

The Virginia Tech – U.S. Forest Service

February 2016

Housing Commentary: Section II



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2016

Virginia Polytechnic Institute and State University

VCE-ANR 197NP

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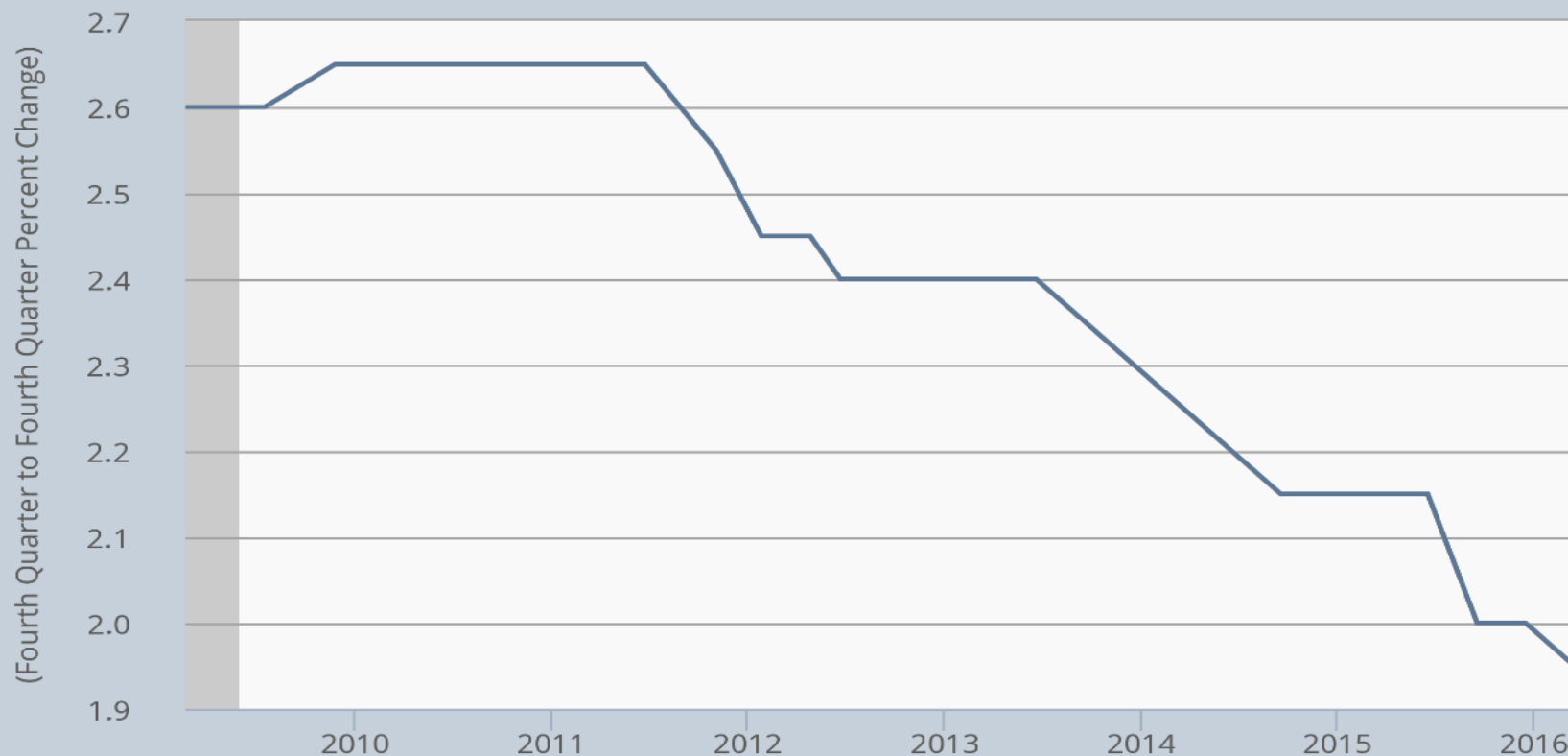
The background of the slide is a grayscale photograph of a complex wooden roof truss system. The beams are arranged in a crisscrossing pattern, creating a geometric framework. The lighting is soft, highlighting the textures of the wood and the structural complexity of the roof.

Federal Reserve System and Private Indicators

Federal Reserve Open Market Committee

FRED 

— Longer Run FOMC Summary of Economic Projections for the Growth Rate of Real Gross Domestic Product, Central Tendency, Midpoint

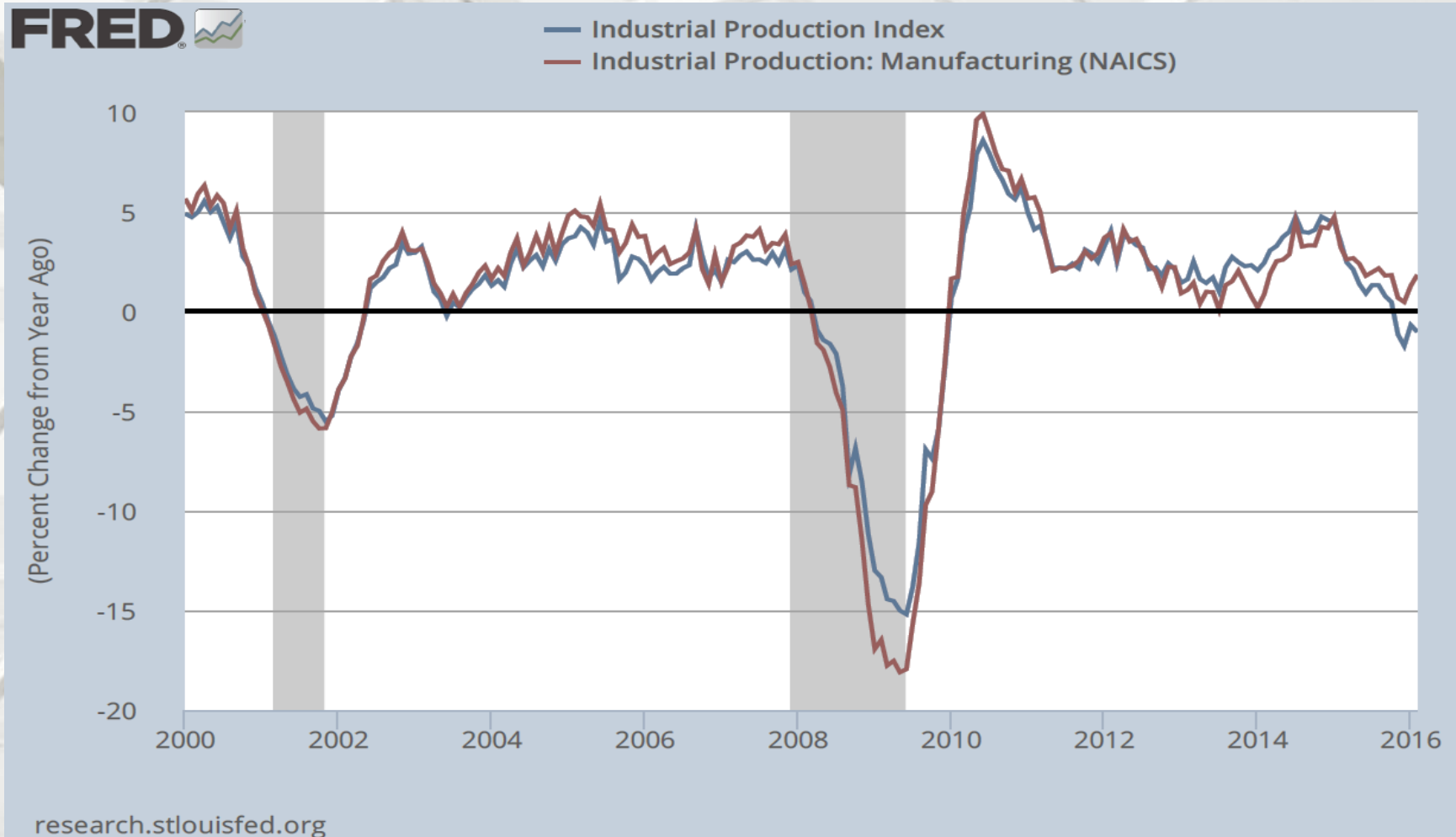


Source: US. Federal Open Market Committee, Federal Reserve Bank of St. Louis
research.stlouisfed.org

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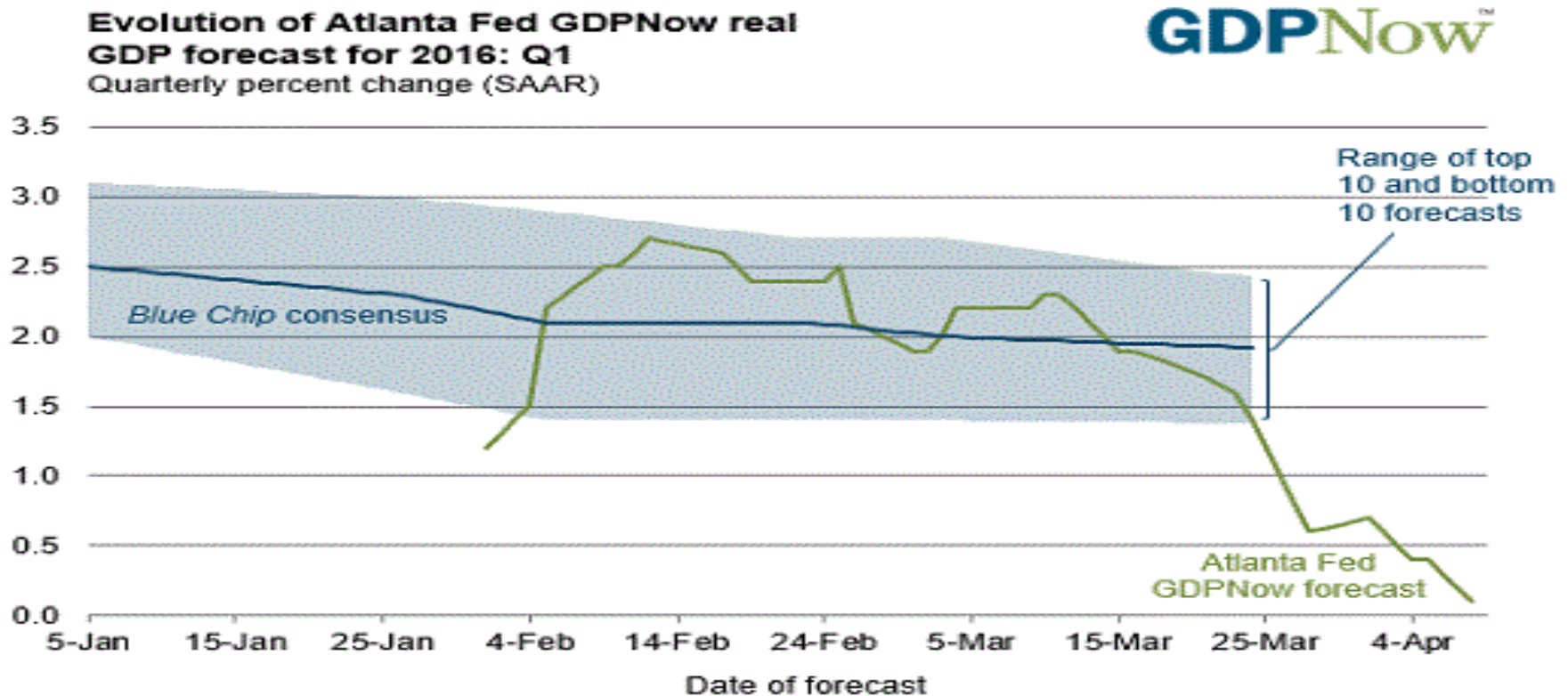
On March 16, 2016 the Federal Reserve Open Market Committee reduced the long-run GDP growth forecast to less than two percent ($< 2\%$).

Industrial & Manufacturing Production Indices



The Industrial production index declined month-over-month and year-over-year. The Manufacturing industrial production index increased month-over-month and decreased year-over-year (both on a percentage basis).

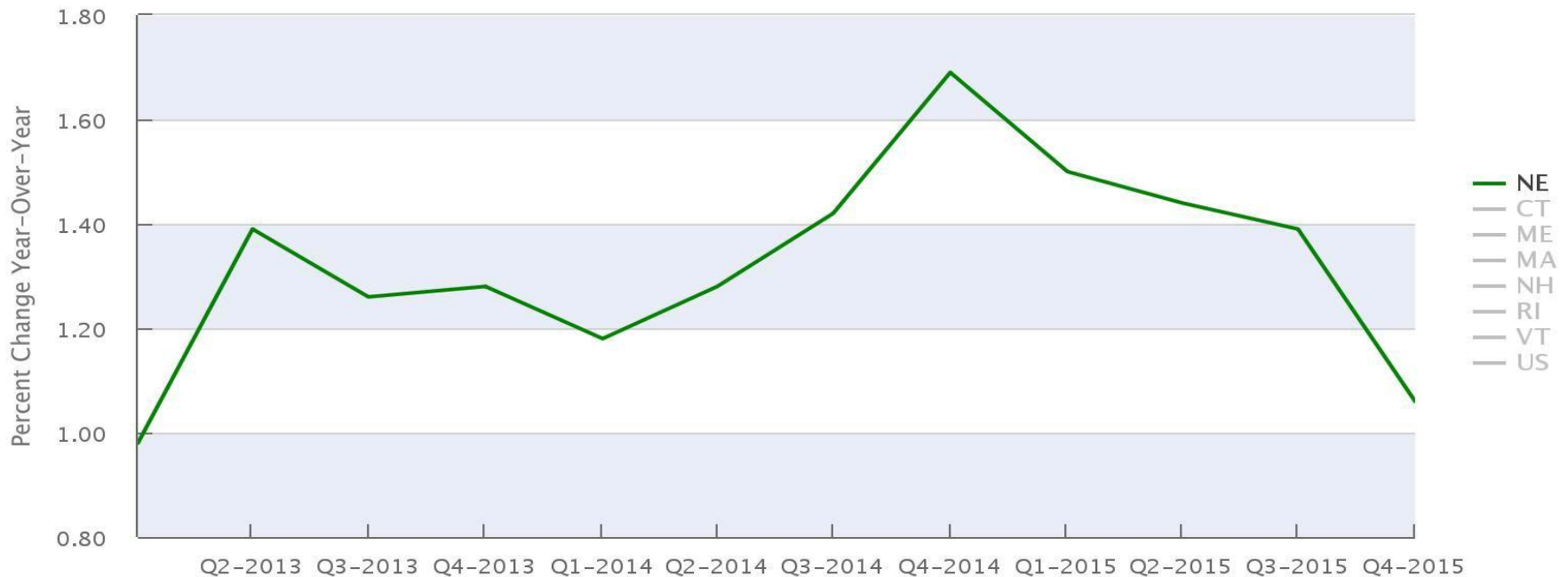
Atlanta Fed: GDPNow™



“The GDPNow model forecast for real GDP growth (seasonally adjusted annual rate) in the first quarter of 2016 is **0.1 percent** on April 8, down from 0.4 percent on April 5. After this morning's wholesale trade report from the U.S. Bureau of the Census, the forecast for the contribution of inventory investment to first-quarter real GDP growth fell from –0.4 percentage points to –0.7 percentage points.” – Pat Higgins, Economist, The Federal Reserve Bank of Atlanta

U.S. Economic Indicators

Total Nonfarm

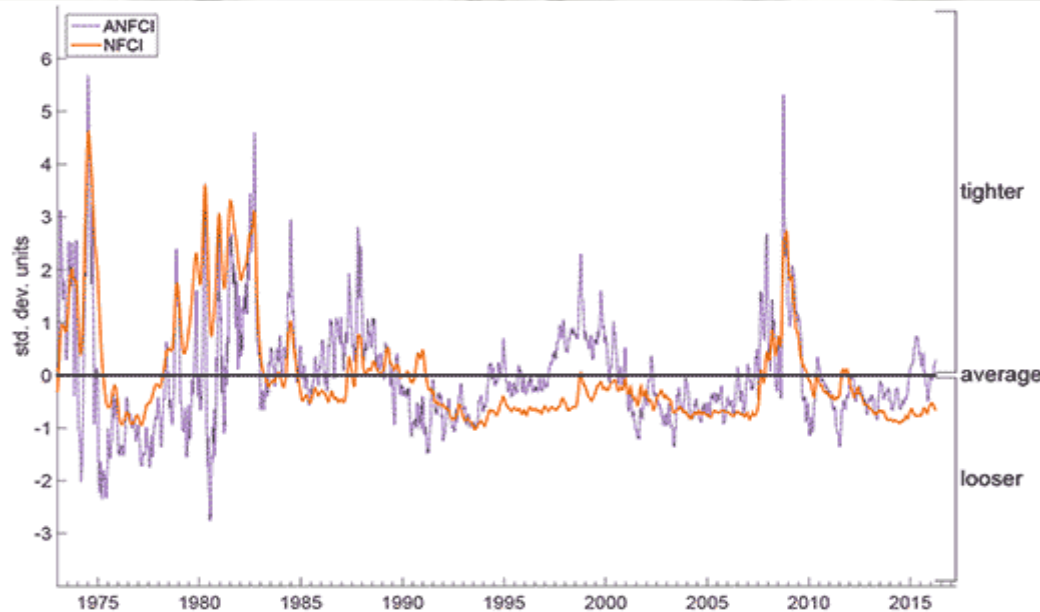


Source: U.S. Bureau of Labor Statistics / New England Economic Indicators

New England Labor Market Indicators

Change Previous 12 Months	Average of Monthly Data				Nov-15	Dec-15	Jan-16	Fec-16
	Q1-15	Q2-15	Q3-15	Q4-15				
Total Nonfarm: 115.3	7,192.8	7,224.8	7,244.3	7,259.8	7,262.6	7,269.4	7,277.5	7,298.5

U.S. Economic Indicators



	Current	Previous	1 Month Ago	3 Months Ago	6 Months Ago	12 Months Ago
Index	4/1/2016	3/25/2016	3/4/2016	1/1/2016	10/2/2015	4/3/2015
NFCI	-0.64	-0.64	-0.59	-0.55	-0.63	-0.76
ANFCI	0.29	0.22	0.04	-0.01	0.04	0.55

Financial Conditions Little Changed in Week Ending April 1

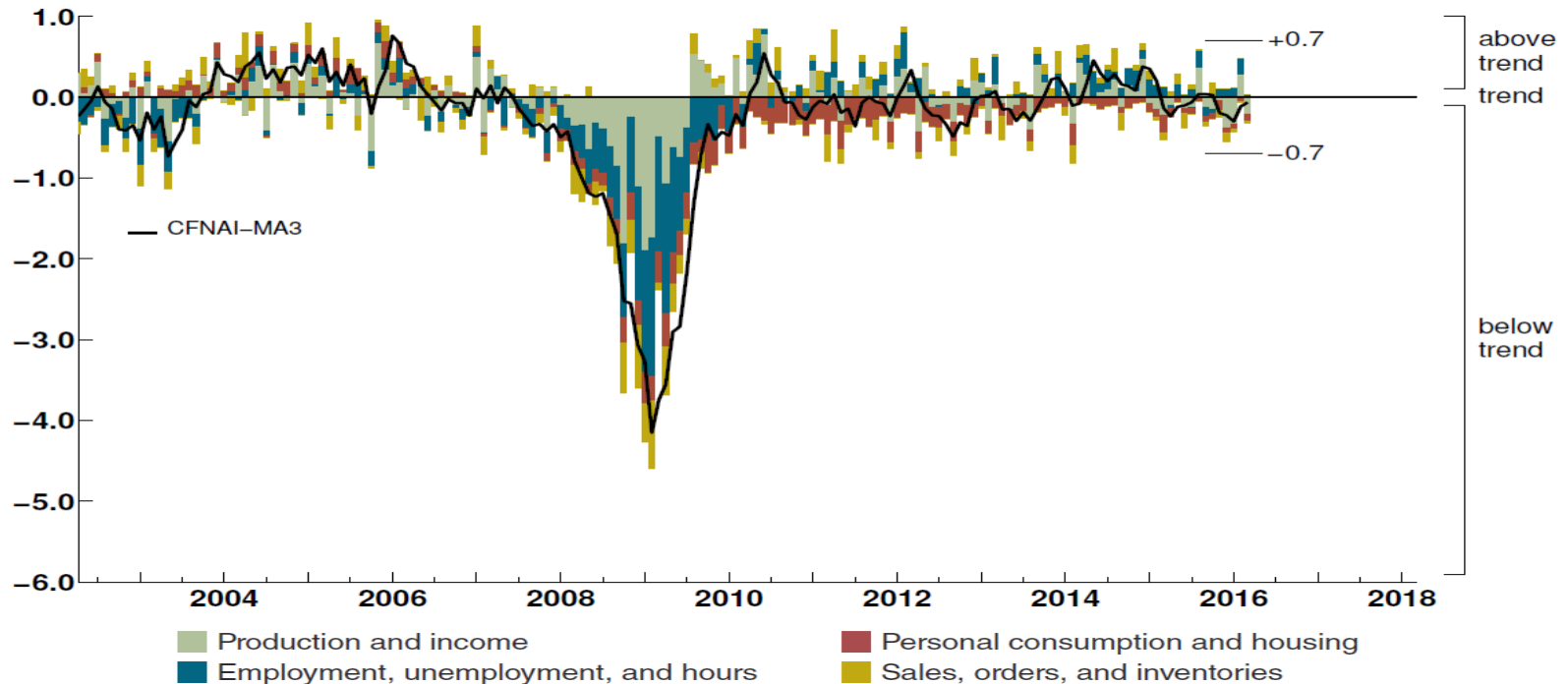
“The NFCI remained at -0.64 in the week ending April 1. The risk and credit subindexes ticked down, the leverage subindex was unchanged, and the nonfinancial leverage subindex ticked up.”

The Federal Reserve Bank of Chicago

“The ANFCI increased slightly to 0.29 in the latest week. The current level of the ANFCI indicates that financial conditions in the latest week were somewhat tighter than typically suggested by current economic conditions as captured by the three-month moving average of the Chicago Fed National Activity Index (CFNAI-MA3) and three-month total inflation according to the Price Index for Personal Consumption Expenditures (PCE).”

Chicago Fed: National Activity Index

Chicago Fed National Activity Index, by Categories, and CFNAI-MA3



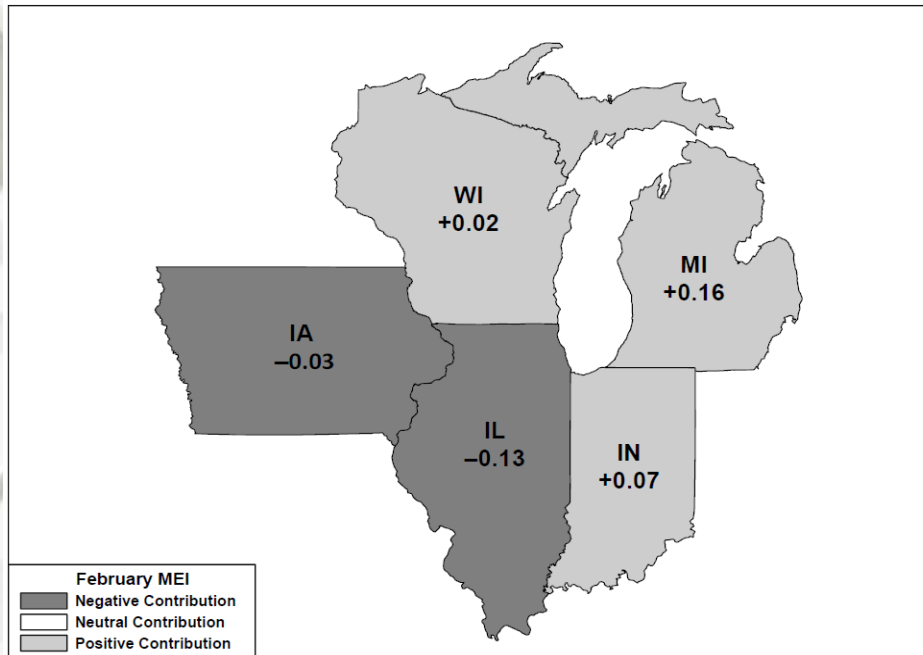
Index shows economic growth slowed in February

“Led by declines in production-related indicators, the Chicago Fed National Activity Index (CFNAI) fell to -0.29 in February from $+0.41$ in January. All four broad categories of indicators that make up the index decreased from January, and three of the four categories made negative contributions to the index in February.

The index’s three-month moving average, CFNAI-MA3, edged up to -0.07 in February from -0.12 in January. February’s CFNAI-MA3 suggests that growth in national economic activity was slightly below its historical trend. The economic growth reflected in this level of the CFNAI-MA3 suggests subdued inflationary pressure from economic activity over the coming year.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

Chicago Fed: Midwest Economy Index

MEI and the Seventh Federal Reserve District States



Note: The map's shading summarizes the most recent contribution to growth in Midwest economic activity from each of the five states in the Seventh Federal Reserve District (Illinois, Indiana, Iowa, Michigan, and Wisconsin).

Index shows economic growth Midwest economic growth improved in February

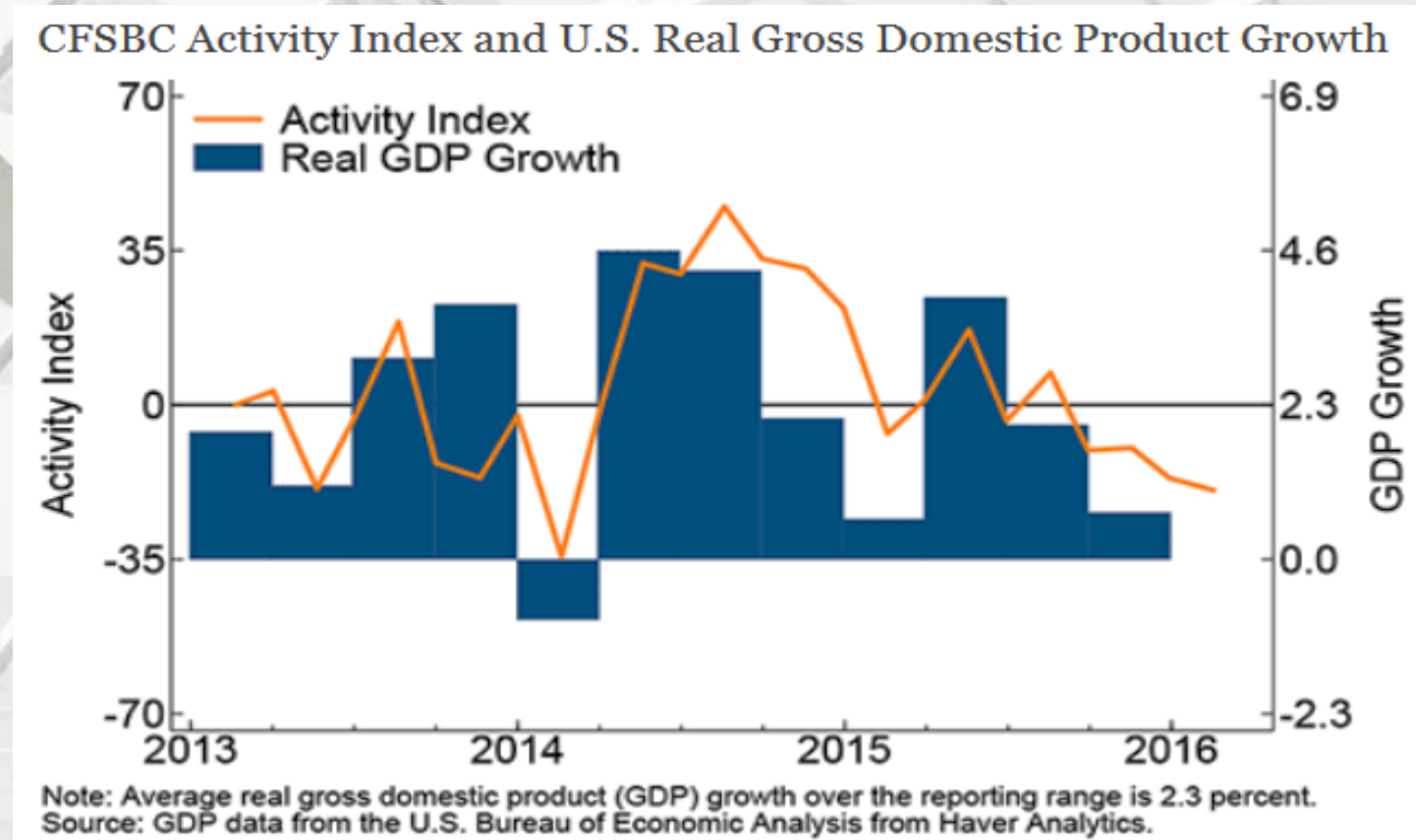
“The Midwest Economy Index (MEI) moved up to +0.07 in February from -0.09 in January. The relative MEI fell to +0.54 in February from +0.73 in January. February’s value for the relative MEI indicates that Midwest economic growth was somewhat higher than what would typically be suggested by the growth rate of the national economy.

Manufacturing’s contribution to the MEI rose to -0.12 in February from -0.21 in January. The pace of manufacturing activity increased in Illinois, Iowa, and Wisconsin, but decreased in Michigan and was unchanged in Indiana. Manufacturing’s contribution to the relative MEI fell to +0.05 in February from +0.20 in January.”

“The construction and mining sector’s contribution to the MEI ticked up to +0.10 in February from +0.08 in January. The pace of construction and mining activity was higher in Indiana and Wisconsin, but lower in Iowa and unchanged in Illinois and Michigan. Construction and mining’s contribution to the relative MEI was +0.24 in February, up slightly from +0.23 in January.

The service sector’s contribution to the MEI increased to +0.05 in February from +0.02 in January. The pace of service sector activity was up in Indiana and Michigan, but down in Illinois and Iowa and unchanged in Wisconsin. The service sector’s contribution to the relative MEI decreased to +0.19 in February from +0.23 in January.” – Laura LaBarbera, Media Relations, Federal Reserve Bank of Chicago

Chicago Fed: Survey of Business Conditions

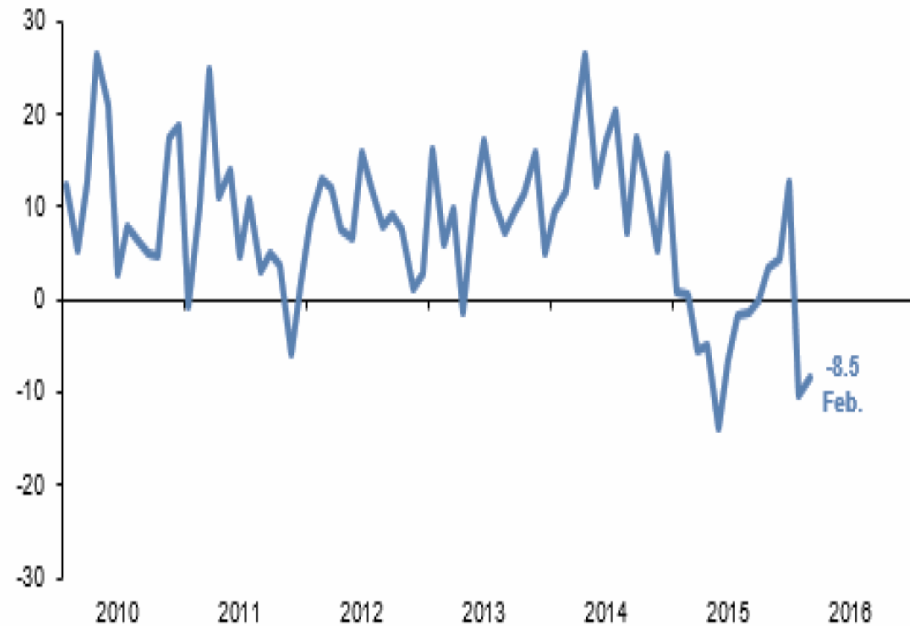


“The Chicago Fed Survey of Business Conditions (CFSBC) Activity Index edged down to –19 from –17, suggesting that growth in economic activity continued at a modest pace in January and early February. The CFSBC Manufacturing Activity Index rose to –7 from –18, while the CFSBC Nonmanufacturing Activity Index declined to –25 from –16.” – The Federal Reserve Bank of Chicago

U.S. Economic Indicators

Texas Manufacturing Outlook Survey Production Index

Index, seasonally adjusted

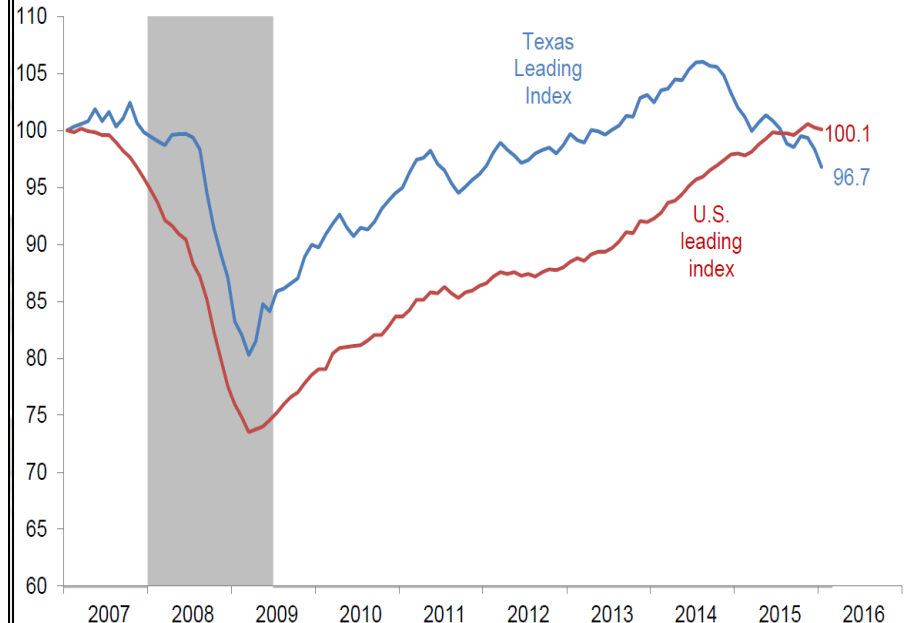


Federal Reserve Bank of Dallas

Chart 6

Texas Leading Index Declines Again in January

Index, January 2007 = 100



NOTES: Data through January 2016. Shaded bar indicates U.S. recession.

SOURCES: Conference Board; Federal Reserve Bank of Dallas.

The Federal Reserve Bank of Dallas

Manufacturing Turns Downward, but Service Sector Grows

“The *Texas Manufacturing Outlook Survey* production index for February came in at –8.5, indicating a second consecutive month of decline in manufacturing activity. A sharp decline in the TMOS employment index suggests that manufacturing job losses accelerated from January to February. The TSSOS revenue index held steady at 9.7 in February, pointing to continued growth in the service sector.” – Emily Gutierrez, Research Analyst, The Federal Reserve Bank of Dallas

U.S. Economic Indicators

The Federal Reserve Bank of Dallas

Texas Manufacturing Activity Rebounds in March

“Texas factory activity expanded slightly in March, according to business executives responding to the *Texas Manufacturing Outlook Survey*. The production index, a key measure of state manufacturing conditions, rebounded to positive territory this month — coming in at 3.3 — after two months of negative readings.

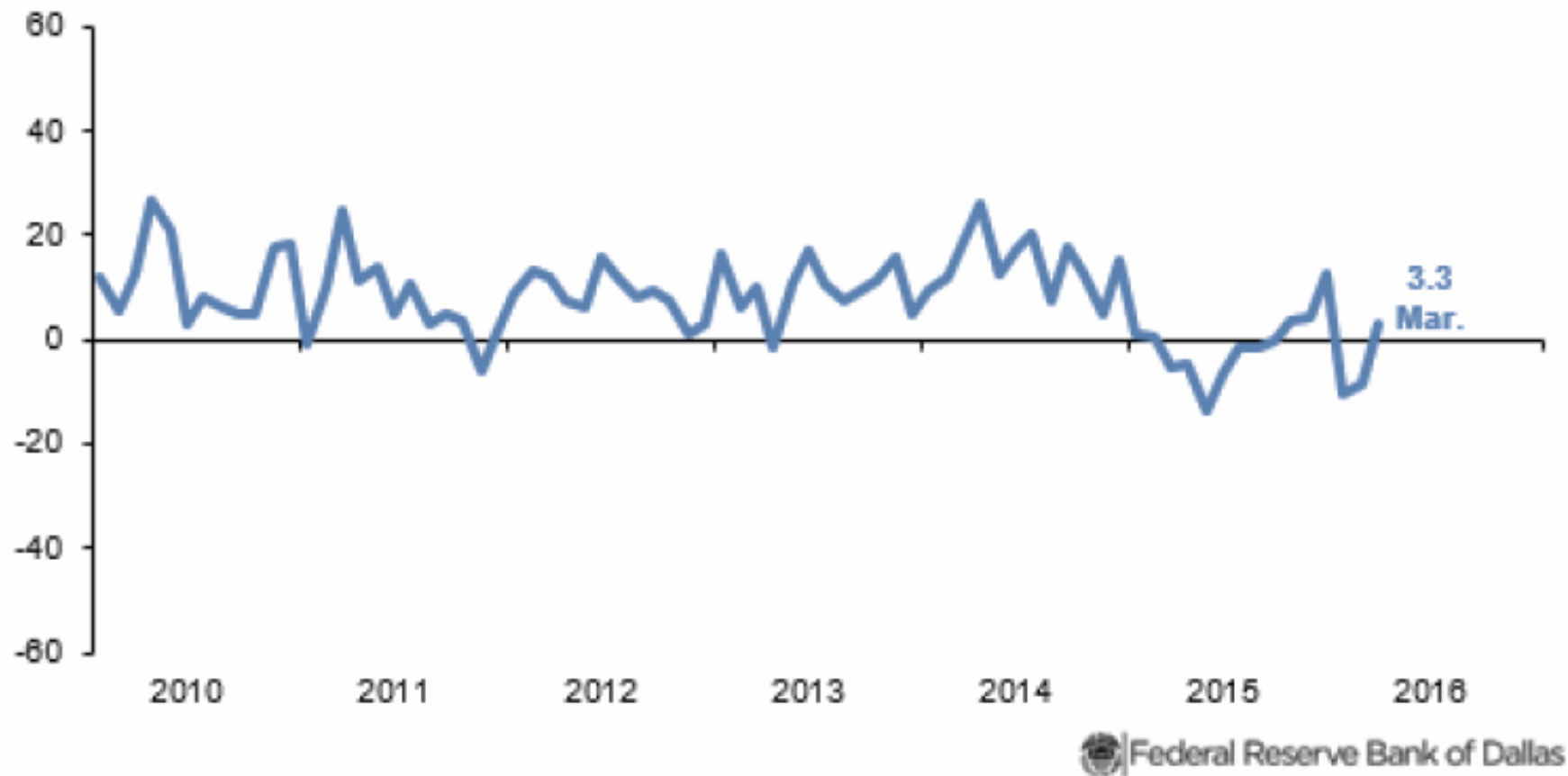
Other indexes of current manufacturing activity also rose this month, although some remained in contractionary territory. The new orders index jumped 13 points but was still negative at -4.8, suggesting demand continued to fall but at a slower pace than last month. The growth rate of orders index has been negative since October 2014, although it did rise in March, to -11.7. The capacity utilization index bounced back to positive territory after negative readings so far this year, coming in at 3.3. Shipment volumes were largely unchanged this month as the shipments index remained near zero.

Perceptions of broader business conditions remained negative but showed signs of slight stabilization in March. The general business activity index jumped 18 points but remained negative for a 15th month, posting a reading of -13.6. The company outlook index posted a fourth negative reading in a row but edged up to -11.0.” – Emily Kerr, Business Economist and Advisor, The Federal Reserve Bank of Dallas

U.S. Economic Indicators

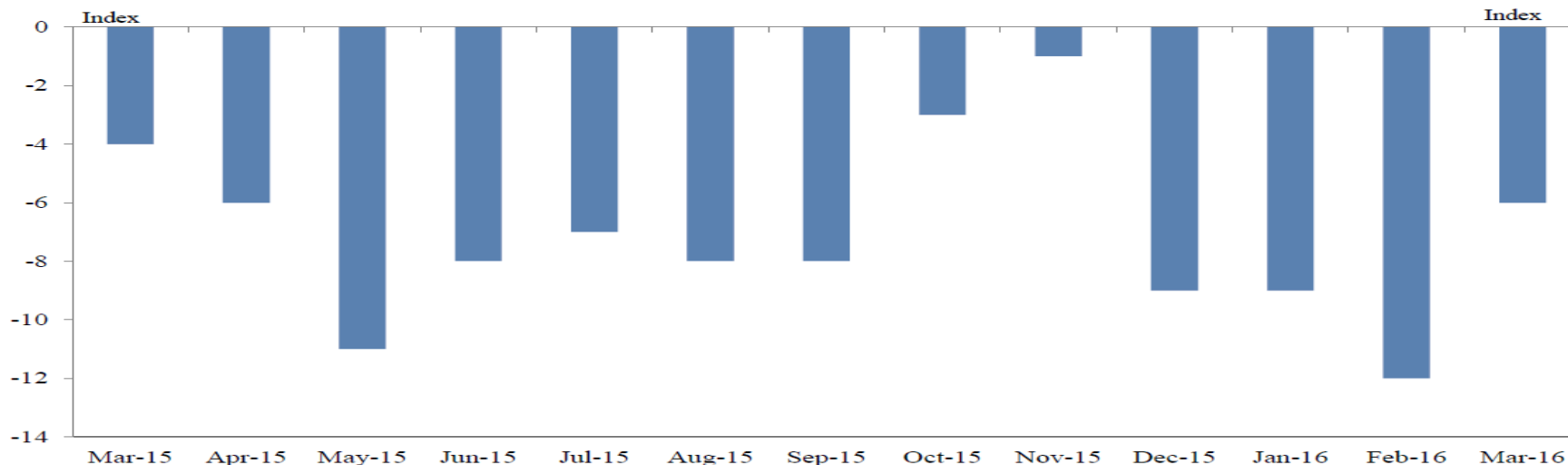
Texas Manufacturing Outlook Survey Production Index

Index, seasonally adjusted



U.S. Economic Indicators

Composite Index vs. a Month Ago



The Federal Reserve Bank of Kansas City

Tenth District Manufacturing Activity Remained Negative

“Factories reported another decline in activity in March, although the drop was somewhat smaller than in the previous three months.

Tenth District manufacturing activity remained negative, while producers’ expectations for future activity weakened. Most price indexes edged higher in March, but remained at low levels. The month-over-month composite index was -6 in March, up from -12 in February and -9 in January. The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. The improvement in the index came from both durable and nondurable goods factories, particularly for chemicals, machinery, and nonmetallic mineral production. Activity remained weak in most District states. Most month-over-month indexes rose somewhat from the previous month. The new orders, order backlog, and employment indexes improved slightly but remained in negative territory. In contrast, the production index dropped from -8 to -14, and the shipments and new orders for exports indexes also fell. The raw materials inventory jumped from -16 to -2, and the finished goods inventory index also moved higher.” – Chad Wilkerson, Vice President and Economist, The Federal Reserve Bank of Kansas City

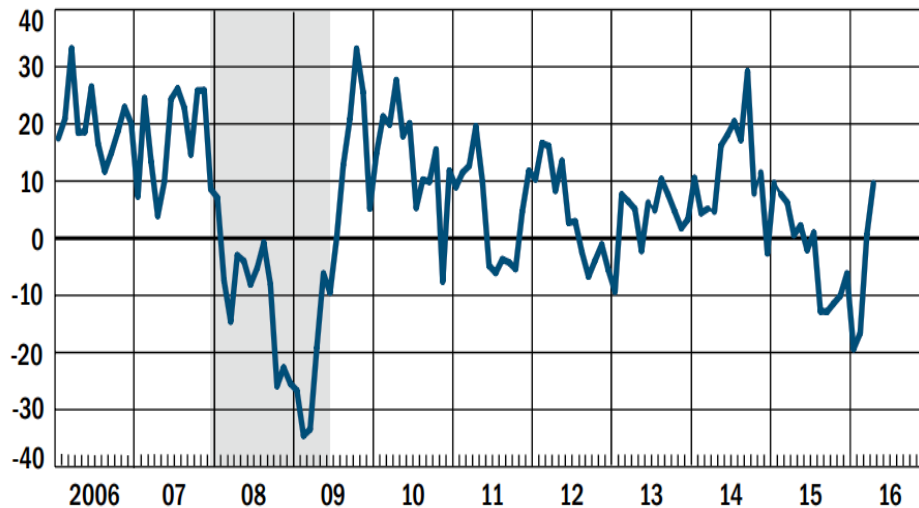
U.S. Economic Indicators

The Federal Reserve Bank of New York

General Business Conditions

Seasonally Adjusted

Diffusion index



Note: The shaded area indicates a period designated a recession by the National Bureau of Economic Research.

Business Conditions Improve

“Business activity expanded for New York manufacturing firms for the first time in over a year, according to the April 2016 survey. After remaining in negative territory for seven months, the general business conditions index rose to a reading slightly above zero last month, and climbed nine more points to reach 9.6 in April. 31% of respondents reported that conditions had improved over the month, while 22% reported that conditions had worsened. After a steep gain last month, the new orders index edged up two points to 11.1, pointing to an increase in orders. The shipments index edged lower but, at 10.2, still signaled a modest increase in shipments. The unfilled orders and delivery time indexes both came in close to zero. The inventories index was -4.8, indicating that inventory levels were slightly lower.”

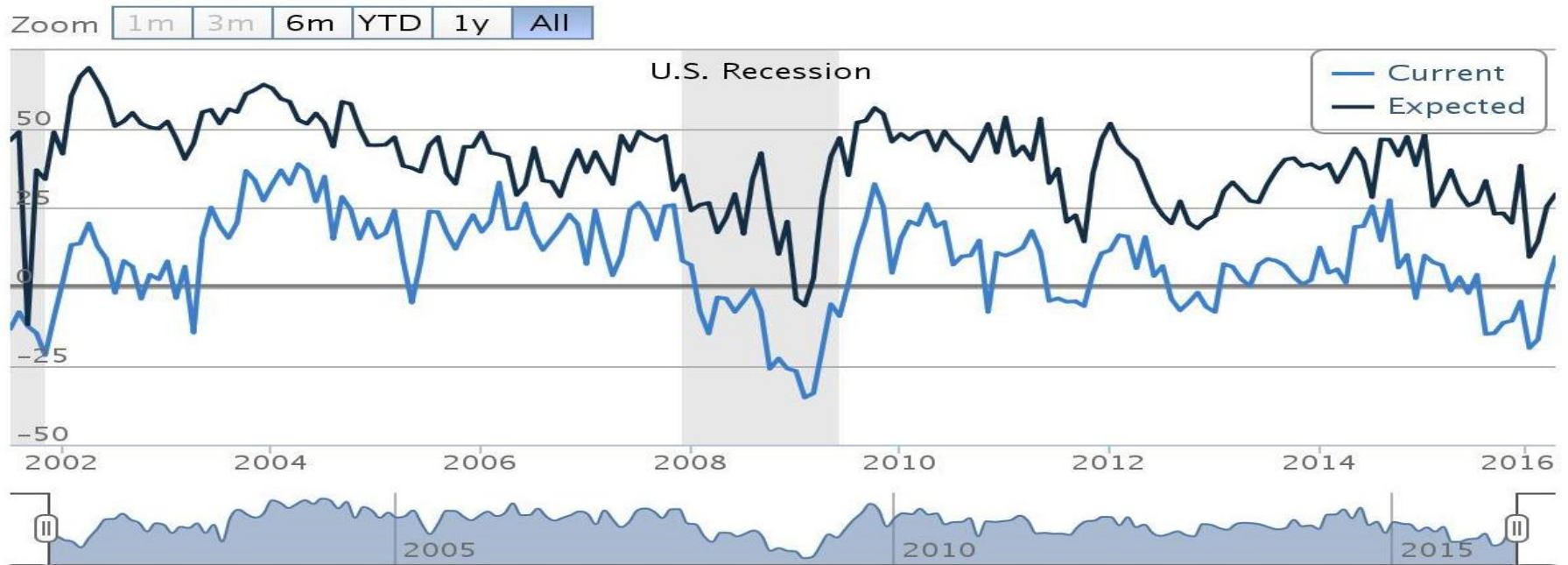
“The April 2016 *Empire State Manufacturing Survey* indicates that business activity expanded for New York manufacturers. The headline general business conditions climbed nine points to 9.6, its highest level in more than a year. The new orders and shipments indexes registered an increase in both orders and shipments, and inventories were slightly lower than last month. The prices paid index climbed sixteen points to 19.2, pointing to a pickup in input price increases, while the prices received index rose above zero, a sign that selling prices increased. Employment levels and the average workweek were little changed from March. The six-month outlook continued to improve, with the index for future business conditions rising for a third straight month.” – The Federal Reserve Bank of New York

U.S. Economic Indicators

The Federal Reserve Bank of New York

Survey Indicators

Diffusion Index of Current and Expected Activity – Seasonally Adjusted



Empire State Manufacturing Survey

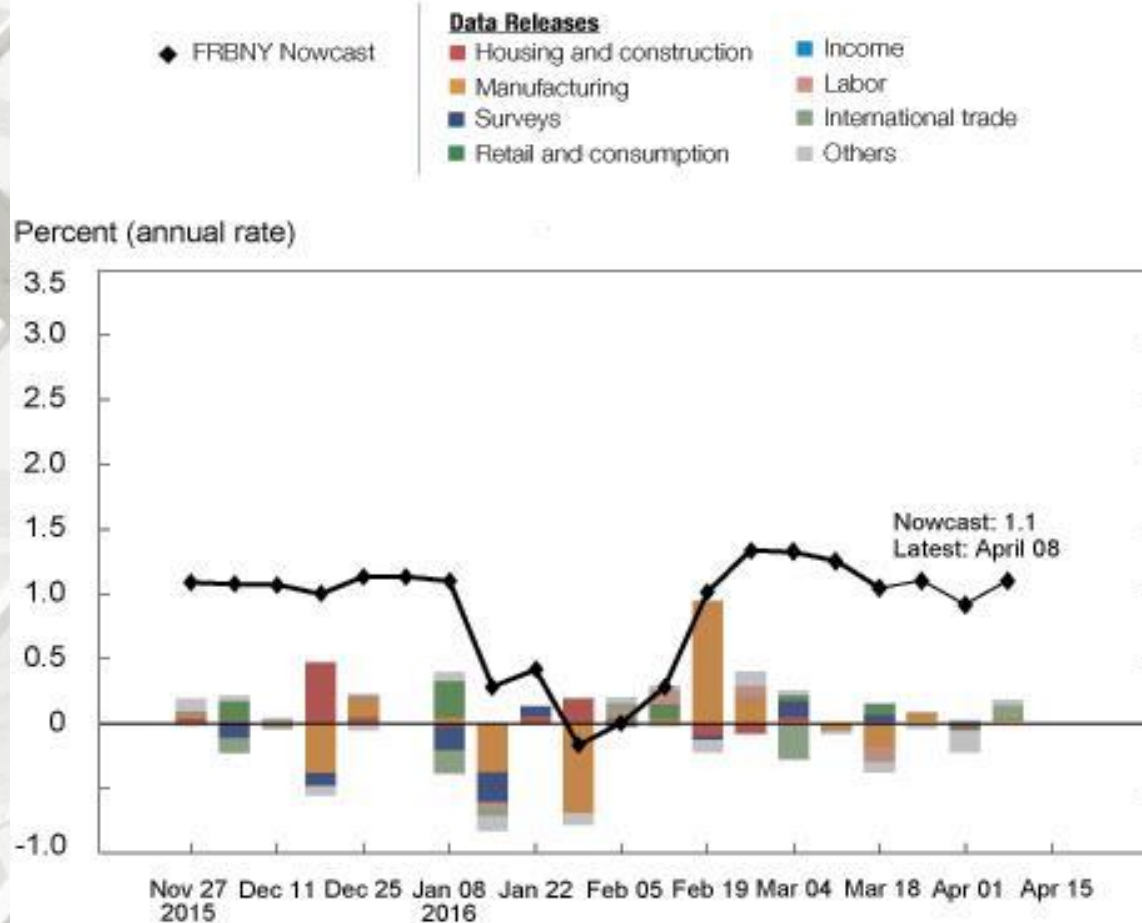
Outlook Continues To Improve

“Indexes for the six-month outlook indicated that conditions were expected to improve in the months ahead. The index for future business conditions moved up four points to 29.4 — its third consecutive rise. The index for future new orders remained elevated at 36.6, and the index for future shipments climbed to 37.2. Future employment indexes conveyed an expectation that employment levels and the average workweek would rise modestly over the next six months. The capital expenditures index climbed six points to 22.1, and the technology spending index rose to 21.2.” – The Federal Reserve Bank of New York

U.S. Economic Indicators

The Federal Reserve Bank of New York: FRBNY Nowcast

FRBNY Nowcast 2016:Q1 GDP Growth

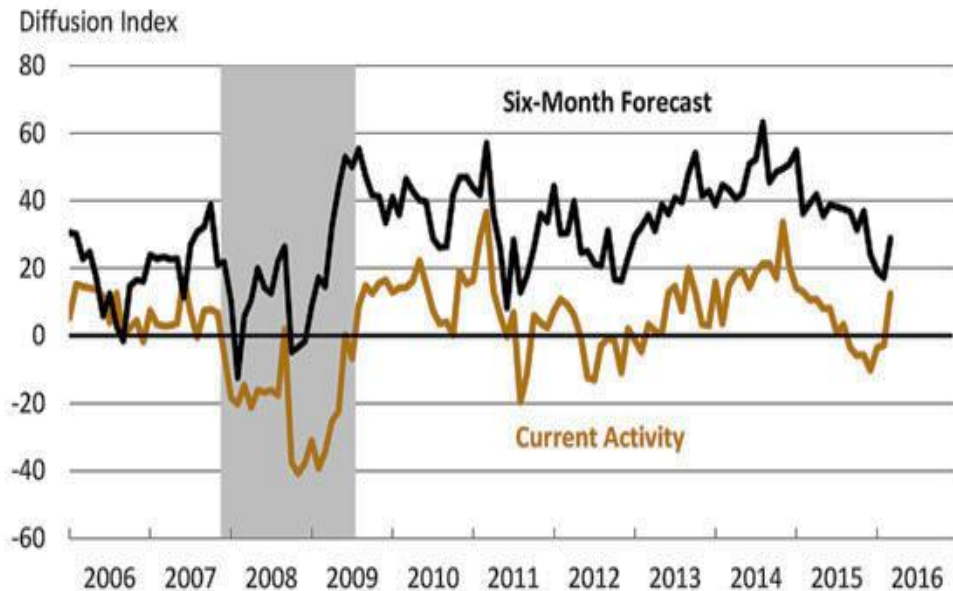


Source: Authors' calculations.

Note: Colored bars reflect the impact of each data release on the nowcast.

U.S. Economic Indicators

Chart 1. Current and Future General Activity Indexes
January 2006 to March 2016



Note: The diffusion index is computed as the percentage of respondents indicating an increase minus the percentage indicating a decrease; the data are seasonally adjusted.

Current Indicators Reflect a Pickup in Activity

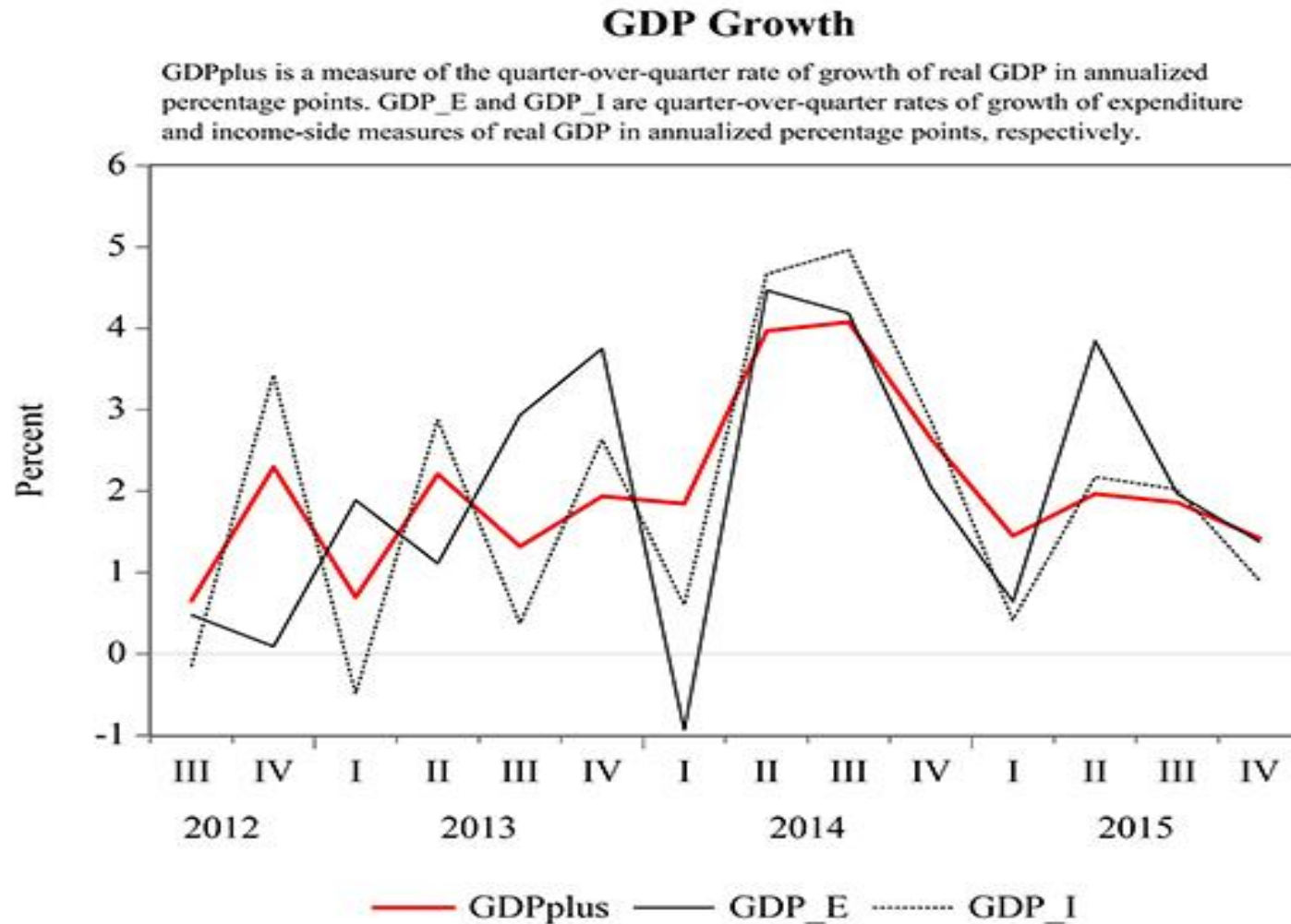
“The diffusion index for current activity increased from a reading of -2.8 in February to 12.4 this month, its first positive reading in seven months (Chart 1). Both the current new orders and shipments indexes also showed improvement this month. The current new orders index returned to positive territory, increasing 21 points to 15.7. Nearly 37 percent of the firms reported an increase in new orders this month.

The current shipments index rose 20 points, to 22.1. The unfilled orders and delivery time indexes showed notable improvement, increasing 11 points and 16 points, respectively. While the unfilled orders remained slightly negative, the delivery time index reached its first positive reading in 11 months. Firms continued to report overall declines in inventories.”

The Federal Reserve Bank of Philadelphia

“Firms responding to the *Manufacturing Business Outlook Survey* reported an improvement in business conditions this month. The indicator for general activity rose sharply in March to its first positive reading in seven months. Other broad indicators offered similar signals of growth: The indexes for shipments and new orders also rose notably. Firms continued to report overall weak employment. With respect to the manufacturers’ forecasts, the survey’s future indicators also showed significant improvement this month.”

Philadelphia Fed: GDP Growth



U.S. Economic Indicators



THE FEDERAL RESERVE BANK OF RICHMOND
RICHMOND • BALTIMORE • CHARLOTTE

1

The Federal Reserve Bank of Richmond

Manufacturing Sector Activity Expanded; New Orders and Shipments Increased

“Fifth District manufacturing activity expanded in March, according to the most recent survey by the Federal Reserve Bank of Richmond. Shipments and the volume of new orders increased this month. Employment advanced at a slightly faster pace in March, while average wages grew moderately and the average workweek lengthened. Prices of raw materials and finished goods rose at a faster pace compared to last month.

Manufacturers anticipated robust business conditions during the next six months. Firms expected faster growth in shipments and in new orders in the six months ahead. Additionally, survey participants looked for increased capacity utilization and expected order backlogs to grow. Producers looked for vendor lead times to lengthen modestly.” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond

U.S. Economic Indicators



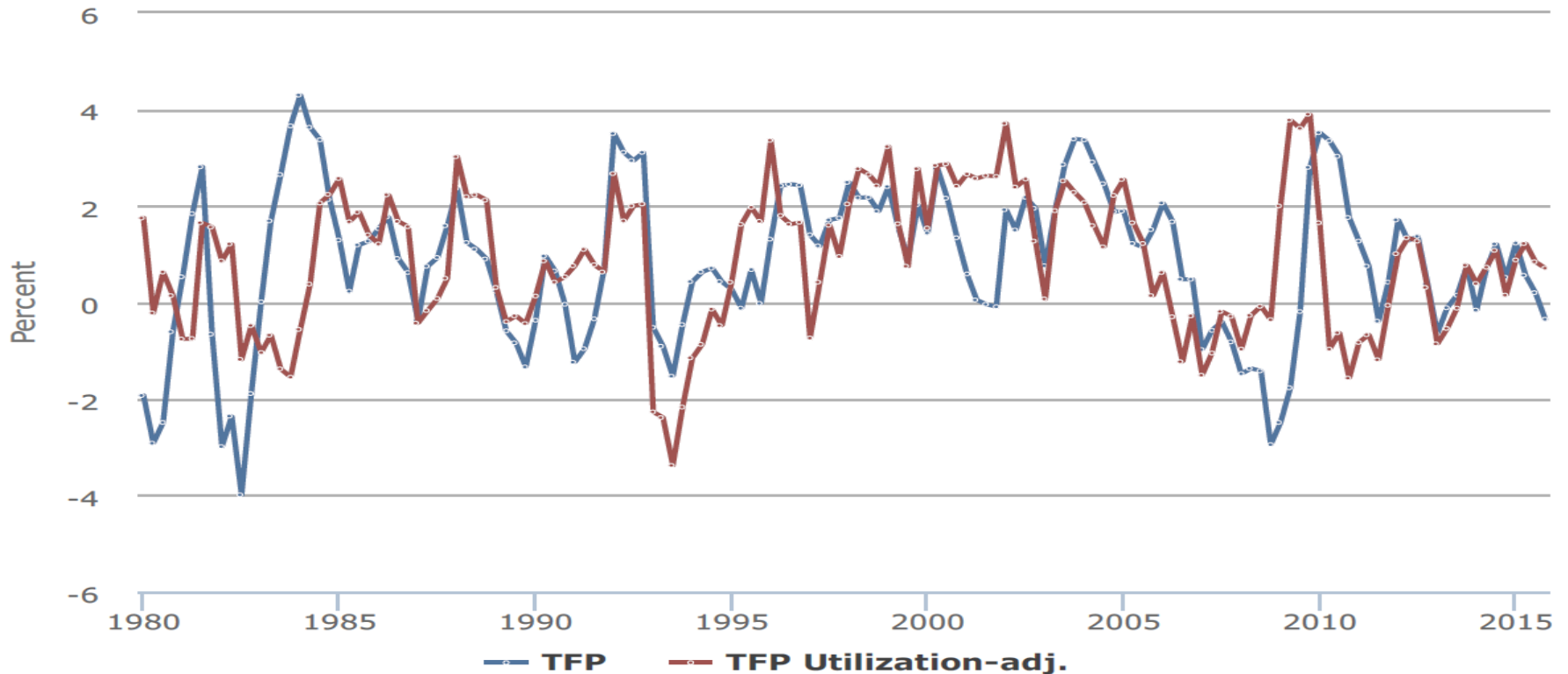
The Federal Reserve Bank of Richmond Current Activity

“Overall, manufacturing activity increased markedly in March. The composite index for manufacturing climbed to a reading of 22, the highest since April 2010. The index for shipments added 38 points and the new orders index advanced 30 points, finishing at strong readings of 27 and 24, respectively. Manufacturing employment grew at a slightly faster pace this month; the employment indicator added two points to end at 11.

Backlogs flattened this month. However, the index moved up from last month’s -14 reading to settle at 1. Capacity utilization grew at a faster pace in March, pushing the index up 22 points and ending at 17. Vendor lead time also leveled off to a reading of 0 this month. Finished goods inventories rose at a somewhat slower pace compared to a month ago. That index lost two points, ending at a reading of 18. Additionally, raw materials inventories increased at a slower pace in March. That gauge moved down to 21 from 36.” – Jeannette Plamp, Economic Analyst, The Federal Reserve Bank of Richmond

U.S. Economic Indicators

4 Quarter Percent Change in Natural Log



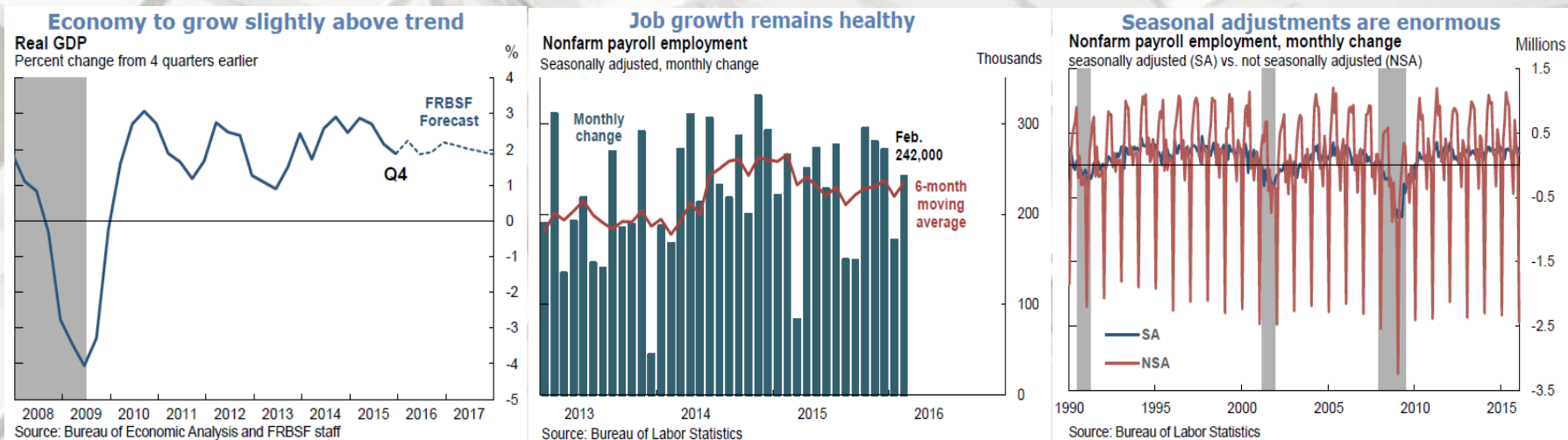
The Federal Reserve Bank of San Francisco

Total factor productivity for the U.S. business sector, adjusted for variations in factor utilization – labor effort and capital's workweek.

Summary

“Over the past four quarters ending in the fourth quarter of 2015, Total Factor Productivity fell at a rate of -0.35% and the Utilization-adjusted Total Factor Productivity grew at rate of 0.71%.” — The Federal Reserve Bank of San Francisco

U.S. Economic Indicators



The Federal Reserve Bank of San Francisco

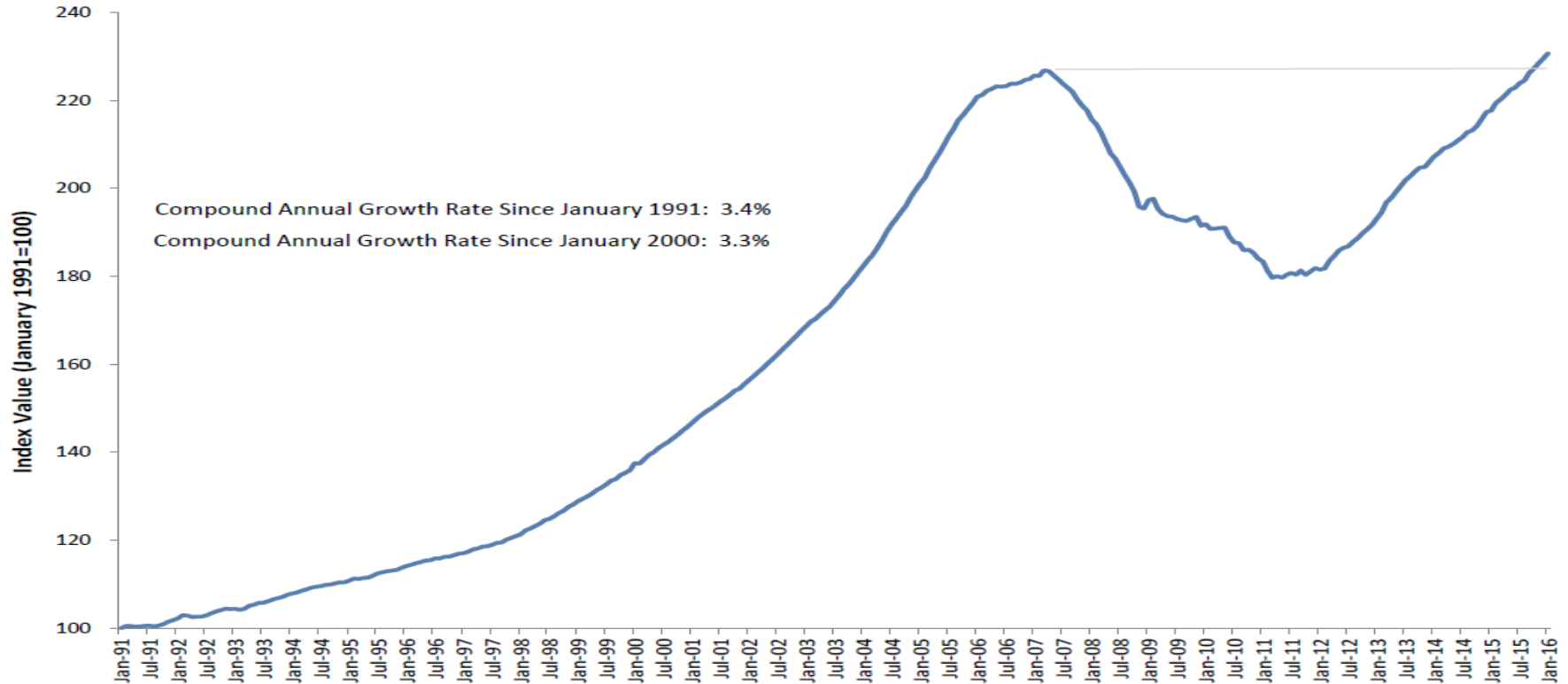
“Despite volatile financial conditions since the start of the year, incoming economic data in recent weeks have been fairly positive and point to healthy economic growth. While real GDP growth in 2015 was around 2%, we expect real GDP to grow slightly faster this year and slow slightly to just below 2% next year.

Many economic variables, such as monthly employment growth, exhibit large fluctuations due to seasonal factors. A comparison of seasonally adjusted (SA) and not seasonally adjusted (NSA) data on the monthly change in nonfarm employment shows that the magnitude of seasonal adjustment can be enormous. For instance, a typical January sees a net decline of over 2 million jobs. By comparison, the worst month of job losses in the Great Recession, March 2009, saw a net decline of just a little over 800,000 jobs, according to the seasonally adjusted data. The large magnitude and variability of these seasonal fluctuations poses a daunting challenge for government statistical agencies seeking to adjust such data for seasonality.” — Daniel Wilson, Research Adviser, The Federal Reserve Bank of San Francisco

U.S. Economic Indicators

Monthly House Price Index for U.S.

Purchase-Only, Seasonally Adjusted Index, January 1991 - Present



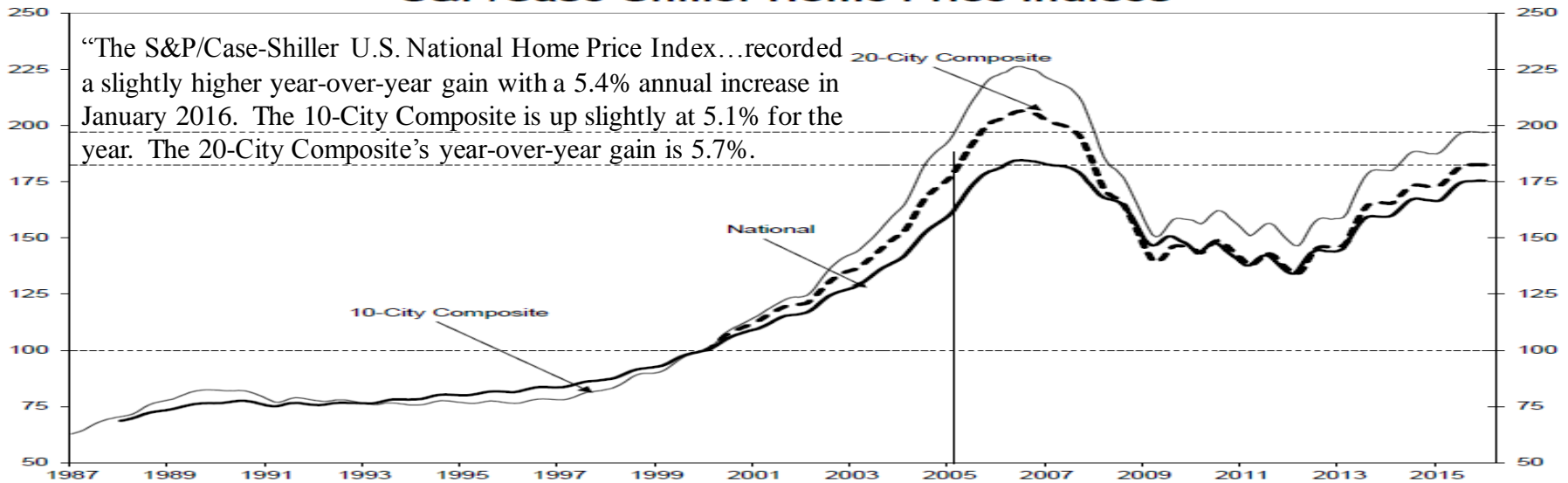
Source: FHFA

Federal Housing Finance Agency

U.S. house prices rose in January, up 0.5 percent on a seasonally adjusted basis from the previous month, according to the Federal Housing Finance Agency monthly House Price Index. The previously reported 0.4 percent increase in December was revised upward to reflect a 0.5 percent increase.

Private Indicators

S&P/Case-Shiller Home Price Indices



S&P/Case-Shiller Home Price Indices

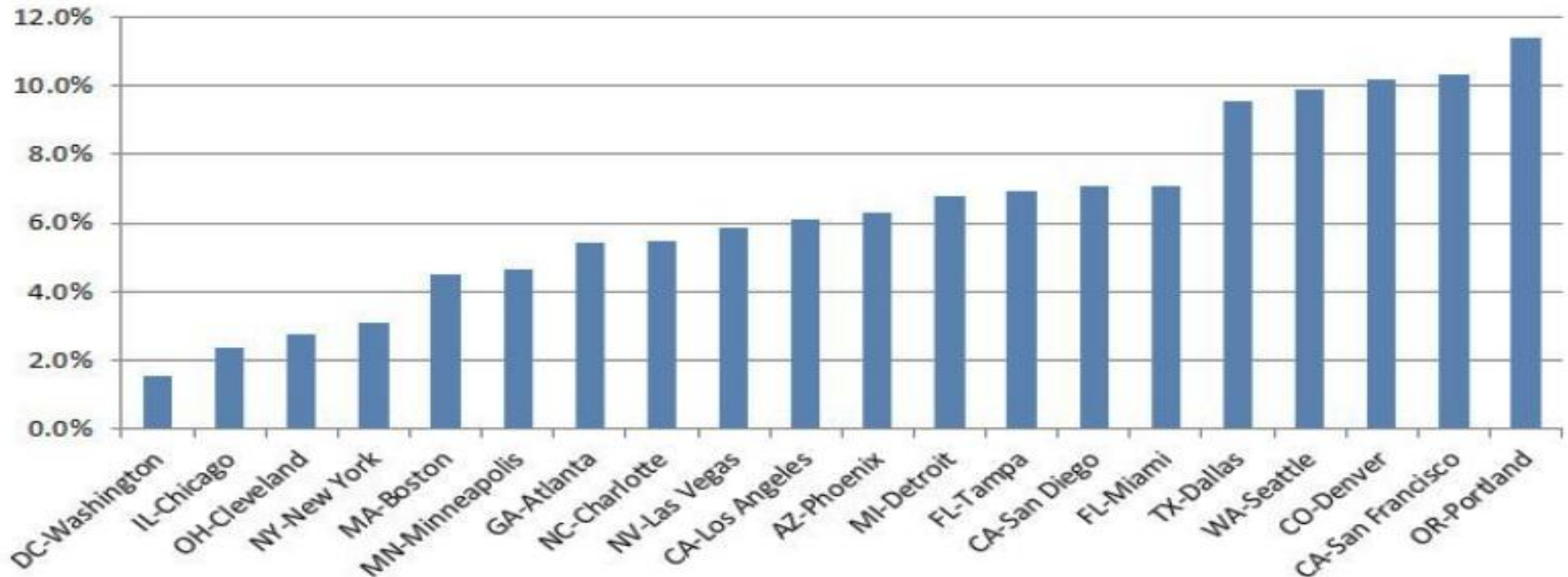
Home Price Increases Continue in January

“Home prices continue to climb at more than twice the rate of inflation. The low inventory of homes for sale -- currently about a five month supply -- means that would-be sellers seeking to trade-up are having a hard time finding a new, larger home. The recovery of the sale and construction of new homes has lagged the gains seen in existing home sales. This may be starting to change: starts of single family homes in February were the highest since November 2007. The single-family-home share of total housing starts was 70% in February, up from a low of 57% in June 2015, and approaching the 75% -80% range seen before the housing crisis. While low inventories and short supply are boosting prices, financing continues to be a concern for some potential purchasers, particularly young adults and first time home buyers. The issue is availability of credit for people with substantial student or credit card debt. While rising home prices are certainly a factor deterring home purchases, individual financial positions are more important than local housing market conditions. One hopeful sign is that the home ownership rate, at 63.7% in the 2015 fourth quarter, may be turning around. It is up slightly from 63.5% in the 2015 second quarter but far below the 2004 high of 69.1%.” – David Blitzer, Managing Director and Chairman of the Index Committee, S&P Dow Jones Indices

Source: https://www.spice-indices.com/idpfiles/spice-assets/resources/public/documents/323944_cshomeprice-release-0329.pdf; 3/29/16

Private Indicators

Price Increase for Existing Single Family Homes
12 Months to December 2015



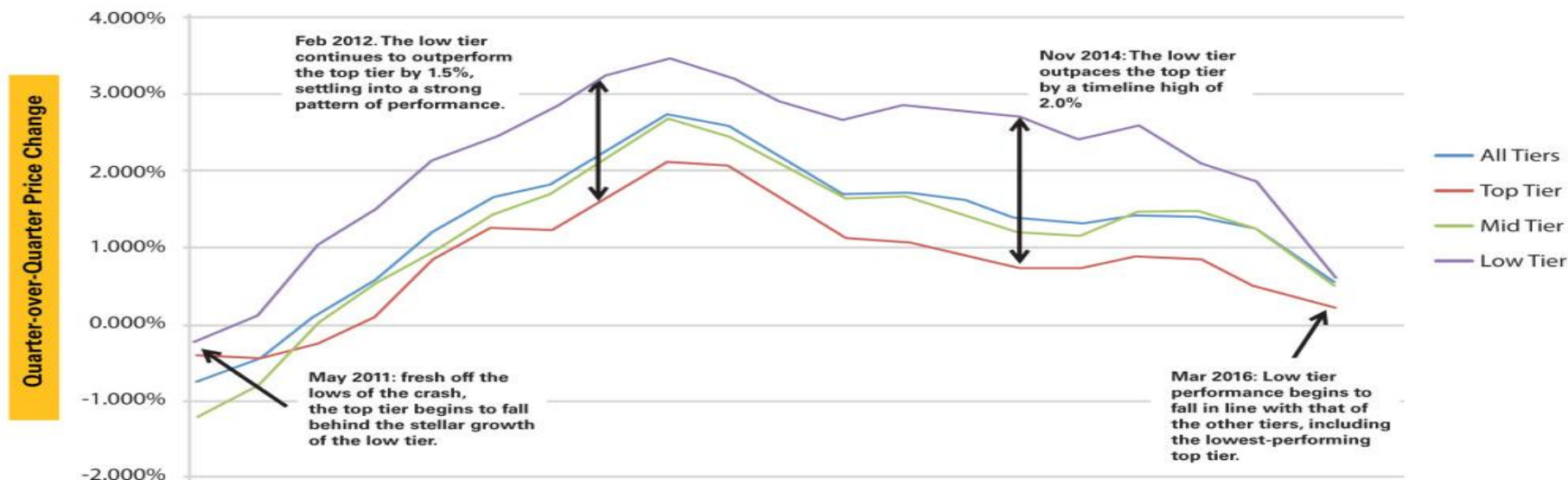
Source: S&P/Case-Shiller Home Price Indices

Can House Prices Keep Rising?

“Prices of existing homes rose 5.3% in the year ended December 2015, more than twice the rate of inflation. However, the pace of price increases varies across the country with the strongest gains in the west and the weakest in the northeast, as shown by the chart. Sales of both new and existing homes also vary across the country with more strength in the west.” – David Blitzer, Managing Director and Chairman of the Index Committee, S&P Dow Jones Indices

Private Indicators

National Quarter-over-Quarter Price Change by Price Tier



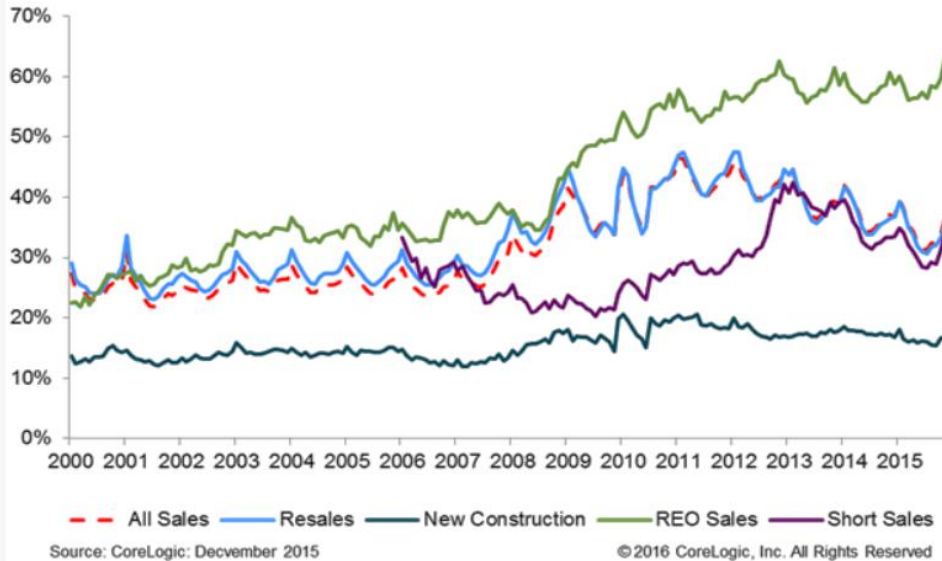
ClearCapital

Is it time for Investors to Find a New Niche?

“As the winter real estate seasonal slowdown seems to be winding down, the numbers through the end of March are somewhat dichotomous. Most of the nation’s top performing markets have seen very little change in performance since last month and have continued to grow throughout the last quarter, despite the winter slowdown in activity. The nation’s lowest performing markets, however, appear to be much less able to resist the effects of the winter slow season even still as quarterly growth continues to decrease. Separately, we are beginning to see two very different ends of the national market, the low and top tiers, start to converge potentially toward a more homogenous pattern of growth. Although this drop in performance for the low price tier may indicate a more sustainable model of affordability for first time homebuyers, it may also plant doubt and uncertainty, especially with the investors – such as the REO to rental investors – who have previously taken advantage of the rapid growth of the tier. Even as price growth for all tiers remains in the black, it may be time for investors to find a new niche in the industry. Perhaps we will see REO or rental investments take a rise.” – Alex Villacorta, Vice President of Research and Analytics, Clear Capital.

Private Indicators

Figure 1: Cash Sales Share by Sale Type
Cash Sales Percent



Cash Sales Share in 2015 Lowest in Seven Years

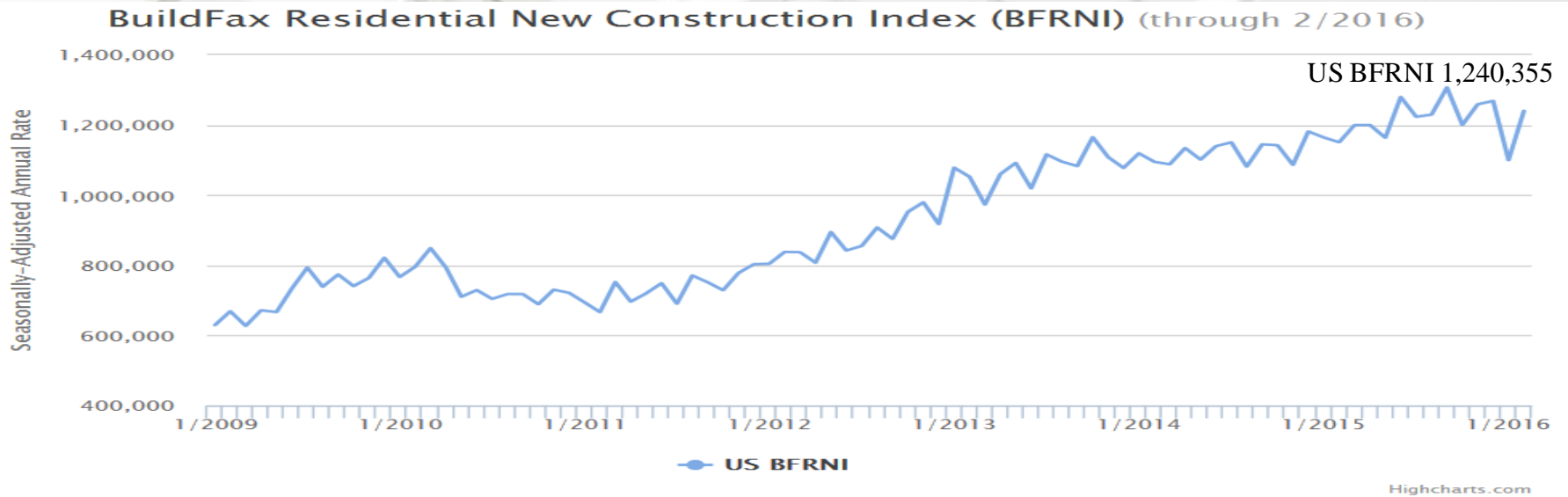
Cash Sales Accounted for 34 Percent of All Home Sales

“Cash sales accounted for 33.4 percent of total home sales in December 2015 and 33.9 percent of total home sales for the full year 2015. The full year 2015 cash sales share was the lowest since 2008. The December cash sales share was down 3.3 percentage points year over year from 36.7 percent in December 2014.”

“On a month-over-month basis, the cash sales share fell by 2.8 percentage points in December 2015 compared with November 2015. The month over month decrease in cash sales share was larger than normal for the month of December, indicating that the elevated share reported for November, and attributed to the new federal mortgage rules (TRID), was temporary.

The cash sales share peaked in January 2011 when cash transactions accounted for 46.6 percent of total home sales nationally. Prior to the housing crisis, the cash sales share of total home sales averaged approximately 25 percent. If the cash sales share continues to fall at the same rate it did in December 2015, the share should hit 25 percent by mid-2017.” – Molly Boesel, Senior Economist, CoreLogic®

Private Indicators



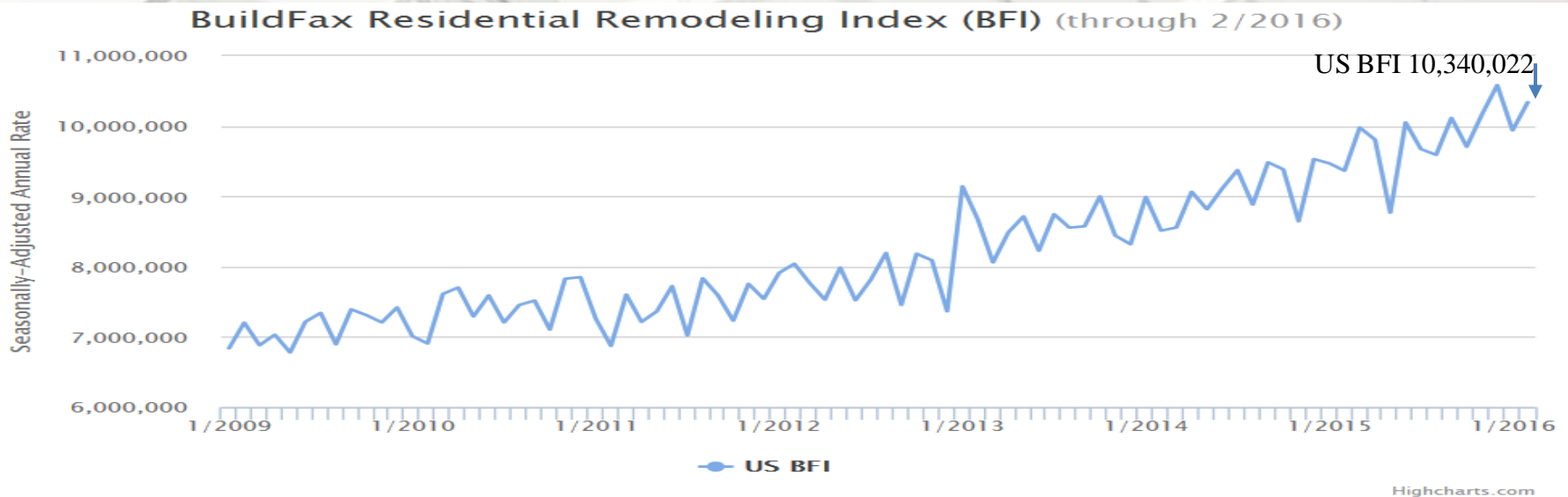
BuildFax Residential New Construction Index

“Residential new construction authorized by building permits in the U.S. in February were at a SAAR of 1,240,355. This is 13% above the revised January rate of 1,099,891 and is 8% above the revised February 2015 estimate of 1,150,766. BuildFax reports on total new residential projects, this is unlike the U.S. Census that reports total number of housing units.”

Regional Residential New Construction

“Seasonally-adjusted annual rates of residential new construction across the country in February 2016 are estimated as follows: Northeast, 56,577 (down 2% from January and up 85% from February 2015); South, 642,474 (up 14% from January and down 5% from February 2015); Midwest, 257,498 (up 13% from January and up 29% from February 2015); West, 292,252 (up 9% from January and up 22% from February 2015).”

Private Indicators



BuildFax Residential Remodeling Index

“Residential remodels authorized by building permits in the United States in February were at a seasonally-adjusted annual rate of 10,340,022. This is 4% above the revised January rate of 9,938,715 and is 10% above the revised February 2015 estimate of 9,364,777.”

Regional Residential Remodeling

“Seasonally-adjusted annual rates of residential remodeling across the country in February 2016 are estimated as follows: Northeast, 684,681 (down 19% from January and up 3% from February 2015); South, 4,954,973 (up 9% from January and up 12% from February 2015); Midwest, 2,117,462 (up 4% from January and up 9% from February 2015); West, 2,552,131 (up 7% from January and up 10% from February 2015).”

Private Indicators: AIA

February Architecture Billings Index

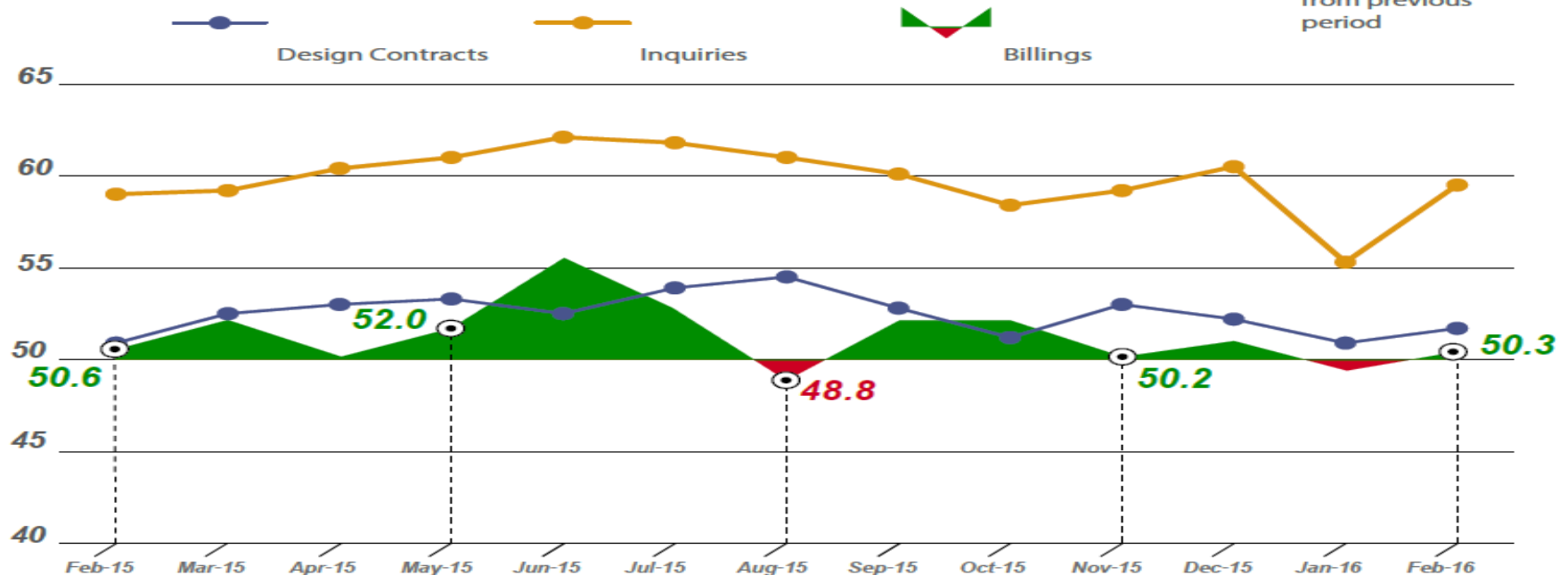
Architecture firm billings recover modestly in February

“U.S. architecture firms reported a modest recovery in billings in February following a small dip in January. The AIA’s Architecture Billings Index (ABI) was 50.3 for the month, on the heels of a 49.6 reading in January. New project inquiries recorded more significant growth, increasing to 59.5 in February from 55.3 in January. New design contracts also pointed to solid growth ahead in design activity, increasing almost a full point to 51.7 for the month.” – Kermit Baker, Hon. AIA, Chief Economist, AIA

NATIONAL

Architecture Firm Billings Eke Out a Small Gain in February

Graphs represent data from February 2015 – February 2016.



Private Indicators: AIA

“Regional trends in architecture firm revenue were disappointing, and reflected the widespread lack of momentum moving into 2016. Billings index scores for firms in the Northeast, Midwest, and West all reflected a slight decline in February. Even in the South, the only region showing an increase, billings have reflected slowing growth for several months now.” – Kermit Baker, Hon. AIA, Chief Economist, AIA

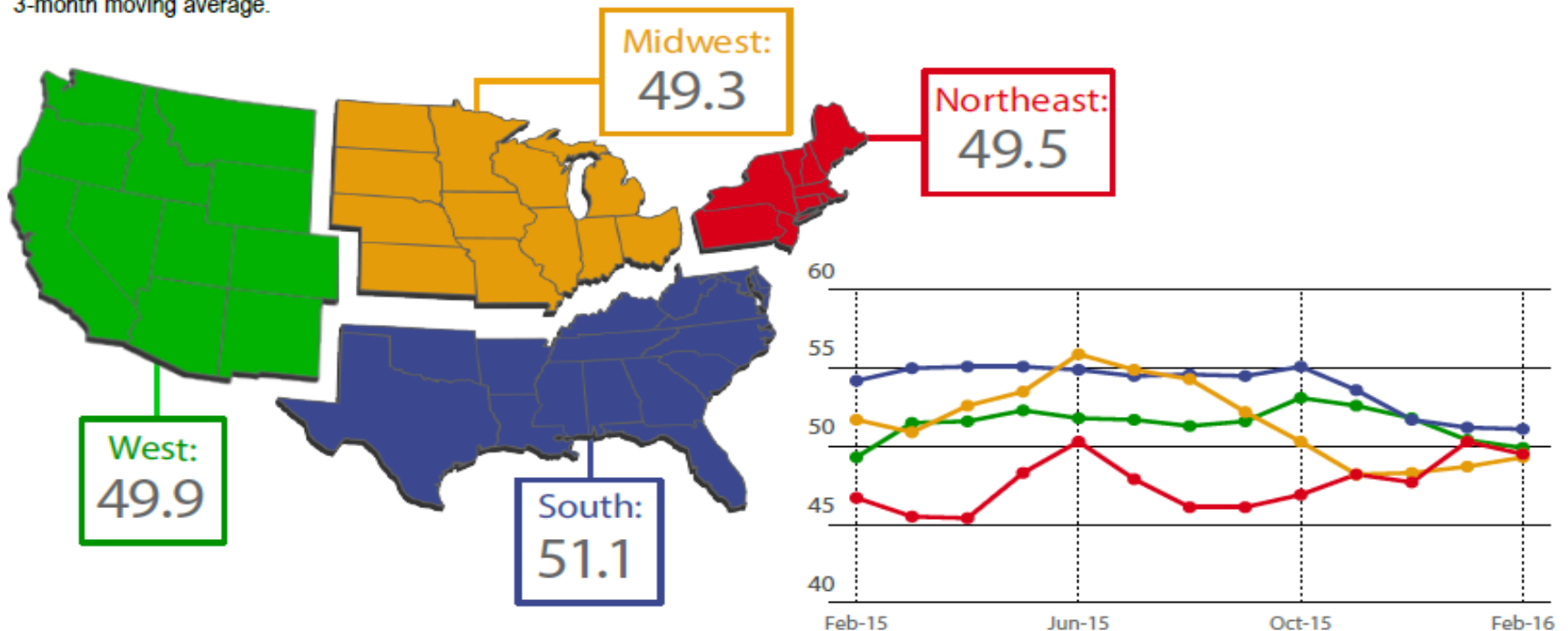
REGIONAL

Billings Remain Soft in Most Regions

Graphs represent data from February 2015 – February 2016 across the four regions.

50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease.

3-month moving average.



Private Indicators: AIA

“By sector, residential and commercial/industrial firms both reported healthy gains, while institutional firms suffered their second consecutive setback after enjoying a year and a half of steady growth.” – Kermit Baker, Hon. AIA, Chief Economist, AIA

SECTOR

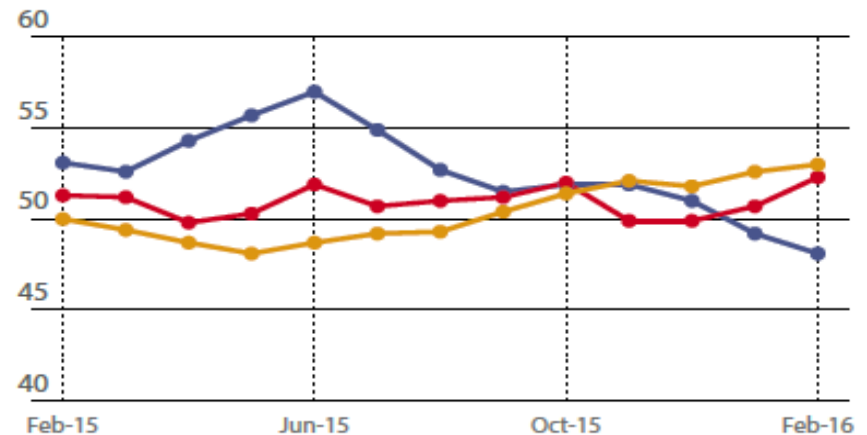
Residential, Commercial/Industrial Billings
Move Up; Institutional Trend Down

Graph represents data from February 2015 – February 2016
across the three sectors.

50 represents the diffusion center.

A score of 50 equals no change from the previous month. Above
50 shows increase; Below 50 shows decrease.

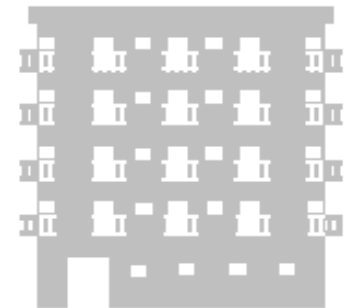
3-month moving average.



Commercial/Industrial: 52.3



Institutional: 48.1



Residential: 53.0

Private Indicators

New Construction Starts in February Climb 10 Percent

“At a seasonally adjusted annual rate of \$667.6 billion, new construction starts in February advanced 10% compared to the previous month, according to Dodge Data & Analytics. The February statistics produced a reading of 141 for the Dodge Index (2000=100), compared to 129 for January. For 2015 as a whole, the Dodge Index averaged 138. The 16% decline for total construction starts on an unadjusted basis during the first two months of 2016 versus last year was the result of a mixed performance by a major sector.

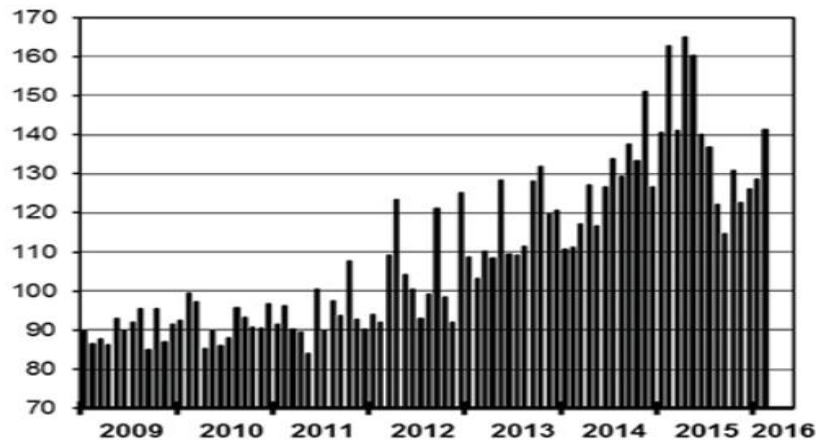
The month-to-month pattern of construction starts will often reflect the presence of unusually large projects, and this explains February’s gain relative to January. It also helps to explain the elevated and unsustainable pace of total construction starts during the early months of 2015, and by comparison the substantial year-to-date declines for nonbuilding construction and nonresidential building so far in 2016. ... On balance, the current economic environment is still favorable for the continued expansion of construction activity, which may not show up in the year-to-date statistics for total construction starts until the second half of this year. Interest rates continue to be low, more construction-related bond measures have been passed at the state and local government level, and the new multiyear federal transportation bill is in place. While there are signs that banks are beginning to tighten standards on commercial real estate loans, at the urging of federal bank regulators, market fundamentals such as occupancies and rents remain generally supportive of new construction

Additional perspective is obtained by looking at twelve-month moving totals, in this case the twelve months ending February 2016 versus the twelve months ending February 2015, which lessens the volatility present in comparisons of just two months. On this basis, total construction starts were up 2% as the result of this performance by major sector – residential building, up 15%; nonbuilding construction, up 2%; and nonresidential building, down 12%. By geography, the twelve months ending February 2016 showed this pattern for total construction starts – the Northeast, up 15%; the Midwest, up 5%; the South Atlantic, up 3%; the West, up 2%; and the South Central, down 10%.” – Robert Murray, Chief Economist, McGraw Hill Construction

Private Indicators

February 2016 Construction Starts

**The Dodge Index
of New Construction Starts
(Year 2000 = 100)**



Source: Dodge Data & Analytics

MONTHLY CONSTRUCTION STARTS Seasonally Adjusted Annual Rates, In Millions of Dollars

	<u>February 2016</u>	<u>January 2016</u>	<u>% Change</u>
Nonresidential Building	\$185,492	\$178,302	+4
Residential Building	281,269	294,706	-5
Nonbuilding Construction	<u>200,851</u>	<u>134,748</u>	<u>+49</u>
TOTAL Construction	\$667,612	\$607,756	+10

THE DODGE INDEX (Year 2000=100, Seasonally Adjusted)

February 2016.....141

January 2016.....129

YEAR-TO-DATE CONSTRUCTION STARTS Unadjusted Totals, In Millions of Dollars

	<u>2 Mos. 2016</u>	<u>2 Mos. 2015</u>	<u>% Change</u>
Nonresidential Building	\$24,637	\$31,163	-21
Residential Building	37,913	34,785	+9
Nonbuilding Construction	<u>24,519</u>	<u>37,220</u>	<u>-34</u>
TOTAL Construction	\$87,069	\$103,168	-16

New Construction Starts in February Climb 10 Percent

“Residential building in February dropped 5% to \$281.3 billion (annual rate), following the 5% gain reported in January. Single family housing receded 3%, reflecting a varied pattern by geography – the South Atlantic, down 9%; the West and South Central, each down 5%; and the Northeast and Midwest, each up 7%. Multifamily housing slipped 8% in February after strengthening 24% over the previous two months. Even with the pullback, February did include groundbreaking for eight multifamily projects valued at \$100 million or greater,

During the first two months of 2016, the leading metropolitan area in terms of the dollar amount of multifamily starts was New York NY, maintaining its number one ranking for this project type. Rounding out the top five for multifamily construction were the following – Miami FL, Boston MA, Atlanta GA, and San Francisco CA.” –

Robert Murray, Chief Economist, McGraw Hill Construction

Private Indicators

Deloitte CFO Signals™: 2016 Q1

Deloitte.

powered by
The **CFO** Program

CFO Signals™

Business Outlook Highlights | 1st Quarter 2016¹

A rough 2016 start for economies and equities sparks concerns

Performance expectations have fallen sharply to levels at or near new survey lows, and CFOs' confidence in their companies' longer-term prospects is on the verge of turning net-negative for the first time in more than three years.



LESS CONFIDENCE IN NORTH AMERICAN ECONOMY



41% of surveyed CFOs describe North American conditions as good, and 36% expect better conditions in a year



5% describe Europe as good, and 17% see it improving in a year



9% regard China's economy as good, and only 11% expect improvement



GROWTH EXPECTATIONS MARKEDLY LOWER²

Revenue growth expectations down



3.3%

Earnings growth expectations down



6.0%

Capital spending expectations down



1.7%

Domestic hiring growth expectations down



0.6%



OPTIMISTS OUTNUMBER PESSIMISTS, BUT BY LOWEST MARGIN IN THREE YEARS³



Net optimism of **+1.7%**, the lowest level since 4Q12 and a significant decrease from last quarter's +10.7%



33% of surveyed CFOs express rising optimism, compared to 33.9% in 4Q15



But just over **31%** now cite declining optimism, the highest level since 4Q12

Footnotes

¹ Visit <http://www.deloitte.com/us/cfosignals2016Q1> for the full CFO Signals report background and findings

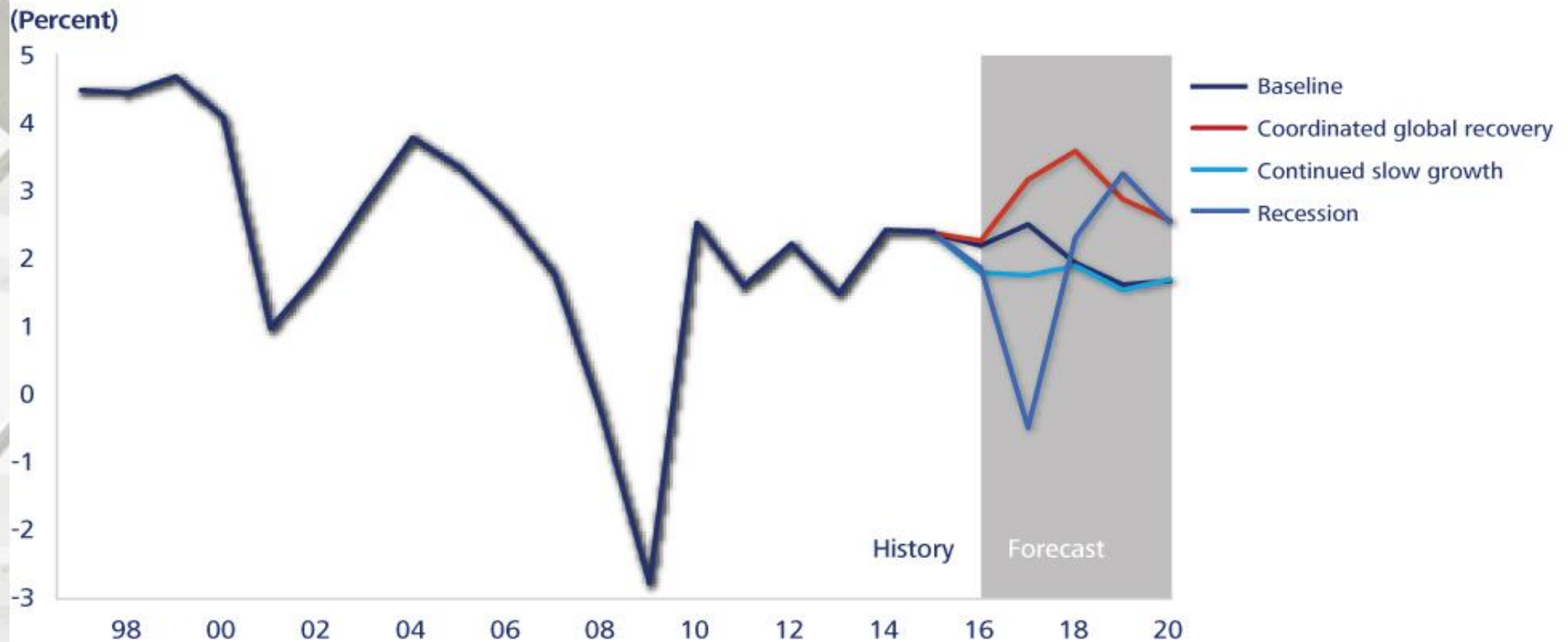
² Represents forecasted results for the next 12 months

³ Represents change in CFO optimism of company prospects over the next 12 months, compared to prior quarter

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Private Indicators

Figure 1. Real GDP growth



Source: Deloitte/Oxford Economics.

Graphic: Deloitte University Press | DUPress.com

Deloitte US Economic Forecast: 2016 Q1

A rough 2016 start for economies and equities sparks concerns

“After six years of waiting for productivity to pick up, we’re reconciled to a new normal of slower US growth. While a recession remains unlikely, question marks in Europe and China — and an expensive dollar — will likely temper any boom in the near future.” – Dr. Daniel Bachman, Senior Manager US Macroeconomics, Deloitte Services LP

Private Indicators

Deloitte US Economic Forecast: 2016 Q1

Scenarios

“The baseline (55 percent probability): Weak foreign demand weighs on growth. US domestic demand is strong enough to provide employment for workers returning to the labor force for a couple of years, and the unemployment rate remains about 5 percent. GDP annual growth hits a maximum of 2.5 percent. In the medium term, low productivity growth puts a ceiling on the economy, and by 2019 US GDP growth is below 2 percent, despite the fact that the labor market is at full employment. Inflation remains subdued.

Recession (5 percent): China’s financial problems create a drag on its economy, and growth slows substantially. This triggers a financial panic in East Asia, as investors in countries connected by supply chains to China seek to reduce risk. Volatility in Europe increases, as does market valuation of the riskiness of euro assets, adding to the panic. Several US financial institutions find themselves long on euro- and China-related assets at the wrong time. The result: a global financial panic. Capital flows into the United States to avoid risk in Europe and Asia, and the US dollar climbs even higher. The financial panic throws the US economy into recession. Timely Fed action offsets the financial crisis after several months, leading to relatively fast growth during the recovery.

Slower growth (25 percent): Weak economic conditions abroad, financial turmoil, and flight from risky assets cuts demand below the level required for labor market equilibrium. Although the participation rate climbs slightly, hoped-for jobs disappear and the unemployment rate rises. Despite that increase, the Fed slowly raises interest rates, helping to keep a cap on inflation. GDP growth stays below 2 percent for the foreseeable future.

Coordinated global boom (15 percent): Terrorism and refugee problems prove to be only minor obstacles for European economies, and the continent finally begins to pull out of the doldrums. Emerging markets also pick up momentum as China resolves its financial problems, and India and Brazil start to adopt more reforms. Capital flows out of the United States and into Europe and the developing world, pushing the dollar lower, further enhancing US exports. Lower US energy prices make the United States even more competitive. At home, the resolution of budget issues at both the federal and state levels allows more money to flow into infrastructure investment, creating short-term demand and long-term productivity growth.” – Dr. Daniel Bachman, Senior Manager US Macroeconomics, Deloitte Services LP

Private Indicators

Deloitte US Economic Forecast: 2016 Q1

Housing

“Every year, untold thousands of young Americans abandon the nest, happy to leave home and start their own households. But more than usual stayed put during the recession: The number of households didn’t grow nearly enough to account for all the newly minted young adults. We expect those young adults would prefer to live on their own and create new households; as the economy recovers, they will likely do exactly that — as previous generations have.

This means some positive fundamentals for housing construction in the short run. Since 2008, the United States has been building fewer new housing units than the population would normally require; in fact, housing construction was hit so hard that the oversupply turned into an undersupply. But the hole isn’t as large as you might think. Several factors offset each other:

1. If household size returns to mid-2000s levels, we would need an additional 3.2 million units.
2. On the other hand, household vacancy rates are much higher than normal. Vacancy returning to normal would make available an additional 2.5 million units — which would fill 78 percent of the pent-up demand for housing units.
3. But are the existing vacant houses in the right place or condition, or are they the right type, for that pent-up demand? The future of housing may look very different than in the past. Growth in new housing construction has been concentrated in multifamily units. If that continues, we may find it is related to young buyers’ growing reluctance to settle in existing single-family units.”

– Dr. Daniel Bachman, Senior Manager US Macroeconomics, Deloitte Services LP

Private Indicators

Deloitte US Economic Forecast: 2016 Q1

Housing

“ In developing our housing forecast, we assumed that the demand for housing (in the form of the average household’s size decreasing) picks up in 2016, vacancy rates gradually drop, and household depreciation begins falling after new renters and buyers remove about 2.5 million housing units from the nation’s housing surplus. Slowing population growth suggests that we will have a short-lived housing boom in which starts hit the 1.5–1.6 million level, followed by a period of contraction until starts reach the level of long-run demand. We estimate this to be just 1.2 million units in the medium term. Housing will likely contribute to GDP growth in 2016 but subtract from GDP growth by 2018 as the pent-up demand goes away. In the long run, the slowing population suggests that housing will not be a growth sector (although specific segments, such as old-age housing, might well be very strong).

Tight housing credit may be a key culprit in keeping individual purchases of single-family houses low, although there are some signs that credit is loosening. Young adults also seem to be showing a preference for living in urban rather than suburban communities. There may be some significant changes from the post–World War II model of single-family home ownership in store.

Housing news

Housing permits have been stable at about 1.2 million units over the past few months. This is enough to meet the long-run demand but not enough to fill the deficit left by low construction levels from 2008 to 2014.

Multiunit permits have been growing faster than single-family permits, and are now at the pre-recession level.

Contract interest rates for conventional mortgages remained at just about 3.9 percent through January. Rates remain very low (although not quite as low as in late 2012 and early 2013). House prices continue to slowly rise and were up 5.4 percent (according to the Case-Shiller measure) over the 12 months ending in November.” – Dr. Daniel Bachman, Senior Manager US Macroeconomics, Deloitte Services LP

Private Indicators

Figure 3. Housing



Source: Deloitte/Oxford Economics.

Graphic: Deloitte University Press | DUPress.com

Private Indicators

Small Business Optimism Index Decreases 0.3 to 92.6

Based on 10 survey indicators, seasonally adjusted, Jan. '00 – Mar. '16



NFIB.COM/sbet

Small Business Optimism Drops To A New Two Year Low

“The Index of Small Business Optimism fell 0.3 points from February, falling to 92.6. Statistically, no change. Four of the 10 Index components posted a gain, six posted small declines, the biggest gain was in Expected Business Conditions, a 4 point improvement to a still very negative number.

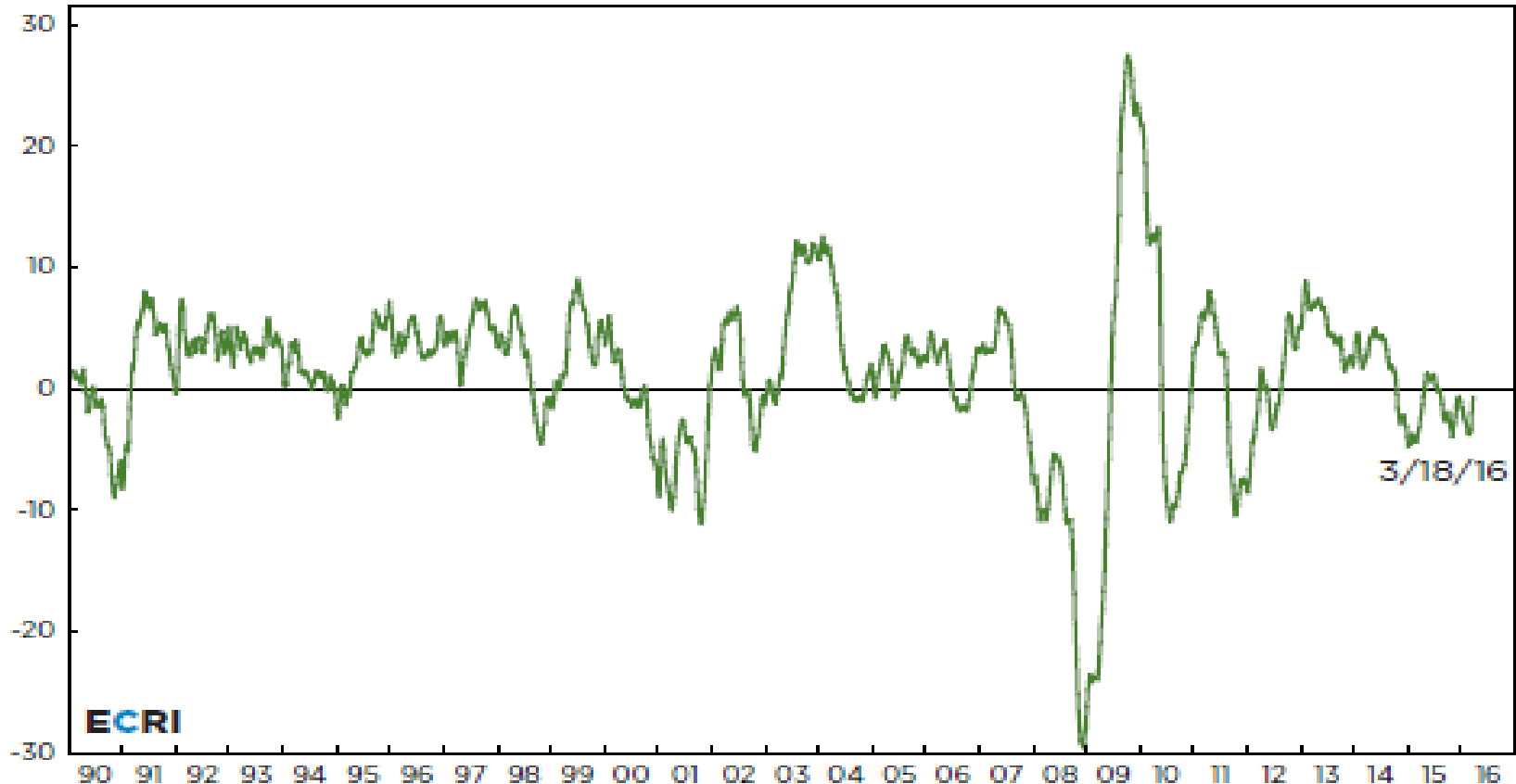
For a broader perspective, the Index has turned decidedly “south” over the last 15 months falling from a reading of 100 in December 2014 to 92.8. A “chartist” looking at the data historically might conclude that the Index has clearly hit a top and is flashing a recession signal. The April survey will decide whether or not the alarm should be rung. This month’s change was not statistically significant, just not in a positive direction.”

“Owners remain very pessimistic about the economy, a view unfortunately reinforced by Fed Chair Yellen’s back peddling on the timing of the next rate hike. She seems to be afraid of something, and this only adds to uncertainty on Main Street. Is the real economy so fragile that a 25 basis point increase will sink it, or is she more concerned about financial markets than the real economy? Stocks did applaud her walk back.

The political climate continued to be the second most frequently cited reason (after weak sales and a poor economy) for why the current period is a bad time to expand. Seasonally unadjusted, 51 percent characterized the current period as a bad time to expand. Only 8 percent thought the time was right for expansion. University of Michigan’s Consumer Sentiment Index posted a modest decline, no encouragement for improved spending there. Overall, the message is “more plodding ahead.” – William Dunkelberg, Chief Economist, National Federation of Independent Business

Private Indicators

Weekly Leading Index, Growth Rate (%)

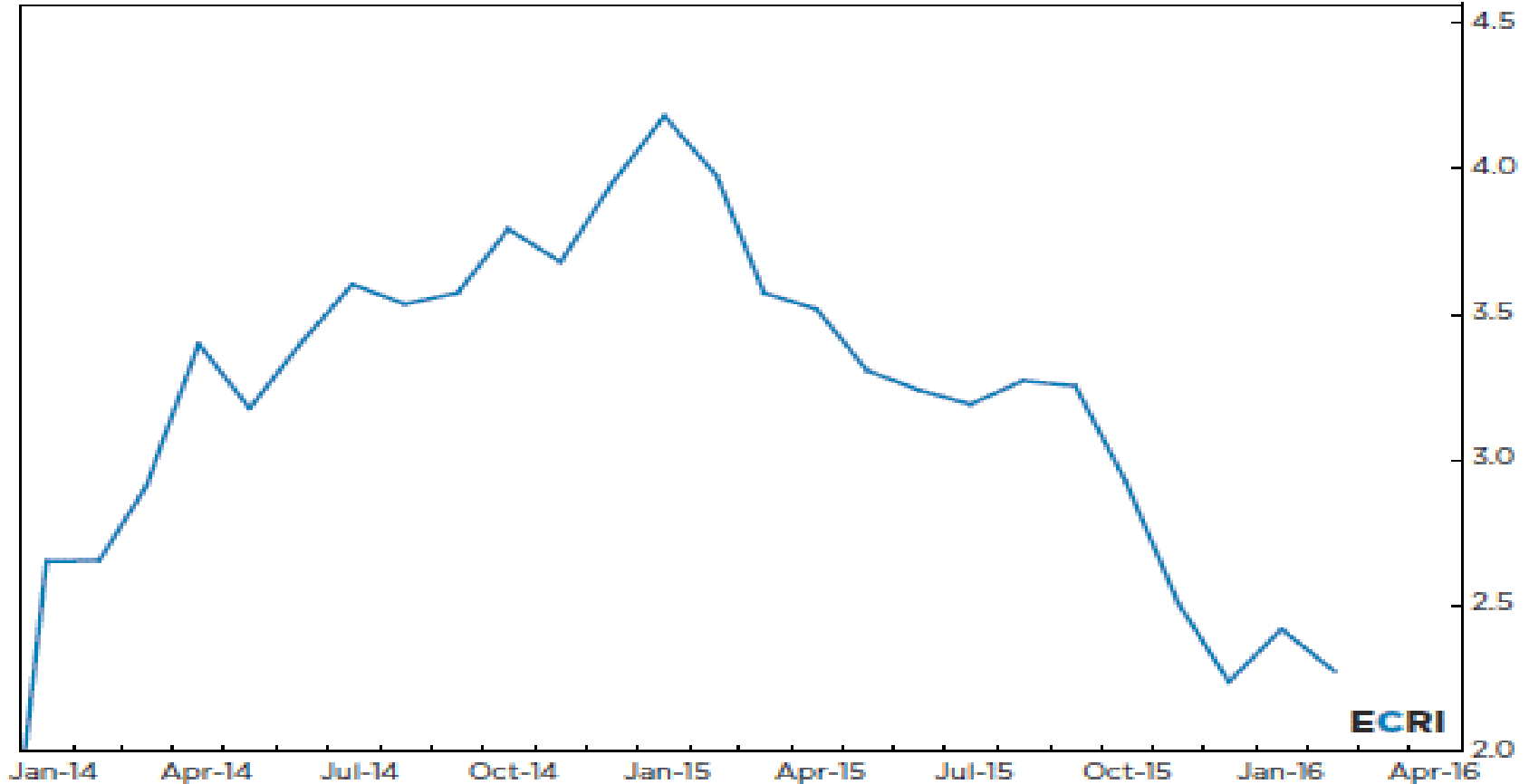


U.S. Weekly Leading Index Increased

“The U.S. Weekly Leading Index increased to 132.4 from 131.8. The growth rate rose to -0.7% from -2.0%.” – ECRI

Private Indicators

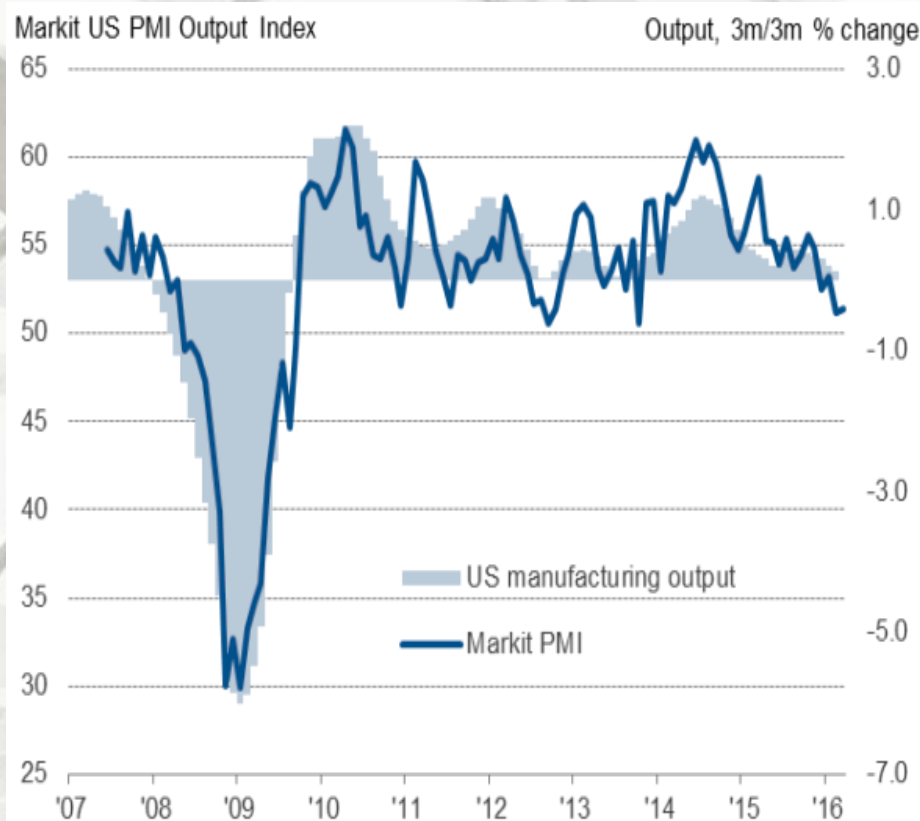
U.S. Coincident Index, Growth Rate (%)



U.S. Coincident Index Growth Rate Ticks Down

“The U.S. Coincident Index (USCI) slipped to 170.5 in February. Year-over-year (yoy) growth in ECRI’s USCI, a broad measure of economic activity that includes GDP, employment, income and sales, has ticked down to 2.3% from 2.4%.” – ECRI

Private Indicators



US economic malaise extends into March as new work inflows hit post-recession low

“The US economy is going through its worst growth spell for three and a half years, according to flash PMI survey data from Markit. The headline index from the two PMI national surveys covering manufacturing and services had fallen to the stagnation-level of 50.0 in February and rose only modestly in March to 51.1. That was the third-lowest reading seen since the global financial crisis.

Collectively, the surveys point to the weakest quarterly expansion of the economy since the third quarter of 2012. The PMI surveys suggest the economy grew at a meagre 0.7% annualised rate in the first quarter, down from 1.0% in the fourth quarter of last year.

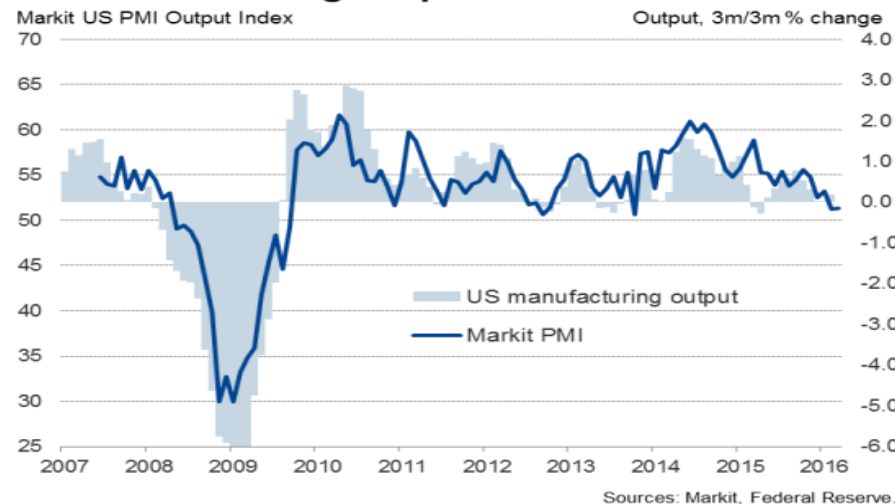
Output indices in both manufacturing and services remained near post-crisis lows in March, failing to revive from recent lows seen in February.”

“The lack a strong rebound in March is a big disappointment, as bad weather had been blamed by companies for part of the weakness in the first two months of the year. Worse may be to come. The greatest concern is the near-stalling of new business growth. The survey’s indices of new order inflows indicate that demand for goods and services is growing at the slowest rate seen this side of the global financial crisis.

It’s not surprising therefore that firms lack pricing power, as reflected in a near-stagnation of average selling prices in recent months. One positive is that the rate of hiring remained impressively resilient, signalling another month of 200,000 non-farm payroll growth in March. However, such strong hiring at a time of weak output growth suggests productivity is deteriorating at the fastest rate seen over the past six years.” – Chris Williamson, Chief Economist, Markit®

Private Indicators

US manufacturing output v Markit PMI



Weak flash US manufacturing PMI rounds off worst quarter since mid-2012

“US factories continue to endure their worst spell for three-and-a-half years.

At 51.4, the seasonally adjusted Markit Flash PMI was up only fractionally from 51.3 in February. Moreover, at 51.7, the average PMI reading for the first quarter as a whole points to the weakest improvement over any quarter since the third quarter of 2012.”

“Headwinds reported by companies include reduced spending by the struggling energy sector, the strength of the dollar, persistent weak global demand and growing uncertainty caused by the looming presidential election. New work from abroad was unchanged, following a marginal decline in February, and overall order books showed one of the smallest increases recorded in recent years, albeit slightly better than February.

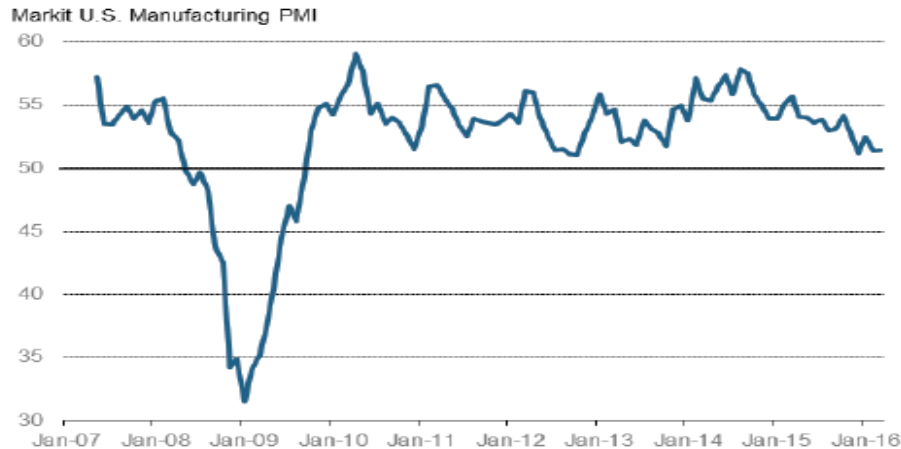
While some comfort might be drawn from the marginal rise in the PMI compared to February, the rate of growth remains worryingly weak and the lack of a stronger rebound is a disappointment, given that many companies reported bad weather to have hit activity in the first two months of the year.

On the prices front, the latest survey indicated that manufacturers’ average input costs dropped for the seventh month running, leading to a second consecutive month of falling factory gate prices.

The persistent weakness of the manufacturing indices seen in March therefore ends a disappointing quarter for industry. When viewed alongside the similar downturn seen in the sister services PMI in February, the survey data are pointing to very modest GDP growth in the first quarter. Hopes are therefore pinned on a rise in Thursday’s services flash PMI for March to reassure that the economy is not completely stalling.” – Chris Williamson, Chief Economist, Markit®

Private Indicators

Markit U.S. Manufacturing PMI (seasonally adjusted)



Source: Markit.

Markit Flash U.S. Manufacturing PMI™

Subdued pace of manufacturing growth persists in March

“Key points:

- U.S. Manufacturing PMI remains only slightly above the 50.0 no-change mark
- Output and new business volumes rose at a slightly faster rate than in February
- Factory gate charges decrease for the second month running”

“March data indicated subdued growth momentum across the U.S. manufacturing sector, thereby continuing the trend seen throughout 2016 to date. At 51.4, the seasonally adjusted Markit Flash U.S. Manufacturing Purchasing Managers’ Index™ (PMI™) was up fractionally from 51.3 in February, but still well below the post-crisis average (54.1).

Moreover, looking at the average PMI reading for Q1 as a whole (51.7), the headline index pointed to the weakest improvement over any quarter since Q3 2012.

Slightly stronger rates of output, new business and employment growth helped to support the headline index in March, while a key factor weighing on the headline index was the sharpest decline in pre-production inventories since January 2014.

Although manufacturing production growth picked up from the 28-month low recorded in February, the latest rise was only marginal and one of the weakest seen over the past two-and-a-half years. Anecdotal evidence from survey respondents suggested that relatively subdued demand conditions and, in some cases, efforts to streamline post-production stocks, had acted as a headwind to output growth in March.” – Chris Williamson, Chief Economist, Markit®

Private Indicators



US industrial sector on course for flat first quarter

“US factory output rose slightly in February, according to official data from the Federal Reserve. But the overall rate of expansion remains disappointingly lacklustre, mirroring downbeat survey data and adding to the picture of a struggling economy so far this year.

Factories produced 0.2% more than in January, building on a revised 0.8% rise at the start of the year. The upturn raises the possibility of production expanding in the first quarter after stalling in the final three months of last year. So far, output is running 0.4% higher than in the fourth quarter. However, this still represents only a meagre 1.7% annualised pace of expansion, highlighting how producers continue to struggle in the face of waning global demand and the strong dollar. Adding to the concern was a 0.5% drop in industrial production in February, as rising factory output was offset by energy sector losses. Utilities output fell 4.0%, almost entirely reversing a 4.2% leap in January.

The industrial sector as a whole is therefore on course for a flat first quarter. When combined with the mere 0.2% rise signalled for recent core retail sales data, the industrial malaise adds to suggestions that the pace of economic growth could disappoint in the first quarter compared to widespread expectations among analysts of 2-2.5% annualised growth.” – Chris Williamson, Chief Economist, Markit®

Private Indicators

Data collected 11 – 23 March.

Service sector business activity (seasonally adjusted)

Markit US Services PMI Business Activity Index



Sources: Markit

Markit Flash U.S. Services PMI™

New business growth eases to post-crisis low in March

“Key points:

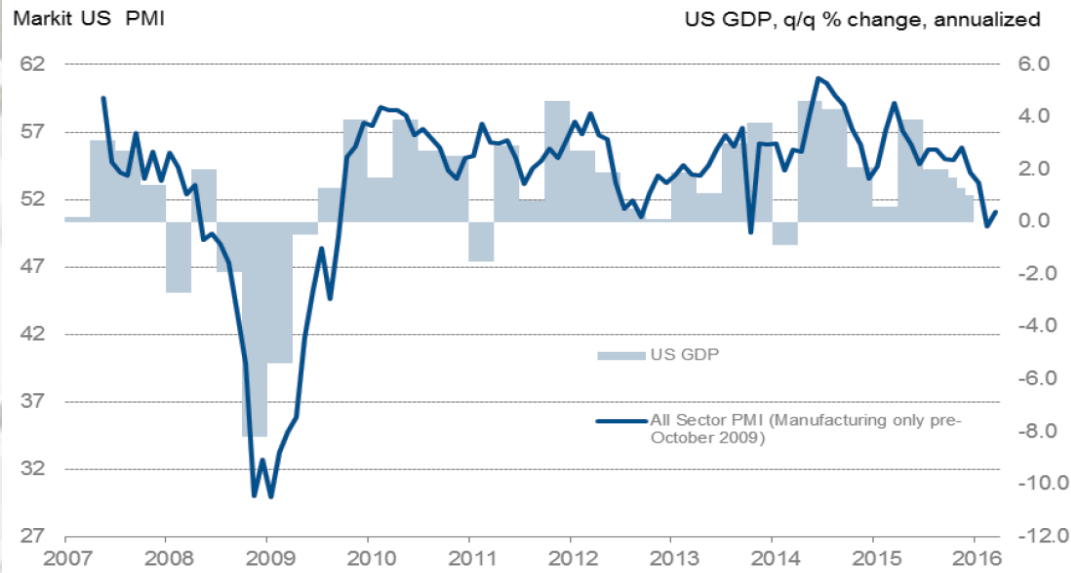
- Weak rebound in service sector activity following weather-related disruption in February
- Softest expansion of new business since the survey began in October 2009
- Payroll numbers rise at solid clip, but confidence about the business outlook remains subdued”

“U.S. service providers indicated a return to business activity growth during March, following a decline that was partly driven by east coast snow disruptions in February. However, the rebound in services output was only marginal, suggesting an underlying slowdown in growth momentum so far this year. At the same time, latest data indicated that new business levels expanded at the weakest pace since the survey began in October 2009.

The seasonally adjusted **Markit Flash U.S. Services PMI™ Business Activity Index** registered 51.0 in March, up from 49.7 in February, to indicate only a marginal expansion of service sector activity. As a result, the latest index reading – which is based on approximately 85% of usual monthly replies – remained well below its post-crisis trend (55.6). Moreover, the average reading for the first three months of 2016 (51.3) revealed the slowest quarterly pace of expansion since Q3 2012.” – Chris Williamson, Chief Economist, Markit®

Private Indicators

Markit Composite PMI and U.S. GDP



Source: Markit, U.S. Bureau of Economic Analysis.

“The US economy is going through its worst growth spell for three and a half years. The lack of a strong rebound in service sector activity in March is a big disappointment, as bad weather had been blamed for part of the weakness in the first two months of the year.

Combined with the lacklustre performance seen in manufacturing, the subdued services survey points to the weakest quarterly expansion of the economy since the third quarter of 2012. The PMI surveys suggest the economy grew at a worryingly meagre 0.7% annualised rate in the first quarter.” – Chris Williamson, Chief Economist, Markit®

Worst may be to come. The greatest concern is the near-stalling of new business growth. Demand for goods and services is growing at the slowest rate seen this side of the global financial crisis. It's not surprising therefore that companies lack pricing power, as reflected in a near-stagnation of average selling prices in recent months.

One positive is that the rate of hiring remained impressively resilient, signalling another month of 200,000 non-farm payroll growth in March. However, such strong hiring at a time of weak output growth suggests productivity is trending down at the fastest rate seen over the past six years.” – Chris Williamson, Chief Economist, Markit®

Private Indicators

U.S. Economic Confidence Index Dips to -13

U.S. Economic Confidence Index -- Weekly Averages Since March 2015

Latest results for week ending March 27, 2016



Gallup U.S. Daily tracking

GALLUP

GALLUP DAILY

REAL UNEMPLOYMENT
Department of Labor (U-6)

9.8% +0.1

GALLUP GOOD JOBS
Percent of Adult Population

44.3% -0.1

ENGAGED AT WORK

33.9% -0.2

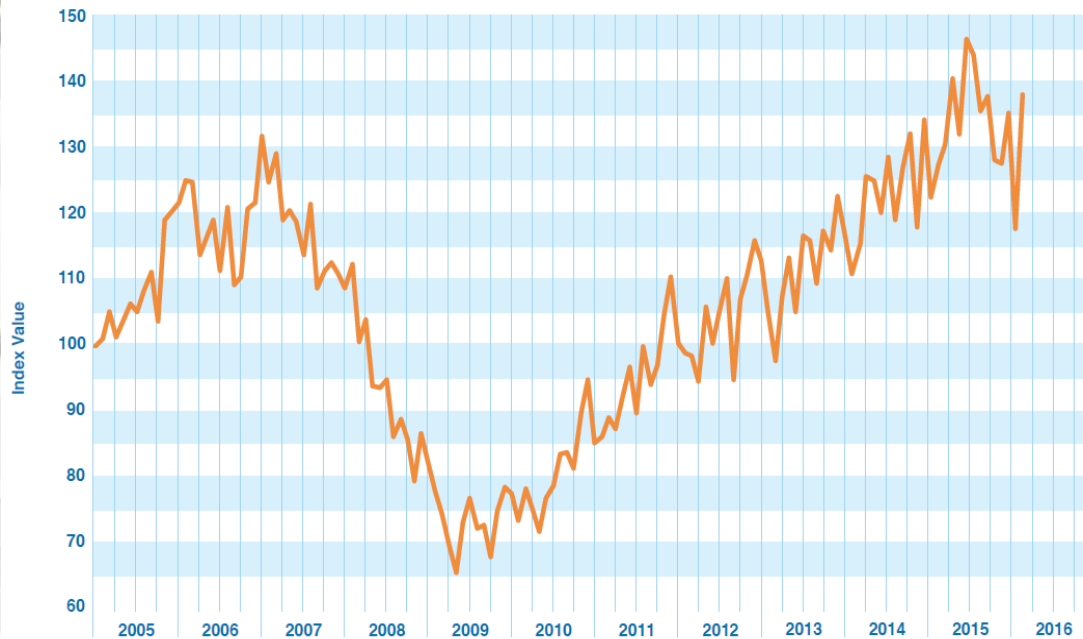
“Americans' confidence in the economy dipped last week, with the U.S. Economic Confidence Index averaging -13 for the week ending March 27. This score is down from -9 the previous week. Since July, Americans' economic confidence has remained fairly steady, apart from a couple of exceptions in late August and mid-January. Before falling back to -13 last week, index scores in recent weeks began to show signs of improving confidence. The terrorist attacks in Brussels last week could have shaken Americans' confidence in the long-term stability of the global or U.S. economy. Confidence remains below where it was in early 2015, when weekly index scores were positive or just slightly negative.” – Justin McCarthy, Gallup

Private Indicators

Thomson Reuters/PayNet Small Business Lending Index

U.S. Small Business Lending Increases Sharply: PayNet

Thomson Reuters/PayNet Small Business Lending Index (SBLI)
(January 2005 - February 2016)



“U.S. small business borrowing rose 17 percent in February, data released on Monday showed, making up for ground lost over the past several months that had raised prospects of weak economic growth ahead.

The Thomson Reuters/PayNet Small Business Lending Index jumped to 138 in February from January's downward-revised 117.7, the lowest level in nearly two years. The PayNet index typically corresponds to U.S. gross domestic product growth one or two quarters ahead.”

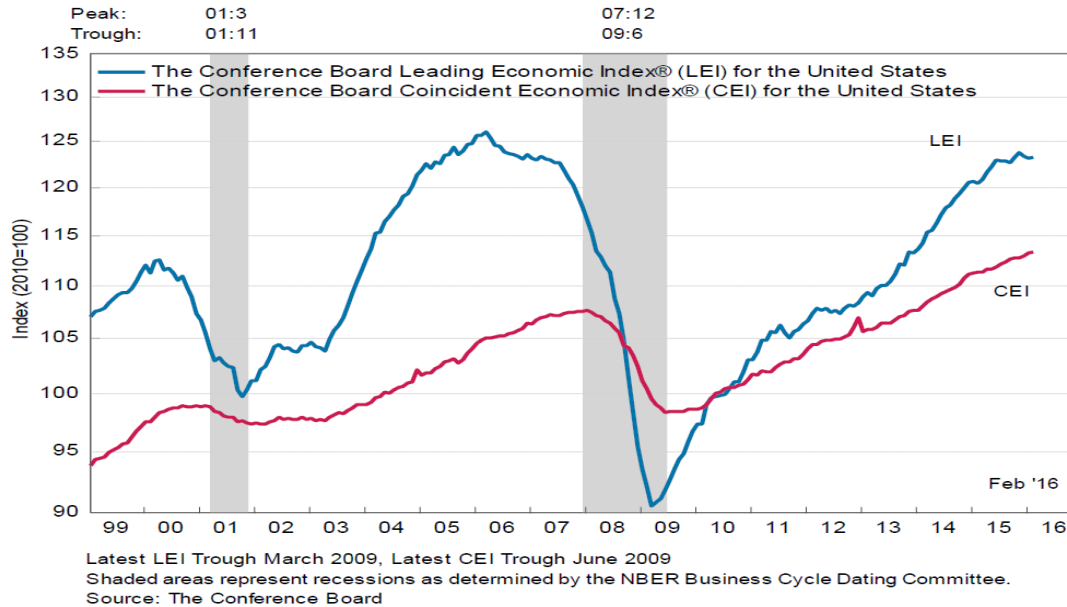
“Borrowing and investment have “come back to life,” said Bill Phelan, president of PayNet, adding that he expects lending growth to “plod along” rather than boom in coming months.

Small business borrowing is a key barometer of growth because little firms tend to do much of the hiring that drives economic gains. Loans more than 30 days past due fell in February to 1.47 percent, separate data from PayNet showed. The decline suggests improving financial health even as companies borrow more.” – Ann Saphir, PayNet

Private Indicators

The Conference Board Leading Economic Index® (LEI)
Modest Economic Expansion to Continue Through Early 2016

The Conference Board Leading Economic Index® (LEI) for the U.S. Increased in February



““The U.S. LEI increased slightly in February, after back-to-back monthly declines, but housing permits, stock prices, consumer expectations, and new orders remain sources of weakness.

Although the LEI's six-month growth rate has moderated considerably in recent months, the outlook remains positive with little chance of a downturn in the near-term." – Ataman Ozyildirim, Director of Business Cycles and Growth Research, The Conference Board

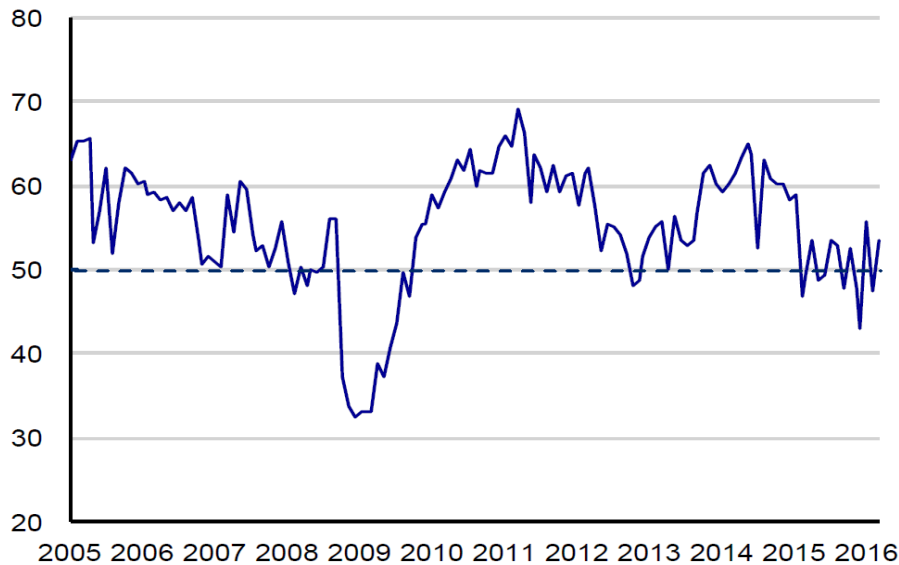
“The Conference Board **Leading** Economic Index® (LEI) for the U.S. increased 0.1 percent in February to 123.2 (2010 = 100), following a 0.2 percent decline in January, and a 0.3 percent decline in December.

The Conference Board **Coincident** Economic Index® (CEI) for the U.S. increased 0.1 percent in February to 113.3 (2010 = 100), following a 0.3 percent increase in January, and a 0.2 percent increase in December.

The Conference Board **Lagging** Economic Index® (LAG) for the U.S. increased 0.4 percent in February to 120.4 (2010 = 100), following a 0.1 percent increase in October, and no change in December.” – The Conference Board

Private Indicators

Chicago Business Barometer™



March Chicago Business Barometer™ Up 6.0 pts to 53.6

“The Chicago Business Barometer increased 6.0 points to 53.6 in March, led by sharp bouncebacks in Production and Employment.

Four of the five Barometer components increased between February and March, with only Supplier Deliveries declining on the month. Movements in the Barometer and its components have been volatile over the past few months, while trend growth has remained weak. March’s positive outturn, though, left the three month trend at the highest for just over a year and the Q1 average at the highest since Q4 2014.”

<https://s3.amazonaws.com/images.chaptermanager.com/chapters/b742ccc3-ff70-8eca-4cf5-ab93a6c8ab97/files/mni-chicago-press-release-2016-03.pdf>

Institute of Supply Management™

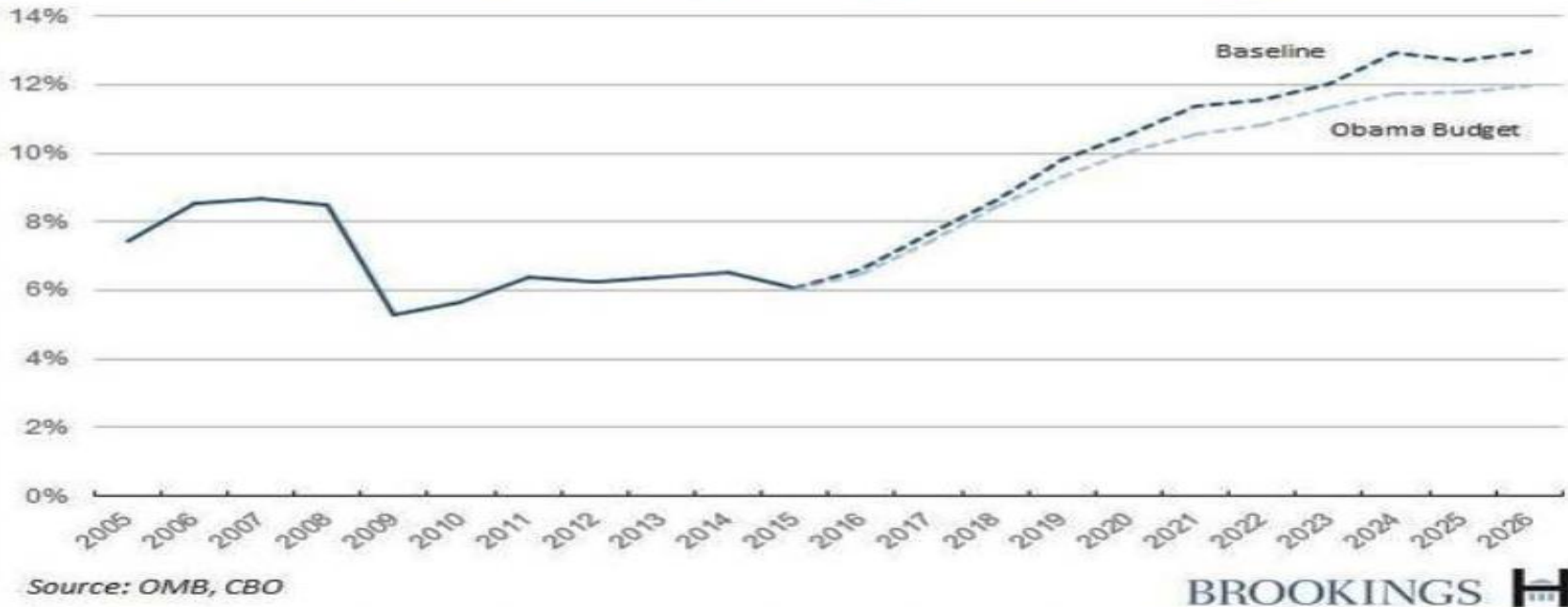
PMI® at 51.8% - 49.5% in January

New Orders and Production Growing, Employment and Inventories Contracting, Supplier Deliveries Slower

“Economic activity in the manufacturing sector expanded in March for the first time in the last six months, while the overall economy grew for the 82nd consecutive month, say the nation’s supply executives in the latest Manufacturing ISM® Report On Business®. The New Orders Index registered 58.3 percent, an increase of 6.8 percentage points from the February reading of 51.5 percent. The Production Index registered 55.3 percent, 2.5 percentage points higher than the February reading of 52.8 percent. The Employment Index registered 48.1 percent, 0.4 percentage point below the February reading of 48.5 percent. Inventories of raw materials registered 47 percent, an increase of 2 percentage points above the February reading of 45 percent. The Prices Index registered 51.5 percent, an increase of 13 percentage points above the February reading of 38.5 percent, indicating higher raw materials prices for the first time since October 2014. Manufacturing registered growth in March for the first time since August 2015, as 12 of our 18 industries reported sector growth, and 13 of our 18 industries reported an increase in new orders in March.”
Bradley Holcomb, CPSM, CPSD, Chair of the ISM® Manufacturing Business Survey Committee.

Private Indicators

**The rising cost of federal borrowing:
Net interest as a percentage of total outlays**



In CBO's Projections, a Growing Reason to Worry About the Federal Debt

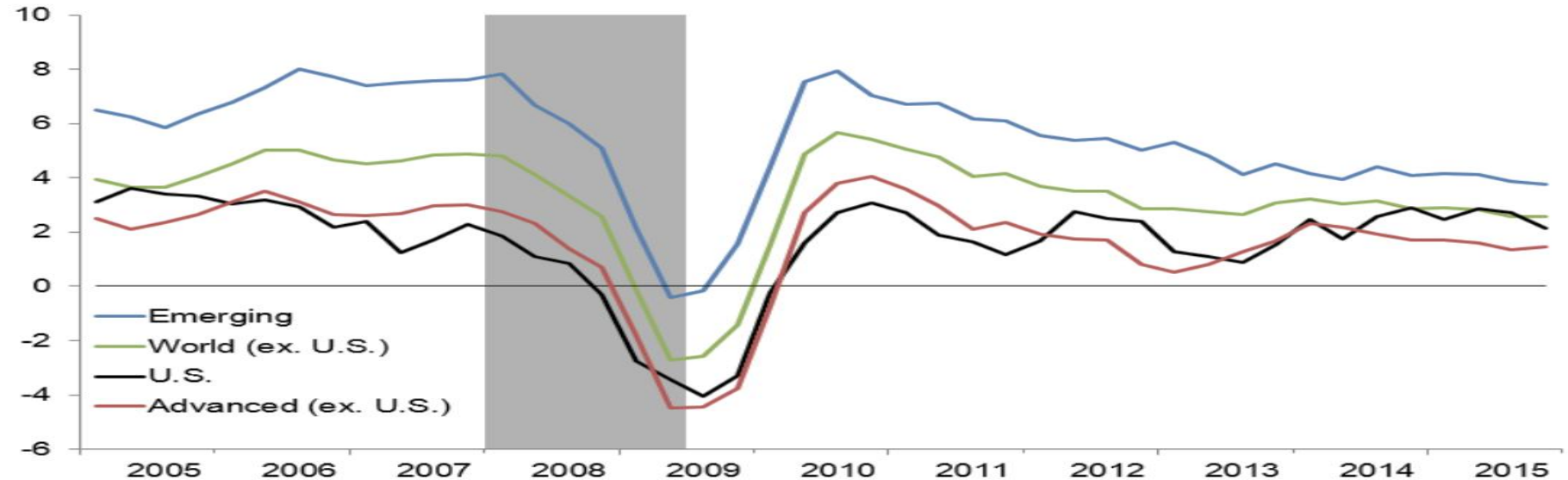
“The federal debt, the sum total of all the government’s past borrowing, is huge by historical standards: bigger as a share of the economy than at any time in U.S. history except for World War II. Yet the U.S. Treasury still is able to borrow billions every day at very low interest rates. Investors demand less than 2% to lend to the Treasury for 10 years.

But the trajectory of the debt is worrisome for one inescapable reason: When you owe a lot of money and interest rates rise, your interest tab mounts.” – David Wessel, Director, Hutchins Center on Fiscal & Monetary Policy, Brookings Institution

Federal Reserve Indicators: Global

Chart 1
Global Growth Slows

Percent, year/year



NOTES: Aggregated using U.S. trade weights. Shaded bar indicates global recession.
SOURCES: Database of Global Economic Indicators; Haver Analytics; author's calculations.

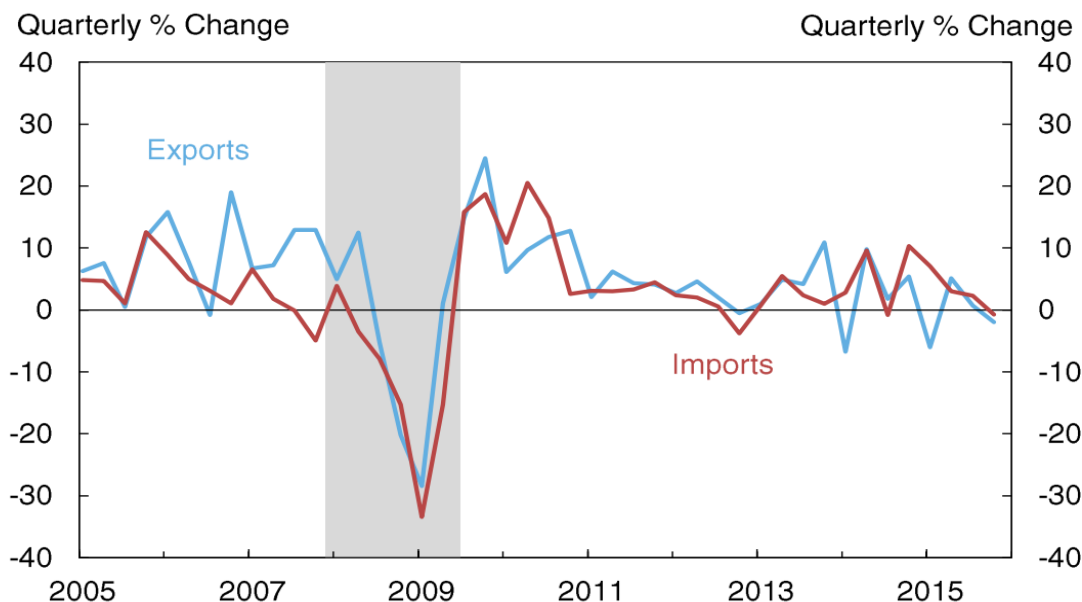
Federal Reserve Bank of Dallas Global Output Slumps

“Global growth is slowing (Chart 1). Fourth-quarter real gross domestic product (GDP) growth in emerging markets was below 4 percent, its lowest level since 2003, except for during the 2009 recession. Advanced foreign economies slowed as well; consequently, global GDP growth is at its lowest since 2009. This global slowdown made U.S. exports to emerging markets decline considerably, while exports to advanced economies grew slightly.

The global economy seems to be dancing on thin ice. The divergence of monetary policy is creating uncertainty, while the global slowdown is causing turmoil among emerging economies and their currencies.” – Arthur Hinojosa, Research Assistant, Globalization and Monetary Policy Institute, The Federal Reserve Bank of Dallas.

Federal Reserve Indicators: Global

Real Exports and Imports of Goods and Services



Source: Bureau of Economic Analysis,
via Haver Analytics

Note: Shading shows NBER recessions.

Federal Reserve Bank of New York Export Growth Slumped in Q4

“Real exports fell 2.7 percent in 2015Q4 (SAAR), following low growth Q3.

Exports rebounded in February, offsetting the 2.2 percent decline in January.

Over the year, real export growth was slightly positive, after four consecutive months of negative growth.

Real imports fell 0.7 percent in 2015Q4 (SAAR), following sluggish growth in the previous quarter.

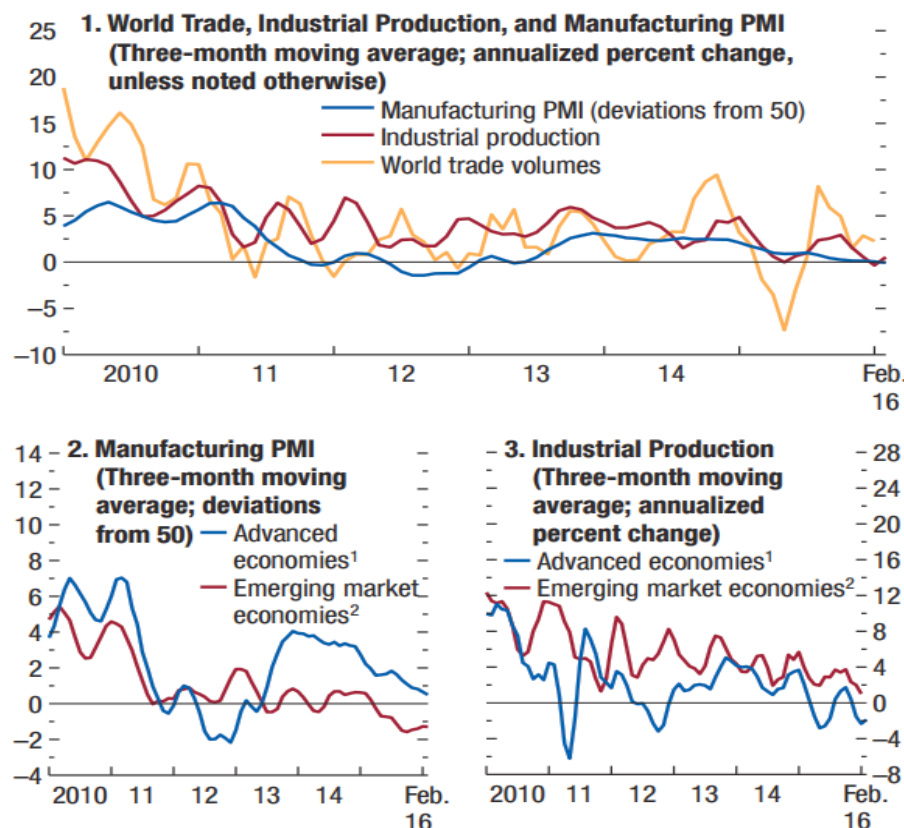
After showing very weak or negative growth since September 2015, real nonoil imports were up 2.4% in February.

Net exports subtracted 0.3 percentage point from the GDP growth in the second half of 2014.” – Research & Statistics Group, The Federal Reserve Bank of New York

Private Indicators: Global

Figure 1.1. Global Activity Indicators

Global trade volumes rebounded in the second half of 2015 after contracting sharply in the first half of the year. Global industrial production remained subdued throughout the year. Global growth slowed in the last quarter of 2015. In both advanced and emerging market and developing economies, the growth projections suggest some pickup in activity in 2016, but to generally weaker levels than projected in the October 2015 *World Economic Outlook*.

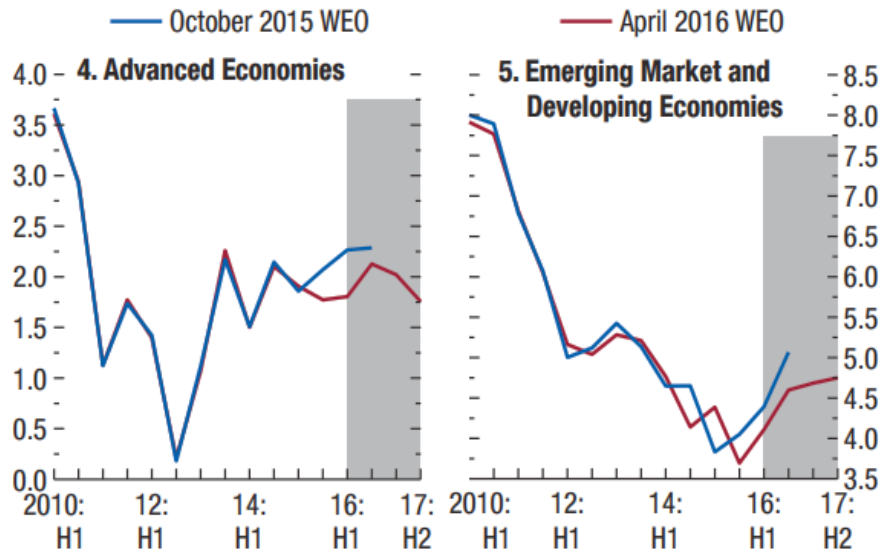


International Monetary Fund Too Slow for Too Long

“The baseline projection for global growth in 2016 is a modest 3.2 percent, broadly in line with last year, and a 0.2 percentage point downward revision relative to the January 2016 [World Economic Outlook Update](#). The recovery is projected to strengthen in 2017 and beyond, driven primarily by emerging market and developing economies, as conditions in stressed economies start gradually to normalize. But uncertainty has increased, and risks of weaker growth scenarios are becoming more tangible. The fragile conjuncture increases the urgency of a broad-based policy response to raise growth and manage vulnerabilities.” – International Monetary Fund

Private Indicators: Global

GDP Growth
(Annualized semiannual percent change)



Sources: CPB Netherlands Bureau for Economic Policy Analysis; Haver Analytics; Markit Economics; and IMF staff estimates.

Note: IP = industrial production; PMI = purchasing managers' index.

¹Australia, Canada, Czech Republic, Denmark, euro area, Hong Kong SAR (IP only), Israel, Japan, Korea, New Zealand, Norway (IP only), Singapore, Sweden (IP only), Switzerland, Taiwan Province of China, United Kingdom, United States.

²Argentina (IP only), Brazil, Bulgaria (IP only), Chile (IP only), China, Colombia (IP only), Hungary, India, Indonesia, Latvia (IP only), Lithuania (IP only), Malaysia (IP only), Mexico, Pakistan (IP only), Peru (IP only), Philippines (IP only), Poland, Romania (IP only), Russia, South Africa, Thailand (IP only), Turkey, Ukraine (IP only), Venezuela (IP only).

International Monetary Fund Too Slow for Too Long

“The global recovery has weakened further amid increasing financial turbulence. Activity softened toward the end of 2015 in advanced economies, and stresses in several large emerging market economies showed no signs of abating. Adding to these headwinds are concerns about the global impact of the unwinding of prior excesses in China’s economy as it transitions to a more balanced growth path after a decade of strong credit and investment growth, along with signs of distress in other large emerging markets, including from falling commodity prices. With heightened risk aversion and increasing concerns about the lack of policy space, the valuation of risky assets as well as oil prices dropped sharply in early 2016. However, market sentiment began to improve in mid-February, and by the end of March market valuations had recovered most of or all the ground lost earlier in the year.” – International Monetary Fund

Private Indicators: Global

Table 1: Merchandise trade volume and real GDP, 2012-2017a. Annual% change

Volume of world merchandise trade	2.2	2.4	2.8	2.8	2.8	3.6
Exports						
Developed economies	1.1	1.7	2.4	2.6	2.9	3.8
Developing and emerging economies	3.8	3.8	3.1	3.3	2.8	3.3
North America	4.5	2.8	4.1	0.8	3.1	4.0
South and Central America	0.9	1.2	-1.8	1.3	1.9	1.9
Europe	0.8	1.7	2.0	3.7	3.1	4.1
Asia	2.7	5.0	4.8	3.1	3.4	4.0
Other regions ^b	3.9	0.7	0.0	3.9	0.4	0.4
Imports						
Developed economies	-0.1	-0.2	3.5	4.5	3.3	4.1
Developing and emerging economies	4.9	5.0	2.1	0.2	1.8	3.1
North America	3.2	1.2	4.7	6.5	4.1	5.3
South and Central America	0.7	3.6	-2.2	-5.8	-4.5	5.1
Europe	-1.8	-0.3	3.2	4.3	3.2	3.7
Asia	3.7	4.8	3.3	1.8	3.2	3.3
Other regions ^b	9.9	3.7	-0.5	-3.7	-1.0	1.0
Real GDP at market exchange rates (2005)	2.2	2.2	2.5	2.4	2.4	2.7
Developed economies	1.1	1.0	1.7	1.9	1.8	2.0
Developing and emerging economies	4.7	4.5	4.2	3.4	3.5	4.2
North America	2.3	1.5	2.4	2.3	2.3	2.5
South and Central America	2.8	3.3	1.0	-1.0	-1.7	1.1
Europe	-0.2	0.4	1.5	1.9	1.8	2.0
Asia	4.4	4.4	4.0	4.0	4.0	3.9
Other regions ^b	3.8	2.6	2.5	0.9	1.7	2.9

a Figures for 2016 and 2017 are projections; b Other regions comprise Africa, Commonwealth of Independent States and Middle East. Sources: WTO Secretariat for trade, consensus estimates for GDP.

“Trade is still registering positive growth, albeit at a disappointing rate. This will be the fifth consecutive year of trade growth below 3%. Moreover, while the volume of global trade is growing, its value has fallen because of shifting exchange rates and falls in commodity prices. This could undermine fragile economic growth in vulnerable developing countries. There remains as well the threat of creeping protectionism as many governments continue to apply trade restrictions and the stock of these barriers continues to grow.” – Roberto Azevêdo, Director-General, WTO

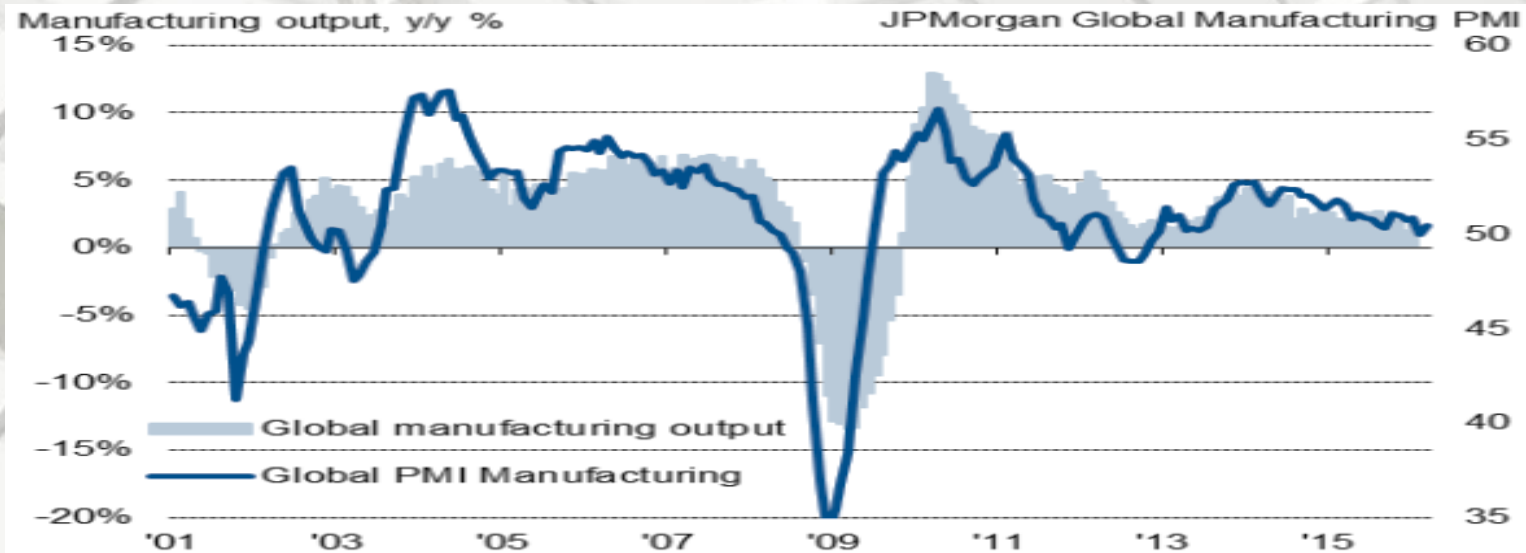
World Trade Organization

Trade growth to remain subdued in 2016 as uncertainties weigh on global demand

“Growth in the volume of world trade is expected to remain sluggish in 2016 at 2.8%, unchanged from the 2.8% increase registered in 2015. Imports of developed countries should moderate this year while demand for imported goods in developing Asian economies should pick up. Global trade growth should rise to 3.6% in 2017.

... Risks to this forecast are mostly on the downside, including a sharper than expected slowing of the Chinese economy, worsening financial market volatility, and exposure of countries with large foreign debts to sharp exchange rate movements. On the other hand, there is some upside potential if monetary support from the European Central Bank succeeds in generating faster growth in the euro area.”

Private Indicators: Global



J.P. Morgan Global Manufacturing PMI™

Global manufacturers see worst quarter for almost three years

“Global factory growth remained near-stagnant in March, according to PMI survey data. The JPMorgan Global PMI, compiled by Markit from its worldwide business surveys, rose from the no-change level of 50.0 seen in February, but at just 50.5 signalled only a marginal improvement in overall conditions. The surveys also pointed to falling global trade flows, declining factory headcounts and an ongoing lack of inflationary pressures, albeit with some signs that deflationary pressures may be easing.

Indices measuring output and new orders both rose in March but remained indicative of weak growth. Historical comparisons suggest the latest PMI Output Index reading points to just 1.5% annual global manufacturing production growth. The export orders index remained especially subdued, pointing to a marginal decline in worldwide trade volumes for a second successive month.

Manufacturing growth over the whole of the eurozone remained disappointingly modest, however, dragged down in particular by poor performances in Germany and France. Similarly, only weak growth was recorded in both the US and the UK, with both countries also showing signs of malaise spreading from manufacturing to services.” – Chris Williamson, Chief Economist, Markit®

Private Indicators: Global



Markit® Global PMI™

“Global economic growth slowed to near-stagnation in February, according to PMI™ survey data. The JPMorgan Global PMI™, compiled by Markit® from its worldwide business surveys, sank to 50.6 from 52.6 in February, its lowest level since October 2012.

More-over, the index was down from 53.2 in February and the weakest recorded since October 2013.

Worse may be to come, as companies’ expectations about future business activity in the global services sector fell to the lowest in over four-and-a-half years.”

J.P. Morgan Global PMI™

Global PMI sinks to lowest since October 2012

“Weakness was again most pronounced in the emerging markets, where the PMI hit its second-lowest since March 2009, dropping below the 50.0 neutral level from 50.2 in February to 49.1. Developed world economies meanwhile reported the weakest growth since April 2013, with the PMI sliding from 53.3 in February to 51.2.

It wasn’t just output that stumbled. Global order books showed the smallest increase for almost three years and employment growth also waned, though net job creation continued to be recorded in the service sector, offsetting job losses in manufacturing. The weakening of demand growth led to a further intensification of deflationary pressures, with average prices charged for goods and services falling slightly, down for the first time in five months.

The slowdown was also broad-based by sector, with near-stalling growth seen in both global manufacturing and services, where PMI output readings of 50.2 and 50.7 respectively were recorded, the lowest since late-2012 in both cases.” – Chris Williamson, Chief Economist, Markit®

Private Indicators: Global



Markit® Global PMI™

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J.P. Morgan Global PMI™

Global factory activity stagnates and payrolls fall

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Private Indicators: Global



China manufacturing PMI shows steepest job losses for seven years

“The Caixin China General Manufacturing PMI™ survey, compiled by Markit, showed business conditions deteriorating at the fastest rate for five months in February. The PMI dropped from 48.4 in February to 48.0.

Production fell at the steepest rate since last September as new order inflows fell for the eleventh time in the past 12 months. Exports led the decline in new order books.

Backlogs of work – which measures firms’ pipelines of orders received but not yet completed – showed the first fall in ten months. Reduced backlogs of work are an indication of firms having excess capacity relative to demand. Stocks of finished goods fell at the fastest rate for over four years as many firms deliberately wound-down inventories in the face of weak demand, focusing on cost-cutting.”

“Perhaps most worrying of all, however, was the accelerating pace of job losses signalled by the survey. Factory employment suffered the largest monthly fall since February 2009, when jobs were being culled at the height of the global financial crisis. The steepening decline in employment indicates that the process of reducing excess capacity in the manufacturing sector is still very much ongoing. We note that larger firms have seen particularly steep job cutting, with a more modest rate of job losses seen in smaller firms.

Consumer facing businesses are suffering the worst conditions, reporting the steepest downturns in production and exports since the global financial crisis in recent months, raising concerns about the extent to which global consumer spending is being buoyed by lower oil prices. Demand, including exports sales, of investment goods such as plant and machinery, has been somewhat more stable in prior months, though declined sharply again in February.” – Chris Williamson, Chief Economist, Markit®

Demographics

Demographics

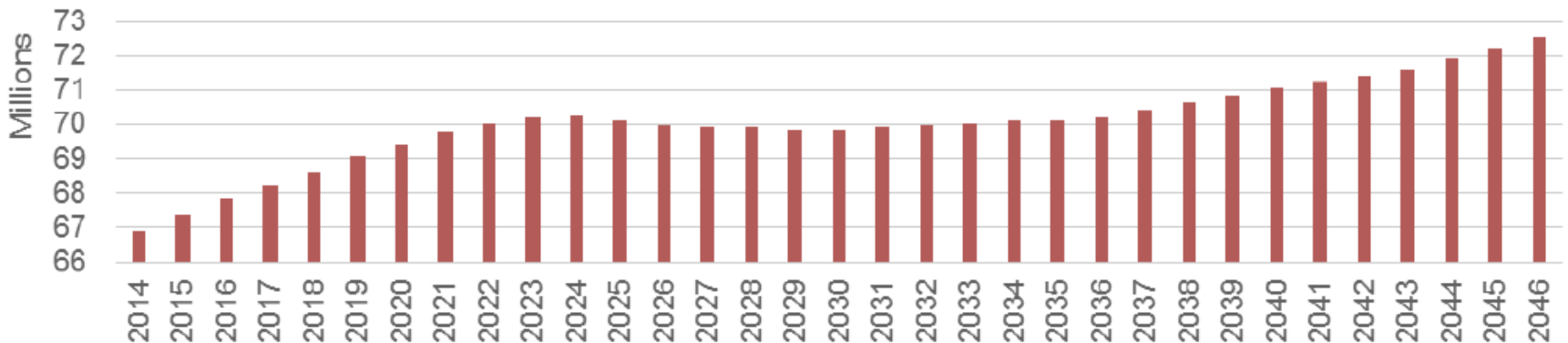
Multifamily Market Commentary – March 2016

The Future of Multifamily: Generation Z

“Some members of the post-Millennial generation – or “Generation Z” – are getting ready to form their own households over the coming decade. What will their housing needs be? How will they compare with baby boomers and Millennials? Most likely, they won’t be very different at all, at least when it comes to multifamily demand.

Today, there are more than an estimated 65 million people under the age of 16. Over the next decade, the oldest of this cohort will start forming households. As the chart below shows, about 70 million people will be between the ages of 20 and 34 by 2024. And if they are anything like previous generations, a sizable percentage of them will become renters of multifamily housing. Despite all the new multifamily construction going on today, there might not be enough of the right rental housing, in the right locations, to meet the demands of this generation.” – Kim Betancourt, Director of Economics and Tim Komosa, Economist Manager, Multifamily Economics and Market Research, Fannie Mae

Population Forecast for 20-34 Year Old Cohort



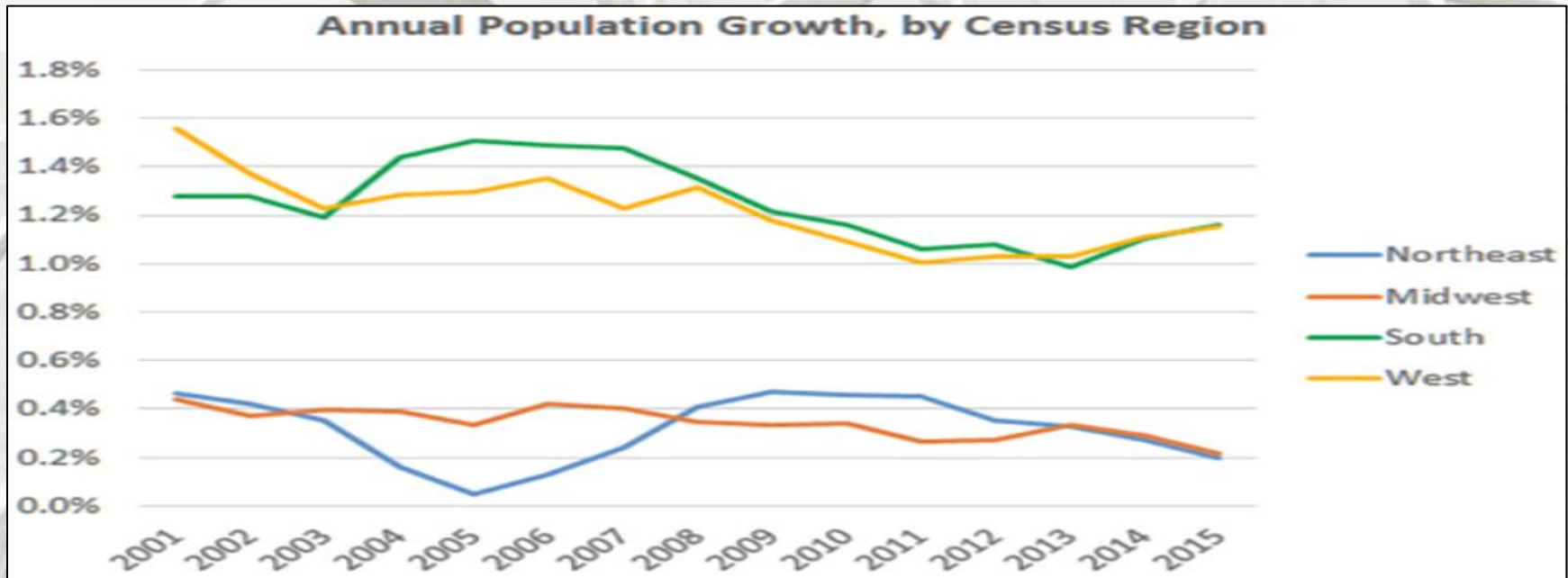
Source: Census Bureau

Demographics

Population Trends Favor the Sunbelt and the Suburbs

“The lists of the fastest and slowing growing metros hint at general patterns in recent population growth. Looking at all counties in the U.S., not just those in metropolitan areas, reveals three trends.

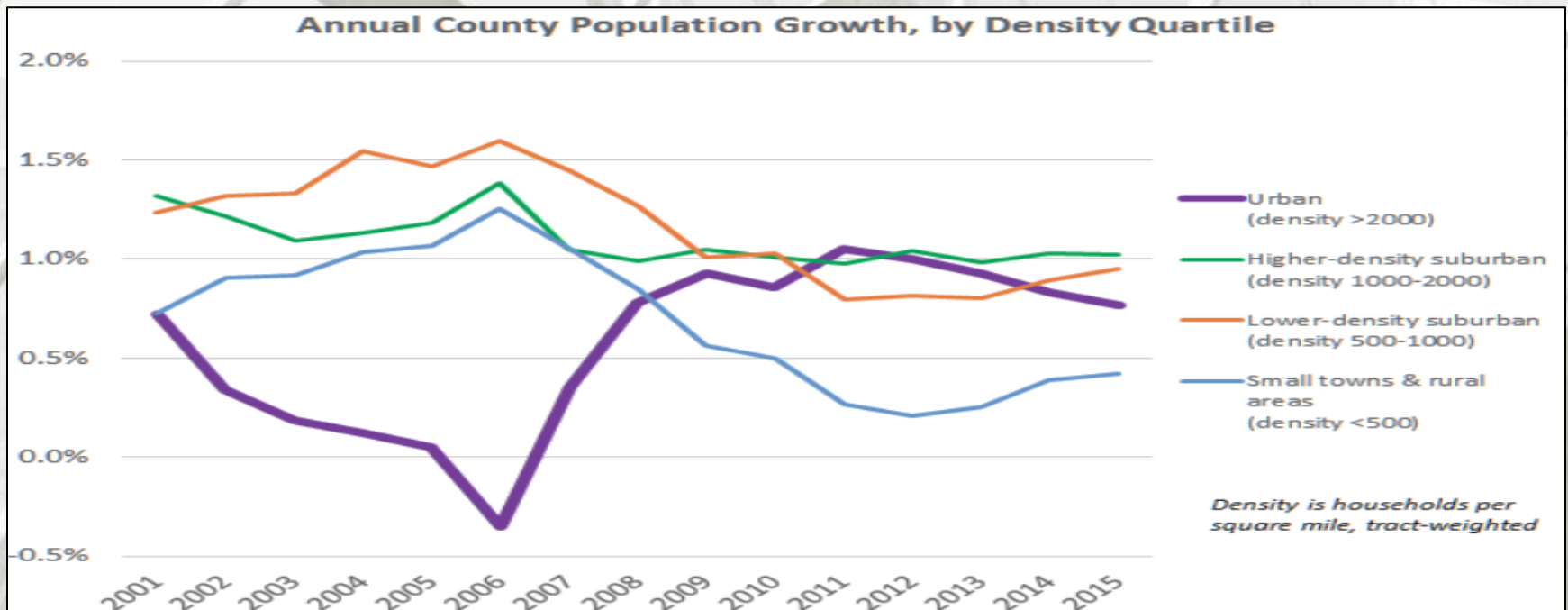
The first is the accelerating shift of population toward the Sunbelt. Among the four Census regions, the South and West both had population growth of 1.2 percent in 2015, far ahead of the 0.2 percent growth in both the Northeast and Midwest. Population growth in the South and West has outpaced that in the Northeast and the Midwest for decades, as well as in each year since 2000 throughout the housing bubble, bust, and recovery. The gap narrowed somewhat after the bubble burst, as population growth quickened in the Northeast between 2008 and 2012. Since 2013, however, population growth in the South and West has accelerated, while growth in the Northeast and Midwest has slowed, thus widening the gap between those two Sunbelt regions and the rest of the country.” – Jed Kolko, Independent Economist and Consultant



Demographics

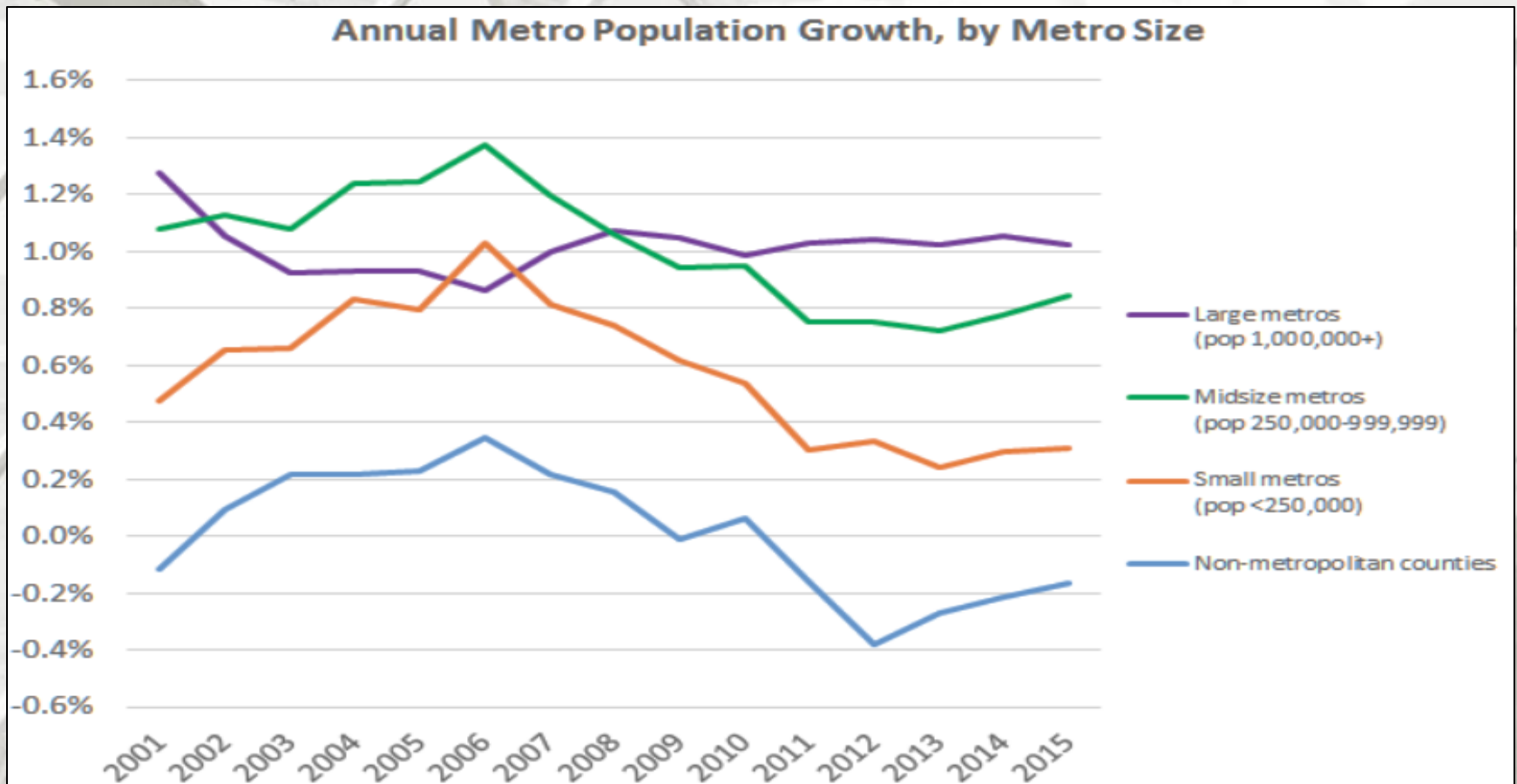
“The second trend is the recent slowdown in population growth in urban counties (defined as those with tract-weighted density of at least 2000 households per square mile). Both higher-density suburban counties and lower-density suburban counties had faster population growth than urban counties in 2015, and the gap between suburban and urban county growth was larger in 2015 than in 2014. In short, suburbanization accelerated in 2015.

While population growth in urban counties has clearly recovered from the housing bubble, during which urban counties lagged for many years and even lost population in 2006, the rebound in urban population growth was brief. Urban counties outpaced all other areas only in 2011, and urban growth in 2015 slowed to its lowest level since 2007. Growth in small towns & rural areas – the lowest-density counties – remained behind that of urban, higher-density suburban, and lower-density suburban counties in 2015, even though small towns & rural areas grew in 2015 at the fastest pace since 2010.” – Jed Kolko, Independent Economist and Consultant



Demographics

“The third trend is that metropolitan areas with at least one million people grew faster in 2015 than midsize and smaller metros did, just as in every year since 2008. While this is a reversal of the bubble years in the early 2000s, when midsize metros grew faster, it is a return to the pre-bubble pattern: In the 1980s and 1990s, as in the post-2008 period, population growth was faster in million-plus metros than in midsize metros, smaller metros, and non-metropolitan areas. (Micropolitan areas counted as metros in this analysis.)” – Jed Kolko, Independent Economist and Consultant



Demographics

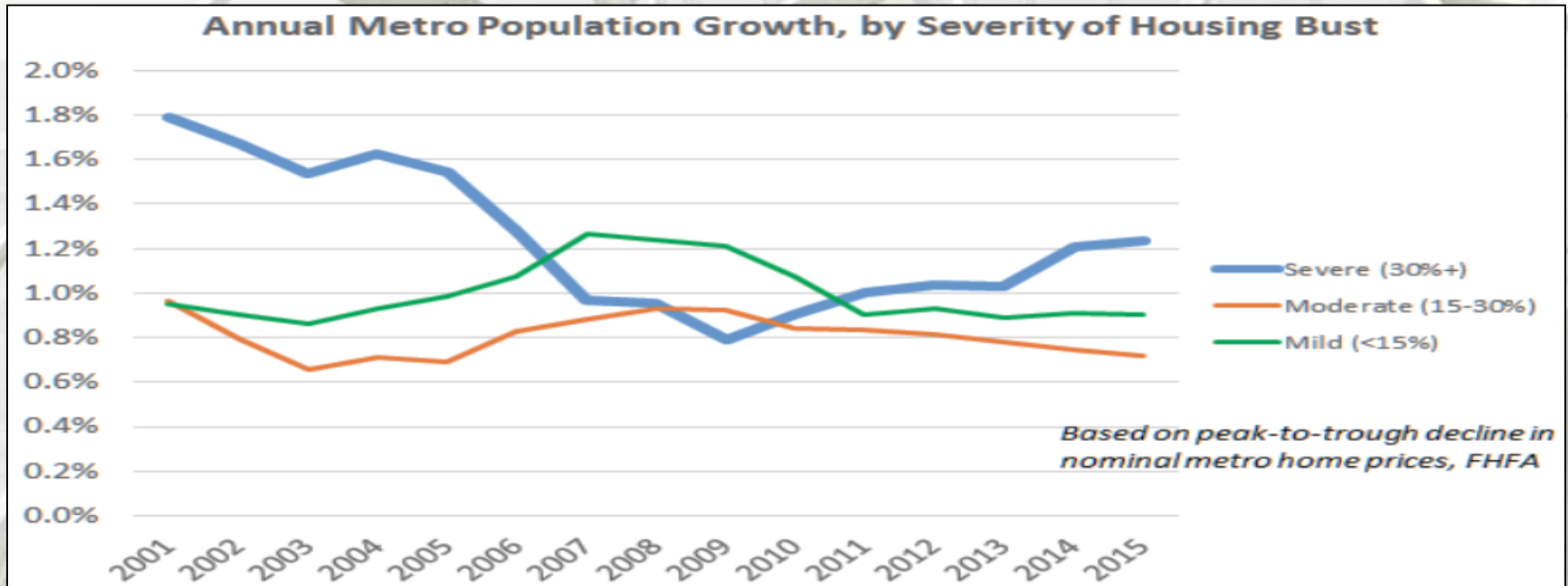
The Longer View: Population Trends Are Getting Back to Old Patterns

“Since 2000 population trends have reflected the housing boom, bust, and recovery. The boom, lasting until 2006, favored the suburbs, where most new single-family homes were built (or overbuilt). Then, in the housing bust, patterns reversed, with urban counties and large metros rebounding while suburban and rural growth slowed. Now, as the recovery continues, old patterns – from before the 2000s – are returning.

For starters, compare population growth in metros by the severity of their local housing bust. In the hardest-hit metros, where prices climbed during the bubble and then fell 30% or more, population growth slowed dramatically from 2006 to 2009. Note that population in these metros started to slow before the bubble reached its height in 2006, as rising prices hurt affordability, and continued when the bubble burst as people lost their homes and local job markets suffered. In contrast, in metros with a relatively mild housing bust (price declines of 15% or less), population growth accelerated in 2007-2009: their economies held up better in the recession than the hardest-hit metros did. But since 2011, the metros with the severest housing bust have once again had the fastest population growth, and their lead over metros that had a moderate or mild bust has grown. Lower housing prices and stabilized local economies have attracted people back to metros that suffered the worst. In five of the ten large metros with the fastest population growth in 2015 (the four Florida metros plus Las Vegas) home prices fell more than 45% in the housing bust.” – Jed Kolko, Independent Economist and Consultant

Demographics

“But it’s not just that population growth patterns today more like they did during early years of the bubble. Rather, local population growth trends increasingly look like they did before the bubble, in the 1980s and 1990s. As local population patterns look more like the pre-bubble period, with accelerating growth in the suburbs and the Sunbelt, it becomes clearer that some of the population shifts during the housing bubble and bust were temporary and reflected the extreme housing cycle. In particular, the acceleration of population growth in the Northeast in 2009-2011 and moment when urban growth surpassed suburban growth in 2011 look like reactions to a housing bubble that brought unsustainable growth to the suburbs and the Sunbelt. That’s not to say that nothing has changed: There have been dramatic shifts since the pre-bubble years in the composition of local populations. College-educated young adults are much more likely to live in high-density urban neighborhoods than they used to, while seniors are increasingly likely to remain in suburban single-family homes. But, in aggregate, local population growth in 2015 looks ever more like it used to before the housing bubble, with the Sunbelt and the suburbs widening their leads.” – Jed Kolko, Independent Economist and Consultant



Demographics

Figure 3 - Cohort Trends in Number of Owner Households: 2003-2013

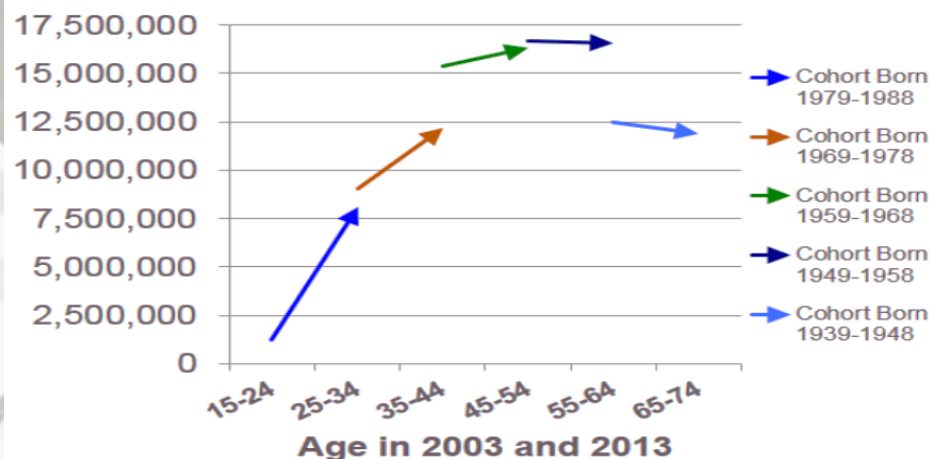
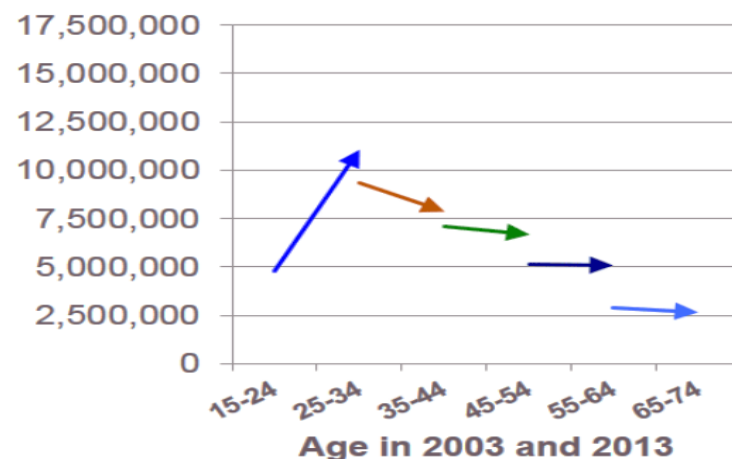


Figure 4 - Cohort Trends in Number of Renter Households: 2003-2013



Millennial Housing Issues in Perspective: Visualizing Cohort Trends in Population Size, Household Numbers, Ownership and Renting

“In spite of having a noticeably larger population at age 25-34 compared to the next oldest cohort (red line), and a slightly larger number of total households at the same age, owner households were almost a million fewer. In addition, this next oldest cohort also shows levels of owner household formation well below what was achieved by the cohort born 1959-1968 (green line) when it was age 35-44 in 2003. Finally, the 1959-1968 cohort had slightly fewer owners in 2013 than the next oldest cohort (purple line) at age 45-54 despite having both 4+ million more people and 1.2 million more total households.

But we must not lose sight of the fact that the older 1959-1968 and 1949-1958 cohorts aged into their 40s and 50s during a very different economic period (1993-2003) with better income growth, looser mortgage lending standards and more affordable newly built housing. The number of owner households that these older cohorts achieved at ages 25-34, 35-44, and 45-54 might not be a proper benchmark by which to judge the progress of today’s younger cohorts.” – George Masnick, Senior Research Fellow, Harvard Joint Center for Housing Studies

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