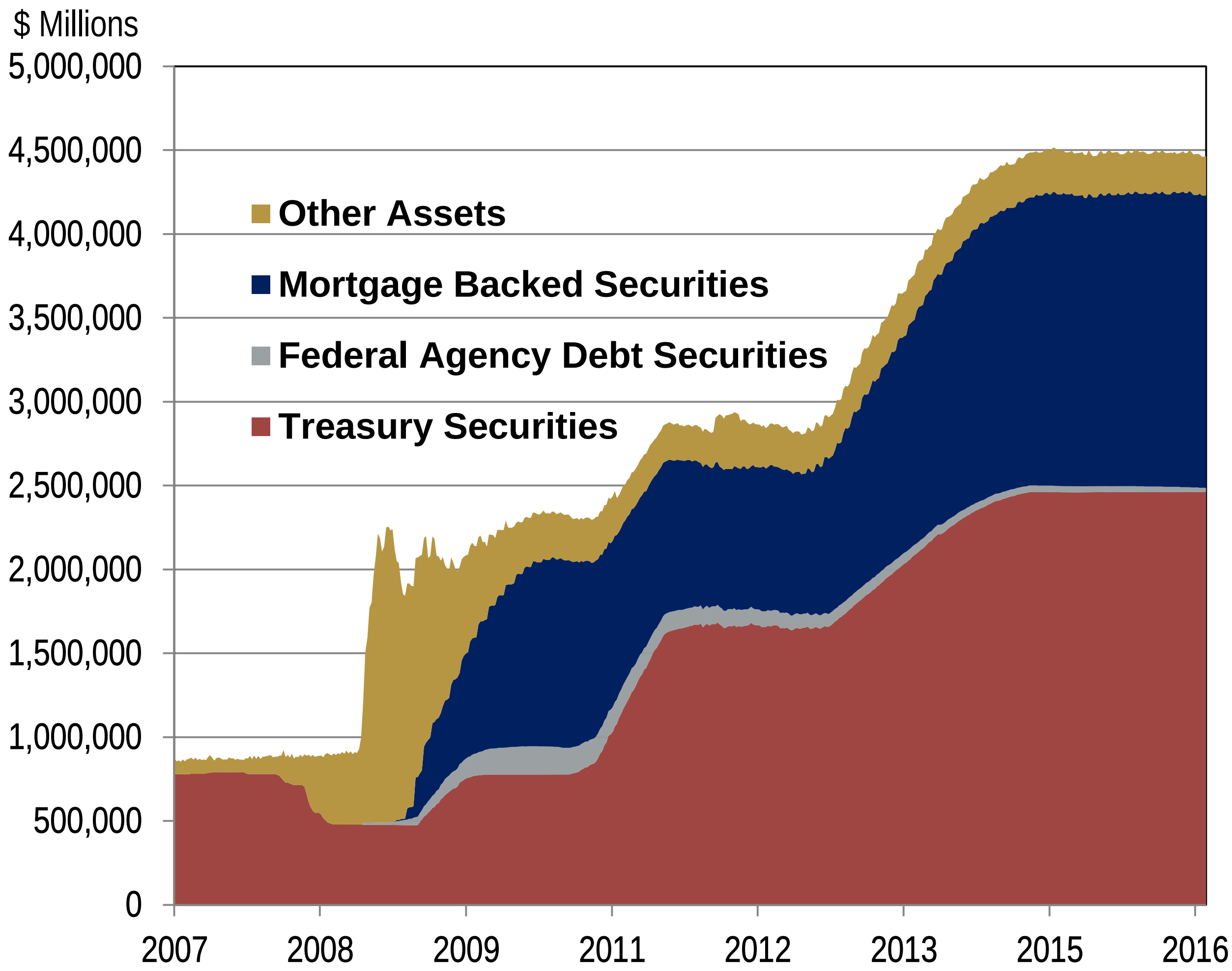




Source: Institute for Supply Management (ISM).

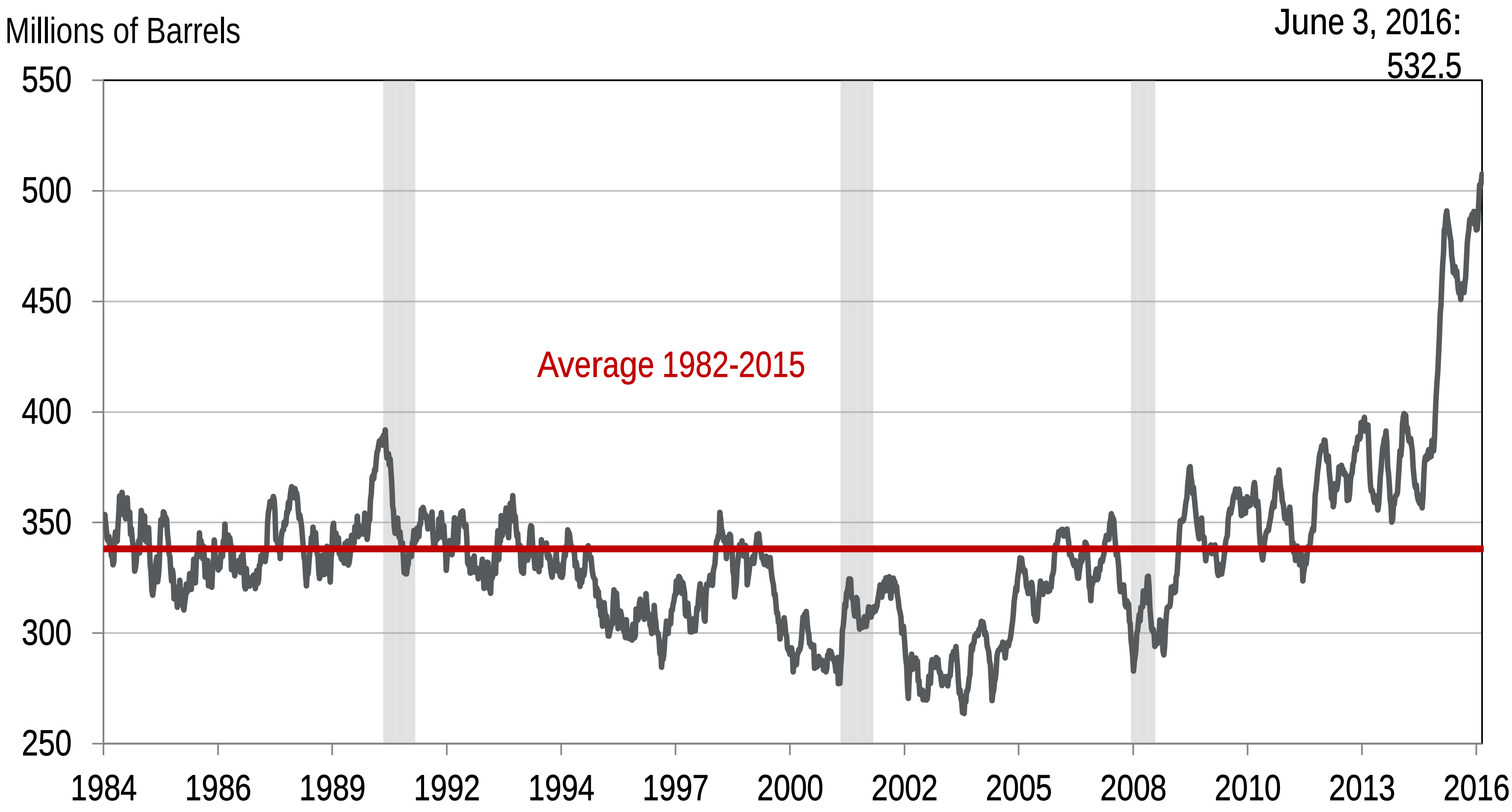
The FED

- QE 1
- QE 2
- Fed promises near zero interest rates until mid-2013, 2014,
- 2015?, 2016?
- Operation Twist
- Swaps
- Tapering Ends
- Interest Rate Hike(s)



Source: Federal Reserve Balance Sheet.

Commercial Crude Oil Storage



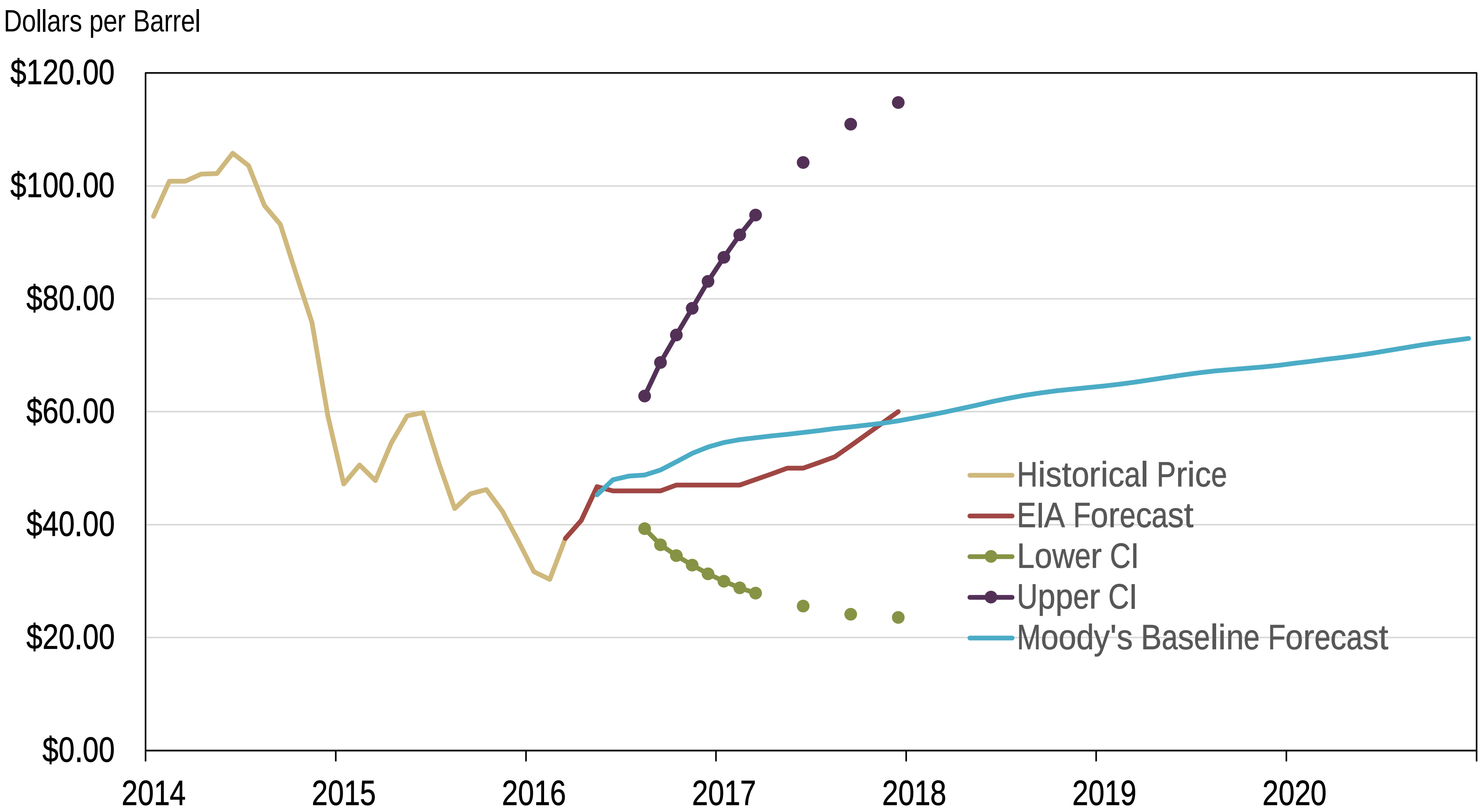
Source: Energy Information Association (EIA), Weekly U.S. Ending Stocks excluding SPR of Crude Oil.

WTI Oil Price

Source: Energy Information Association (EIA), Cushing, OK WTI Spot Price FOB.

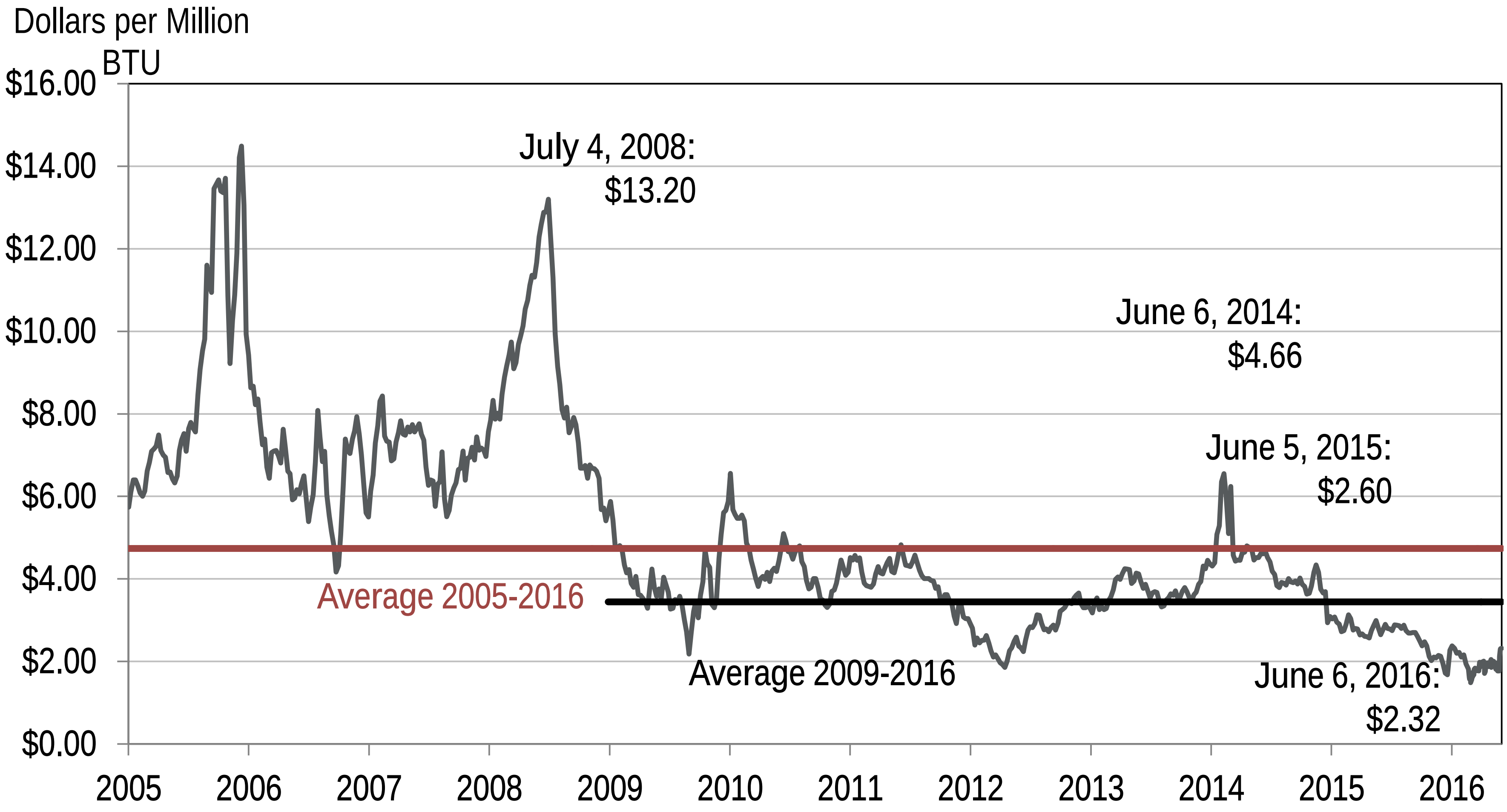
WTI Oil Price Forecast

June 2016



Source: Energy Information Association (EIA), SPEO, Cushing, OK WTI; Moody's Analytics.

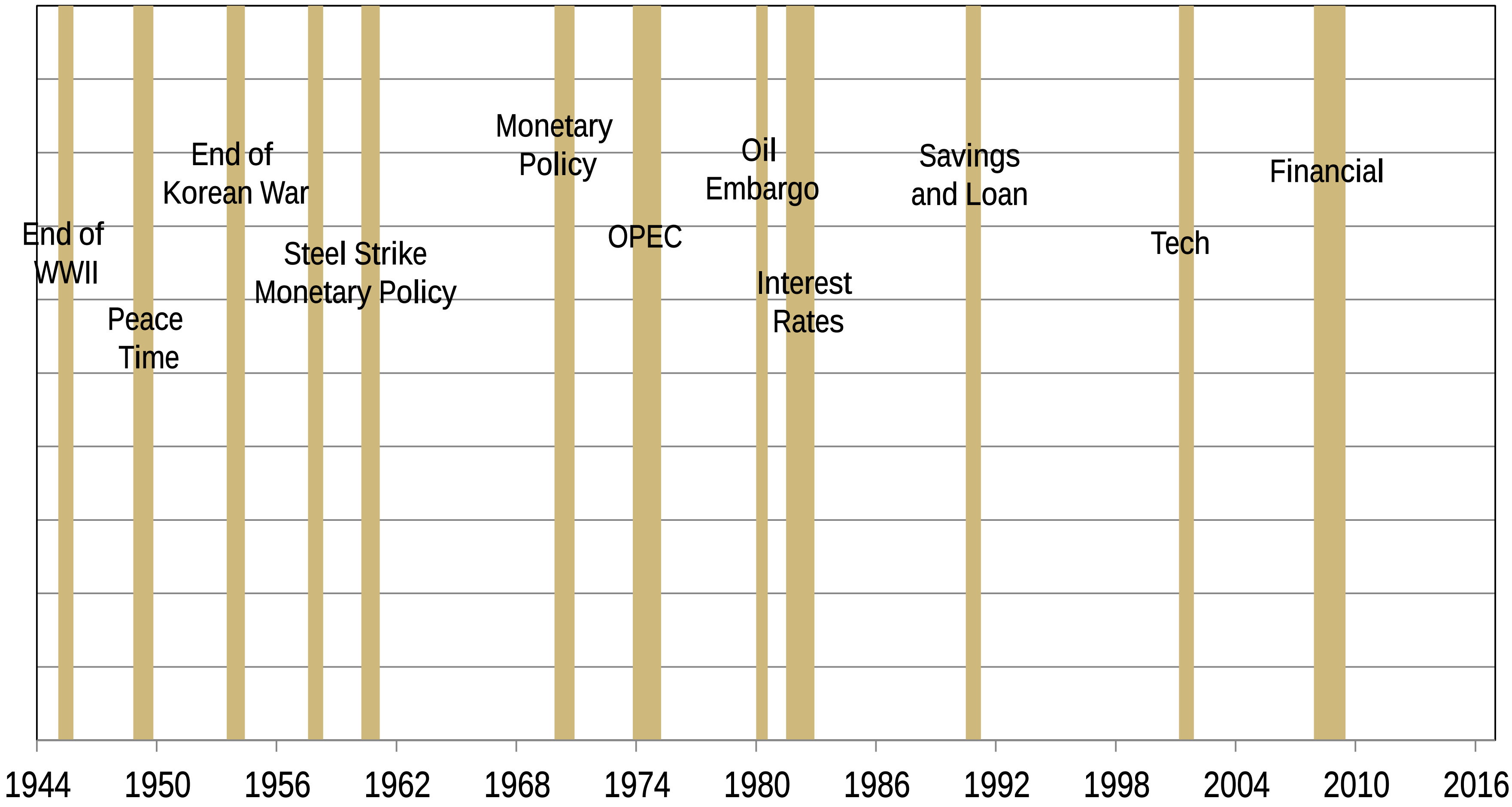
Henry Hub Natural Gas Spot Price



Source: Energy Information Association (EIA), Weekly Henry Hub Natural Gas Spot Price (Dollars per Million Btu).

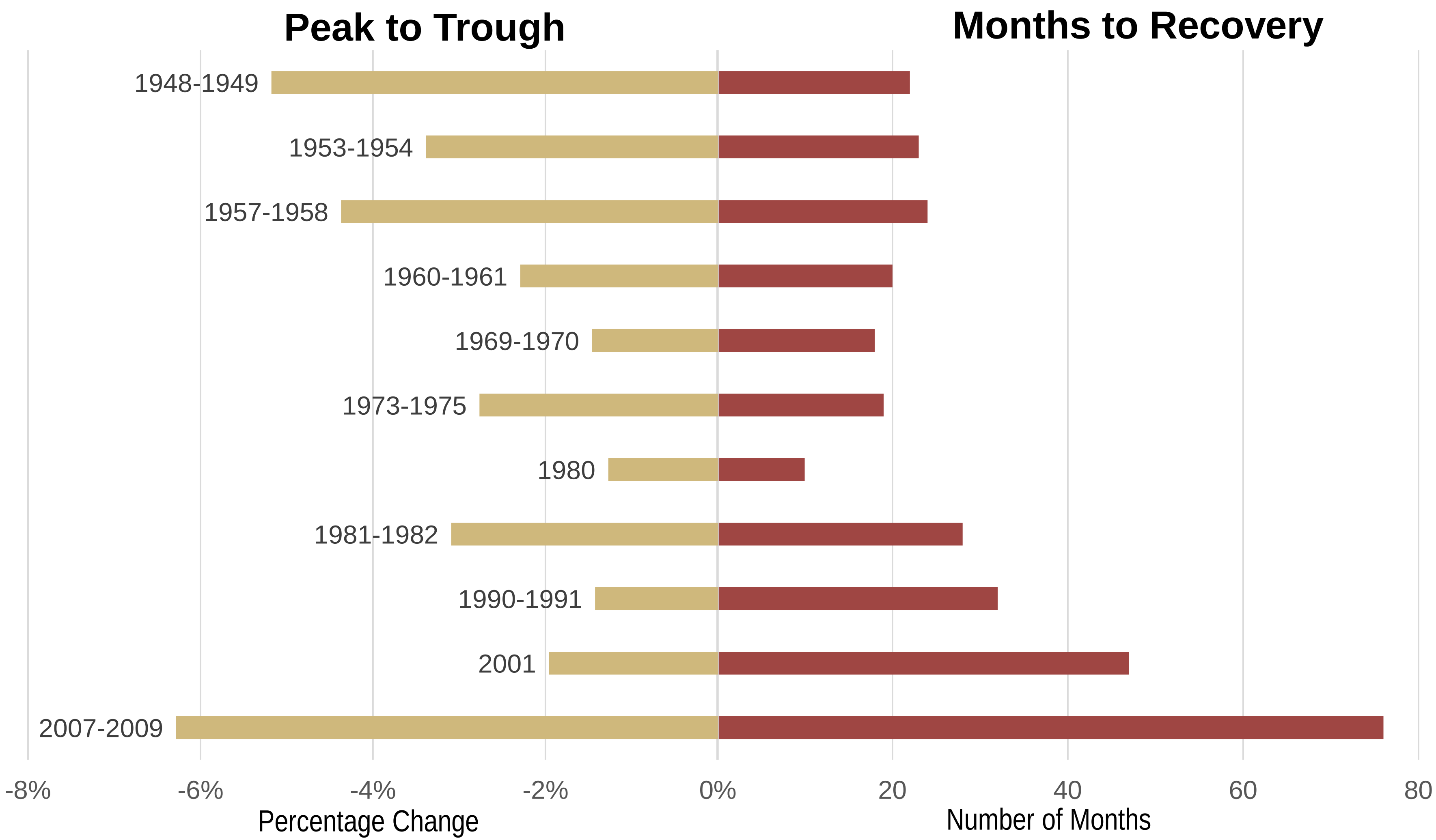
Business Cycles

Business Cycle



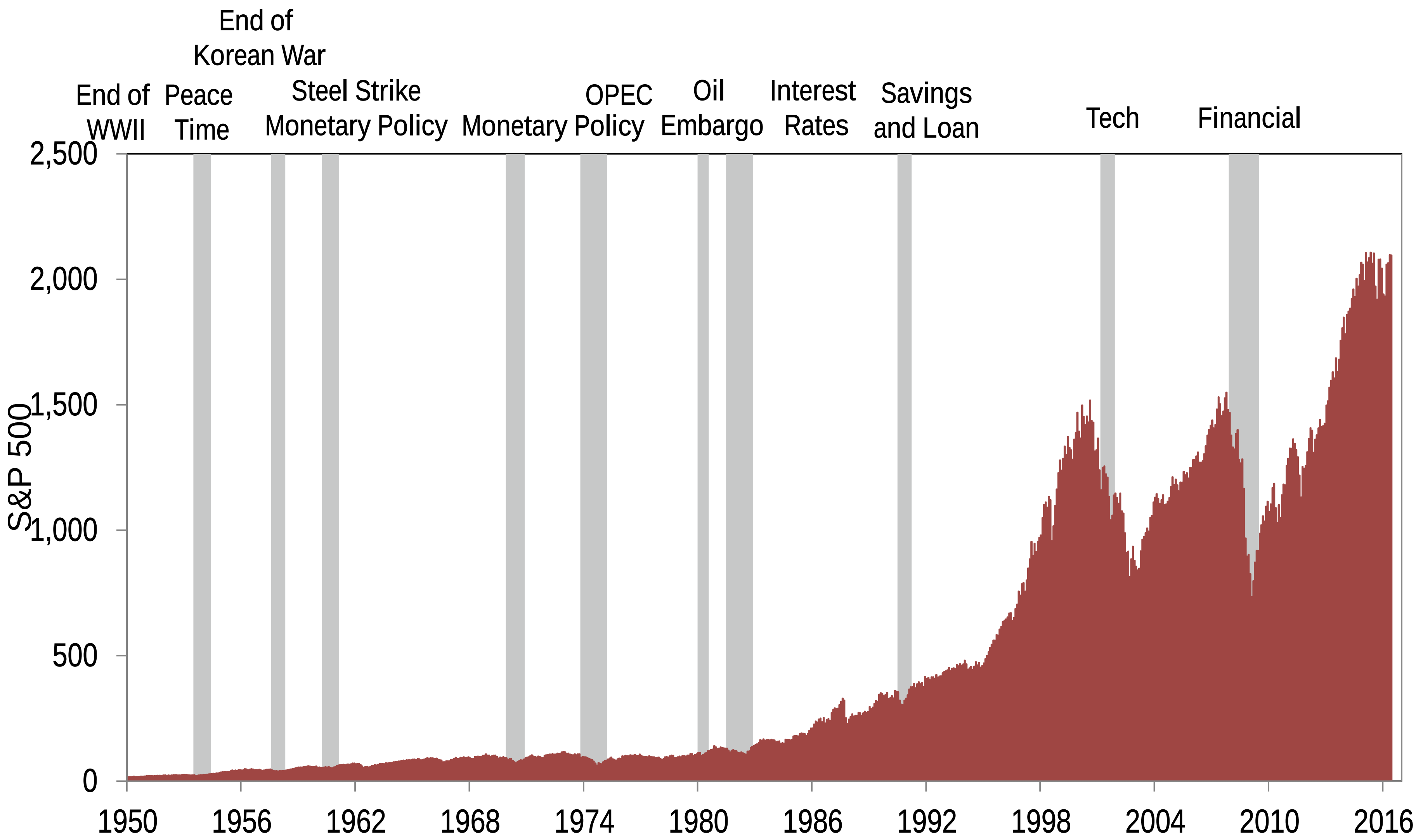
Sources: National Bureau of Economic Research and the Business Research Division.

Employment Losses and Recovery



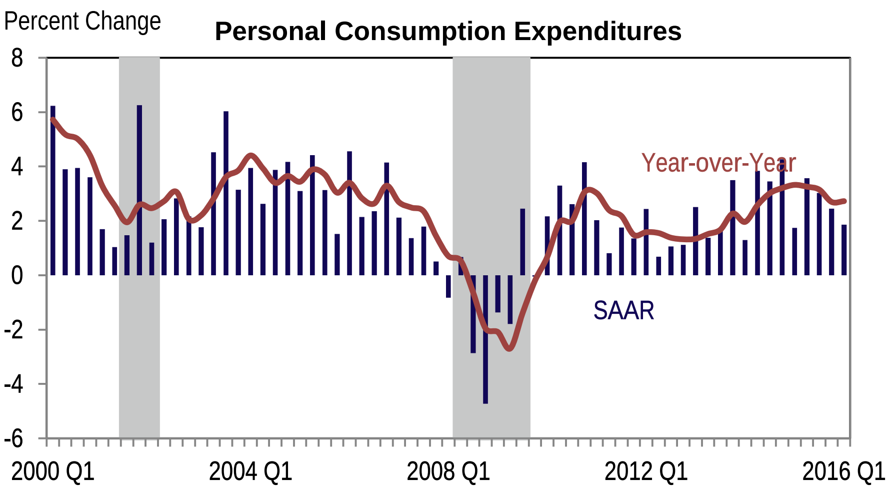
Sources: Bureau of Labor Statistics (Seasonally Adjusted), National Bureau of Economic Research, and the Business Research Division.

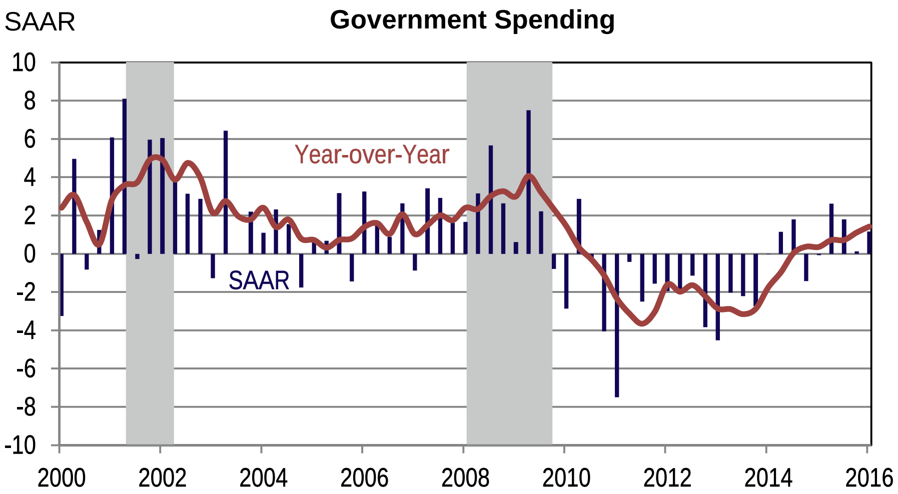
S&P 500

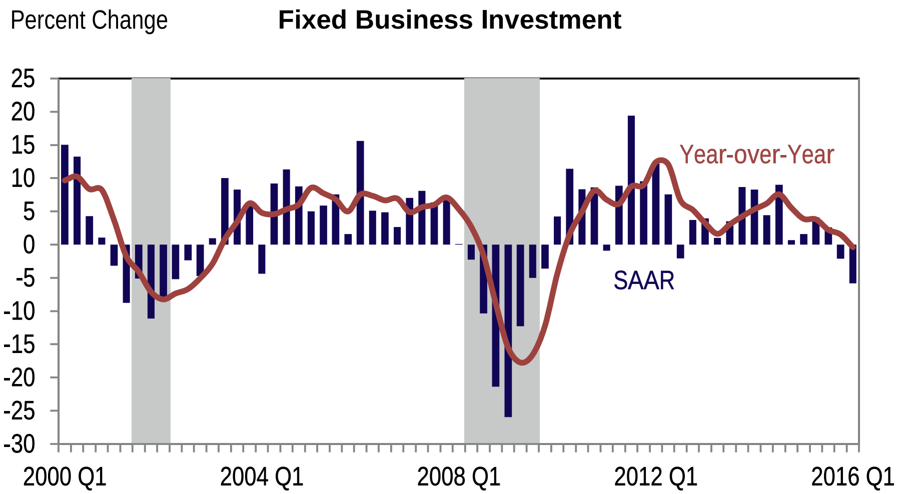


Sources: Bloomberg and the National Bureau of Economic Research.

Economic Growth and Recessions

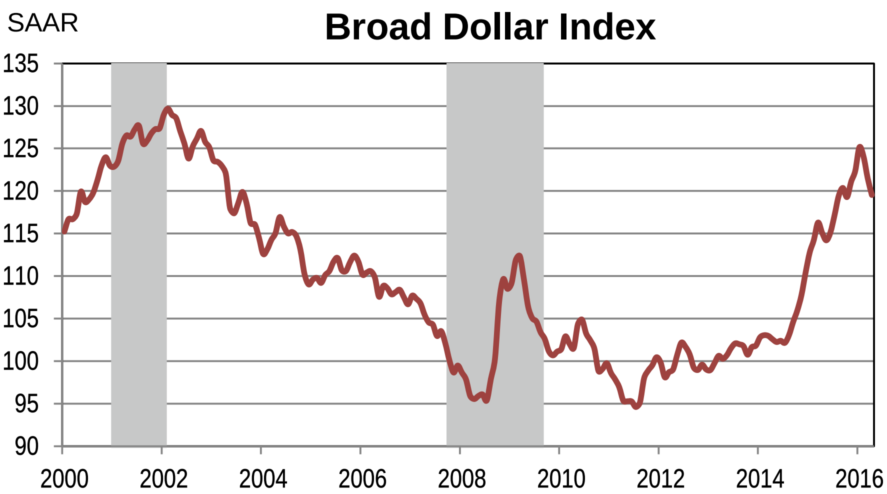


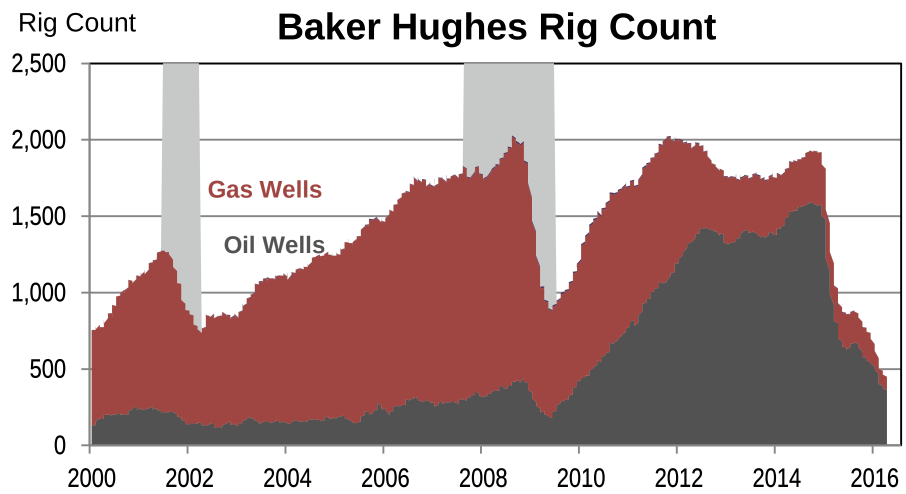


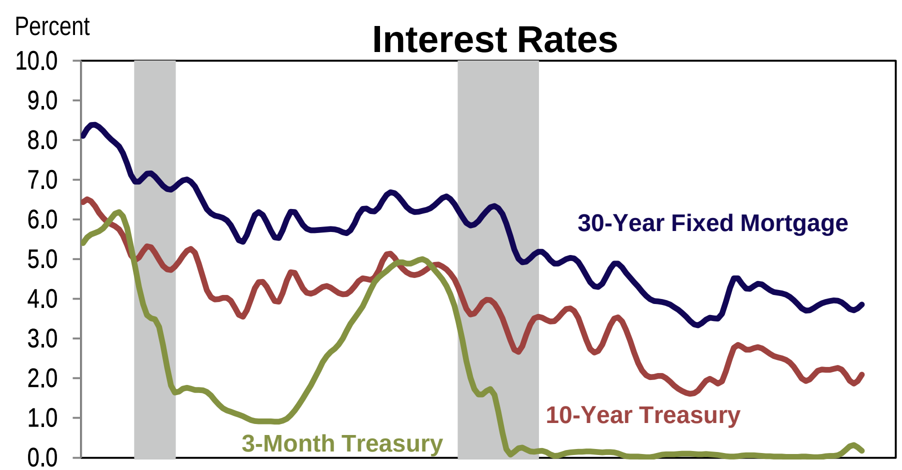


Sources: Bureau of Economic Analysis, the National Bureau of Economic Research, and the Business Research Division.

The Underlying Cause???







Sources: Bureau of Economic Analysis, International Monetary Fund, Baker-Hughes, BofA Merrill Lynch, BofA Merrill Lynch US High Yield Option-Adjusted Spread, National Bureau of Economic Research.

Thank You

Misc. Durable Goods Subsectors (defined by primary products)

Metal Scrap
Diamonds, Jewelry, and Precious Stones/Metals
Sporting and Recreational Goods and Supplies
Toy and Hobby Goods and Supplies
Pre-recorded Media (CDs, DVDs, & Videotapes)
Misc. Other Durable Goods
Misc. Home Furnishings and Wood Millwork
Non-Lumber Forest Products
Musical Instruments and Supplies

Source: 2016 Economic Benchmarks for Wholesale Distribution

Industrial Subsectors (defined by primary products)

General Purpose Industrial Machinery and Equipment
Farm and Garden Machinery and Equipment
Aircraft and Aeronautical Equipment and Supplies
Other Industrial Machinery and Equipment
General Line Industrial MRO Supplies
Oil Well, Refinery, and Pipeline Equipment and Supplies
Fluid Power Machinery, Equipment, and Parts
Mechanical Power Transmission (Bearings) Supplies
Industrial Valves and Fittings (except Fluid Power)
Custodial and Janitorial Equipment and Supplies
Welding Supplies

Construction Machinery and Equipment
Materials Handling Machinery, Equipment, and Parts
Service Establishment Equipment and Supplies
Metalworking Machinery, Equipment, and Parts
Industrial Containers and Supplies
Food Processing Machinery, Equipment, and Parts
Other Transportation Equipment and Supplies
Marine Machinery, Equipment, and Supplies

Source: 2016 Economic Benchmarks for Wholesale Distribution

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Industrial Subsectors (defined by primary products) – Average Revenue per Employee

General Purpose Industrial Machinery and Equipment	$515,300
Farm and Garden Machinery and Equipment	$631,300
Aircraft and Aeronautical Equipment and Supplies	$1,404,200
Other Industrial Machinery and Equipment	$651,600
General Line Industrial MRO Supplies	$727,700
Oil Well, Refinery, and Pipeline Equipment and Supplies	$737,700
Fluid Power Machinery, Equipment, and Parts	$439,800
Mechanical Power Transmission (Bearings) Supplies	$793,000
Industrial Valves and Fittings (except Fluid Power)	$609,700
Custodial and Janitorial Equipment and Supplies	$313,300
Welding Supplies	$474,500
Weighted Average (all 19 subsectors)	$604,800

Source: 2016 Economic Benchmarks for Wholesale Distribution

NETSUITE #1 CLOUD ERP

- First Cloud ERP - founded in 1998
- Publicly-traded on NYSE – ‘N’
- More than 4,700 employees
- $741.1M revenue in FY15
- Grown by 30%+ in each of the last 14 consecutive quarters
- Used by 30,000+ organizations
- Used in 160+ countries
- 400+ new clients in the last quarter
- Accumulated best practice reduces time to value
- 40+ recent IPOs run NetSuite

WHY TODAY'S BUSINESSES CHOOSE NETSUITE ERP

Designed for Modern Business

Built In Platform Enables Flexibility

Unified Data Model Delivers Business Intelligence For All

Commerce Omnichannel

Built for Your Industry

Commitment to the Wholesale Distribution Industry

Vertical Focus

- Thousands of Distribution Customers
- Dedicated Distribution Experts In:
  - Implementation
  - Account Management
  - Support
  - Product Management
  - Executive Team

Specific Functionality

- Inventory Management
- Order Management
- Procurement
- Warehousing
- Demand Planning
- Shipping
- Fulfillment
- Lead-to-Cash
- Ecommerce
- Reporting/Analytics

21st Century Choice

Shaw FLOORS

J.A.KING

MUSCLEPHARM

GREG SMITH Equipment SALES, INC.

NetSuite Wholesale Distribution Evolution

A strategy for distributors to meet the challenge of today's disruptive times.

• Lack of insight into customer behavior • No closed-loop ROI	Stagnant Growth	**5 Disrupt** • Business Intelligence • Marketing Automation • Price and Margin Mgmt
• Inefficient inventory utilization • Consumer directed fulfillment • Service cross sell and upsell	Poor use of Working Capital	**4 Enhance** • Warehouse Mgmt (WMS) • Field Service
• Lack of visibility into the supply chain • Inability to expand channels • Order inefficiency and inaccuracy	Customer Attrition	**3 Innovate** • Supply Chain Automation (SCM) • Bar Coding
• Loss of customers due to online strategy • Difficulty in channel expansion • Inconsistent customer experience	Market Share Loss	**2 Expand** • B2C and B2B Commerce (B2X) • Supplier-Customer Experience
• Finance misery with close & audit • Lack of Order Orchestration • Lack of Inventory Visibility • Inconsistent Customer Care	Revenue Loss due to over-promising and under-delivering	**1 Remediate** • Financial (FMS) • Order Management • Inventory • CRM • Operational BI
• Manual processes • Legacy Platform	Inability to Scale	

NetSuite Cloud Enables Business Disruptors

Zero to Cloud in 100 Days[3]

OPTIMIZATION

56% increase in actionable insights[1]

CUSTOMER EXPERIENCE

30% of buyers complete at least 1/2 of purchases online[2]

OPERATIONAL EFFICIENCIES

1-5% improvement in gross margin[4]

1 SL Associates - Results as Measured in Comprehensive Study of NetSuite Customers
2 Forrester Research, B2B e-commerce sales will top $1.13 trillion by 2020, April 2, 2015
3 In 100 Days is only for the Remediate phase
4 SL Associates - Results as Measured in Comprehensive Study of NetSuite Customers

Transformative Results from Distributors

Actionable Insights

+56%

Gross Margin

+1-5%

Inventory Costs

-30%

IT Support Costs

-75%

Results as Measured in Comprehensive Study of NetSuite Customers Conducted By:

SL Associates

Questions?

2016 Mid-Year Economic Update

Sponsored by:

NETSUITE

June 14, 2016