

Economics Group

Weekly Economic & Financial Commentary

U.S. Review

Q2 Revised Higher, How Does Q3 Look?

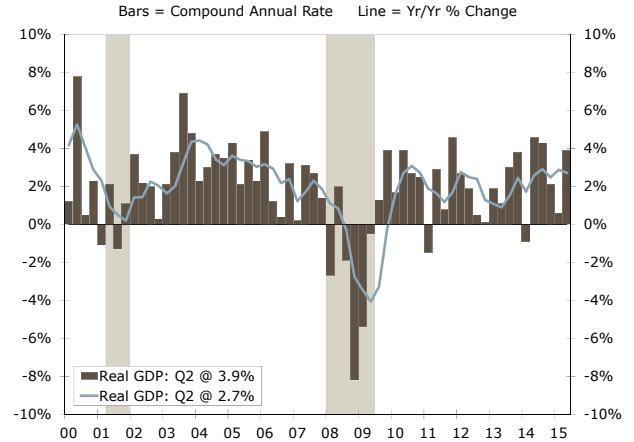
- The latest revision to the GDP figures shows that Q2 economic growth was a bit better than expected. The U.S. economy expanded at 3.9 percent annualized rate.
- In this week's U.S. Review we discuss what was by many measures the best summer home selling season in at least seven years and consider prospects for residential construction. We also break down the latest durable goods report and look at other factors influencing the less-than-stellar outlook for the factory sector.

Global Review

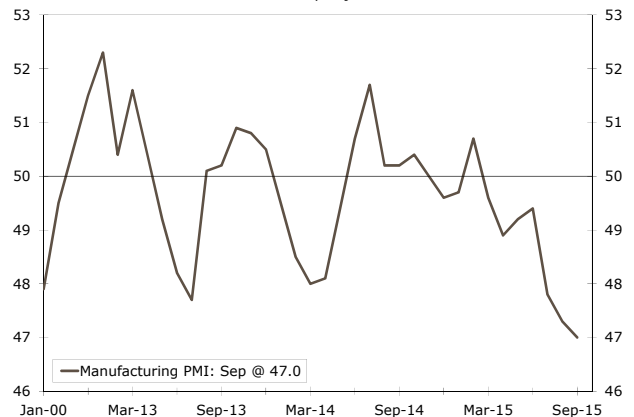
China Concerns Remain Front and Center

- The Chinese manufacturing PMI fell to a fresh cycle low in September. Mainland China is Taiwan's most important trading partner, and industrial production in Taiwan fell sharply in August. Data released this week showed that the Brazilian economy remains weak.
- However, economic activity in many advanced foreign economies appears to be holding up fairly well with data in the Eurozone generally stronger than expected. In short, it appears that the pace of economic activity in the Eurozone remains positive, if only modest, in the current quarter.

U.S. Real GDP



China Caixin Manufacturing PMI
Seasonally Adjusted



Wells Fargo U.S. Economic Forecast													
	Actual				Forecast				Actual		Forecast		
	2015				2016				2013	2014	2015	2016	2017
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q					
Real Gross Domestic Product ¹	0.6	3.7	1.8	2.7	2.6	2.8	2.8	2.6	1.5	2.4	2.4	2.6	2.4
Personal Consumption	1.8	3.1	2.9	3.0	2.5	2.6	2.5	2.3	1.7	2.7	3.0	2.7	2.2
Inflation Indicators ²													
PCE Deflator	0.2	0.2	0.4	0.9	1.8	1.7	1.9	1.9	1.4	1.4	0.4	1.8	2.0
Consumer Price Index	-0.1	0.0	0.2	0.8	2.1	1.9	2.0	2.2	1.5	1.6	0.3	2.0	2.2
Industrial Production ¹	-0.3	-2.6	2.2	2.2	3.5	3.7	3.5	3.5	1.9	3.7	1.5	2.7	3.4
Corporate Profits Before Taxes ²	4.6	-0.5	5.8	6.8	6.5	7.2	5.0	5.8	2.0	1.7	4.2	6.1	5.5
Trade Weighted Dollar Index ³	92.1	89.9	92.0	93.0	94.0	95.3	96.5	97.8	75.9	78.5	91.7	95.9	99.1
Unemployment Rate	5.6	5.4	5.2	5.0	4.9	4.8	4.7	4.6	7.4	6.2	5.3	4.8	4.5
Housing Starts ⁴	0.98	1.16	1.17	1.22	1.24	1.24	1.25	1.26	0.92	1.00	1.14	1.25	1.35
Quarter-End Interest Rates ⁵													
Federal Funds Target Rate	0.25	0.25	0.25	0.50	0.75	1.00	1.25	1.50	0.25	0.25	0.31	1.13	2.13
Conventional Mortgage Rate	3.77	3.98	4.00	4.15	4.23	4.28	4.37	4.63	3.98	4.17	3.98	4.38	4.82
10 Year Note	1.94	2.35	2.20	2.40	2.49	2.53	2.63	2.77	2.35	2.54	2.22	2.61	2.92

Forecast as of: September 18, 2015
¹ Compound Annual Growth Rate Quarter-over-Quarter
² Year-over-Year Percentage Change
³ Federal Reserve Major Currency Index, 1973=100 - Quarter End
⁴ Millions of Units
⁵ Annual Numbers Represent Averages

Source: U.S. Department of Commerce, U.S. Department of Labor, Federal Reserve Board, IHS Global Insight and Wells Fargo Securities, LLC

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Together we'll go far



U.S. Review

Existing Home Sales: Slim Pickens

The housing market has been in recovery mode for the better part of the past six years and indicators in recent months have reflected a renewed vigor in housing. As we head toward the traditionally slower period for residential construction as well as sales activity, the latest figures offer a mixed picture on how things are winding down after what has been the busiest summer selling season in nearly a decade.

In July, existing homes were selling at the fastest pace since 2007, but we learned this week that sales slipped 4.8 percent in August. While that figure was weaker than expected, it bears noting that after years of bloated existing home inventories, the number of homes on the market today is quite low—particularly for a peak season month like August. In fact since 2002, there has only been one August (2013) when there were fewer homes for sale. To some extent the slowdown in existing home sales is a reflection of limited options for buyers.

Pace of New Home Sales Rises to Seven-Year High

Inventories of new homes are lean as well but that did not slow the pace of new homes from rising to a new post-recession high in August. That is partly explained by the fact that the increase was attributable to homes not yet started. The annualized rate of 552,000 was better than expected and the median sales price edged modestly higher.

In terms of residential construction, builder sentiment remains strong. New construction starts, while off 3.0 percent in August, remain near post-recession highs. Building permits, which lead starts, climbed 3.5 percent in August. Taken as a whole, the housing market is exhibiting a vitality that has been conspicuously absent in recent years and a welcome offset to facets of the economy that are not shining so brightly.

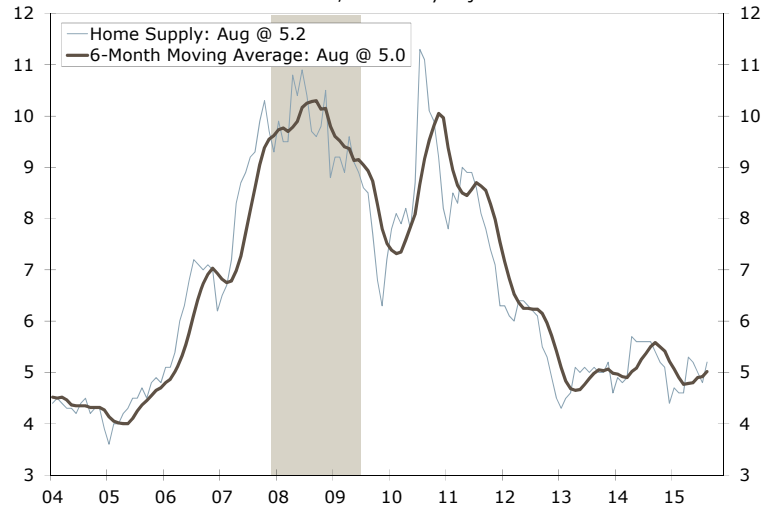
Durable Goods: Not Shining So Brightly

After a temporary respite early this summer, durable goods orders are once again pointing to a soft environment for big-ticket spending. Durable goods orders fell 2.0 percent in August. The drop was actually a bit more modest than expected (markets were looking for a pullback of 2.3 percent), but details still left much to be desired for the industrial side of the economy.

A 5.8 percent drop in transportation orders was the primary culprit for the miss. Aircraft orders continued to unwind following the Paris Air Show in June, while orders for motor vehicles and parts slipped 1.6 percent. Changing seasonal patterns that are not yet caught in the Census Bureau's adjustment process have led to some quirks around the orders figures for the auto sector. With fewer shutdowns in July, the rebound in August production looks somewhat weak historically. Yet, the strength in the auto sector is evident in the 9.2 percent year-over-year rise in orders.

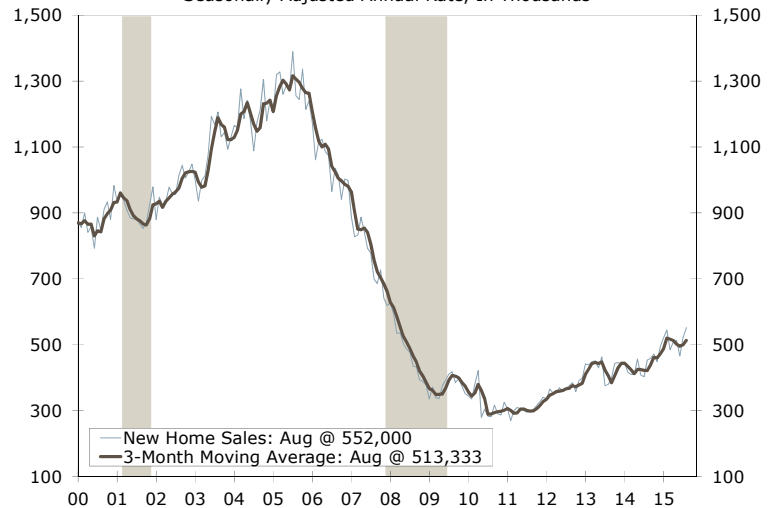
A meaningful pickup in manufacturing does not appear to be in the cards anytime soon. The first three regional purchasing managers' indices released for September all showed activity contracting over the month.

Existing Single-Family Home Supply
In Months, Seasonally Adjusted



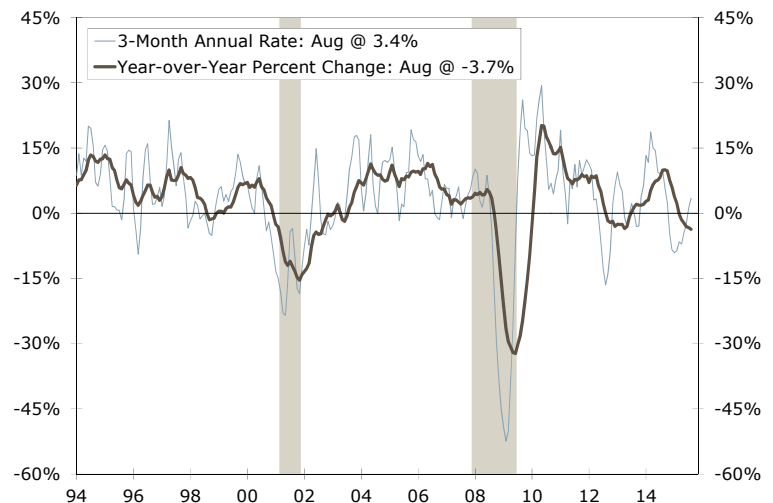
New Home Sales

Seasonally Adjusted Annual Rate, In Thousands



Durable Goods New Orders

Ex. Transportation Equipment, 3-MMA



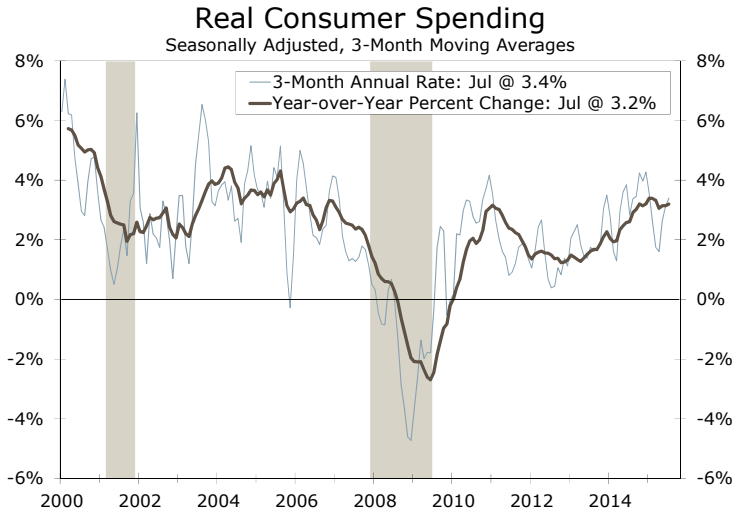
Source: National Assoc. of Realtors, U.S. Dept. of Commerce and Wells Fargo Securities, LLC

Personal Spending • Monday

Personal spending rose 0.3 percent in July, matching the same rate of growth observed in June. Real spending activity rose 3.4 percent on a three-month annualized basis. While real spending activity has continued to pick up, the rate of saving has also been increasing, reflecting the continued caution exhibited by consumers. The slide in gasoline prices has also helped to support saving and spending behavior. Disposable income rose 0.4 percent in July, marking the fourth month in a row of growth. We expect that consumer spending rose 0.3 percent in August with real spending also growing by 0.3 percent. The continued growth in consumer spending has been supported by greater full-time job growth and low inflation. We expect these themes to continue through the end of this year. Our outlook for consumer spending remains robust at roughly 3.0 percent in the second half of this year and around 2.5 percent in 2016.

Previous: 0.4% (Month-over-Month) Wells Fargo: 0.3%

Consensus: 0.4%



ISM Manufacturing • Thursday

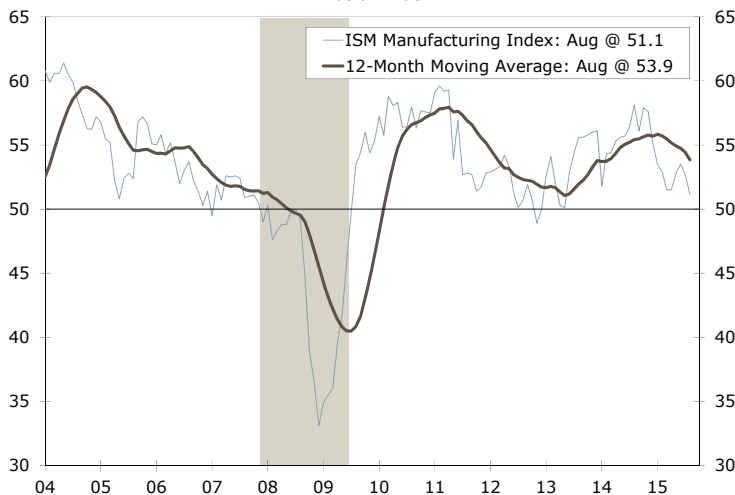
August's ISM manufacturing reading fell to 51.1, marking the lowest level of the year. The dominate trend in the manufacturing space has been a combination of slow global demand and headwinds from a stronger U.S. dollar. Besides the global headwinds, there are continued signs of soft demand for domestic business investment that reflects the cautious nature of firms to invest. We expect that the ISM Manufacturing index slid further in September as the headwinds facing the manufacturing sector have yet to subside. We are forecasting a reading of 50.4, a 0.7 point decline from the August reading. With slow global and modest domestic demand for manufactured goods, we expect that industrial production will be held to around 2.2 percent over the second half of this year. Gradually, as global growth recovers and the relative strength of the dollar subsides, domestic manufactures should begin to see a turnaround in output growth in 2016.

Previous: 51.1

Wells Fargo: 50.4

Consensus: 50.5

ISM Manufacturing Composite Index
Diffusion Index



Employment Situation • Friday

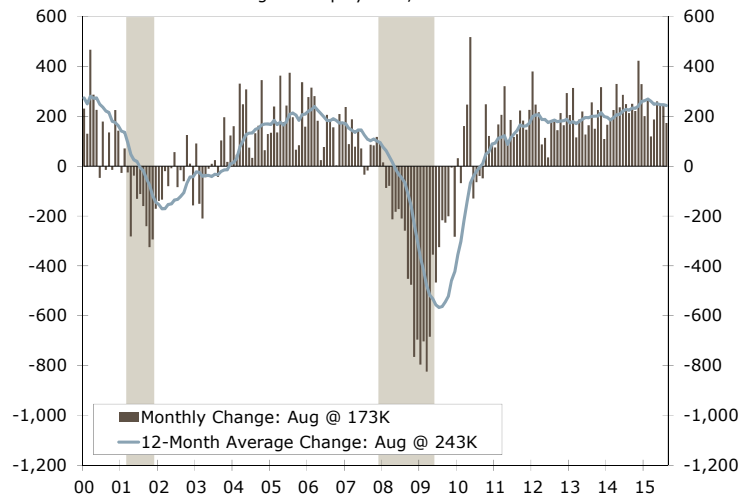
Nonfarm payrolls grew by 173,000 in August, as the unemployment rate fell to 5.1 percent. Reflecting the headwinds facing the goods-producing side of the economy employment for the sector fell by 24,000. On the other hand, the private service side of the economy continues to show improvement with employment growth expanding 164,000 jobs for the month. While the pace of job growth has downshifted over the past few months, the share of full-time jobs added continues to improve. Looking ahead we expect that 192,000 jobs were added in September. The unemployment rate will likely remain flat on the month at 5.1 percent. We continue to expect a modest pace of job growth over the next several months, with continued gains in full-time employment. In turn, the positive labor market dynamics should help support a robust pace of consumer spending.

Previous: 173,000

Wells Fargo: 192,000

Consensus: 200,000

Nonfarm Employment Change
Change in Employment, In Thousands



Source: U.S. Dept. of Commerce and Labor, ISM and Wells Fargo Securities, LLC

Global Review

China Concerns Remain Front and Center

There was only one major economic data release out of China this week, but it showed that manufacturing activity in the world's second-largest economy continues to weaken. As shown on the front page, the Caixin manufacturing PMI fell from 47.3 in August to 47.0 in September. Not only does the index remain well below the demarcation line separating expansion from contraction, but the PMI fell to yet another cycle low.

It appears that the slowdown in China is weighing on growth in some of the country's major trading partners. Export volumes in Taiwan dropped more than 8 percent on a year-ago basis in August, which contributed to the 5.5 percent decline in Taiwanese industrial production (top chart). Due to slow growth and benign inflation—the Taiwanese CPI fell 0.5 percent on a year-over-year basis in August—the central bank decided this week to reduce its main policy rate from 1.875 percent, where it has been maintained for more than four years, to 1.75 percent.

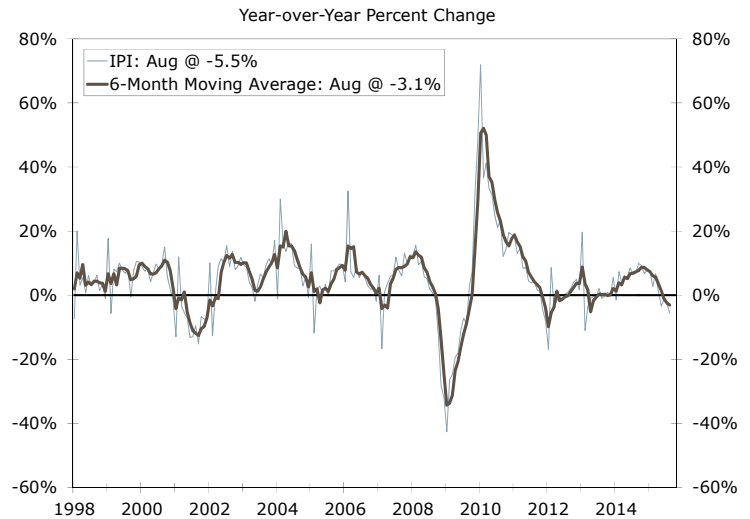
The Brazilian economy, where GDP fell 2.6 percent on a year-ago basis in Q2 2015, appears to remain weak in Q3. Data released this week showed that the monthly economic activity index, which is a good proxy for GDP growth, fell 4.2 percent (year over year) in July (middle chart). Brazil's economic woes are broader than simply weaker exports to China, but the slowdown in China certainly does not help the country's economic prospects.

Unlike Taiwan, where the inflation rate is negative and where the central bank recently eased policy, the CPI inflation rate in Brazil has been rising rapidly and the central bank has been hiking rates. In that regard, the recent sharp depreciation of the Brazilian real, which plunged to an all-time low vis-à-vis the U.S. dollar this week, will likely push the inflation rate even higher. If the central bank responds with further rate hikes to keep inflation expectations in check, the outlook for Brazilian GDP growth would deteriorate even further.

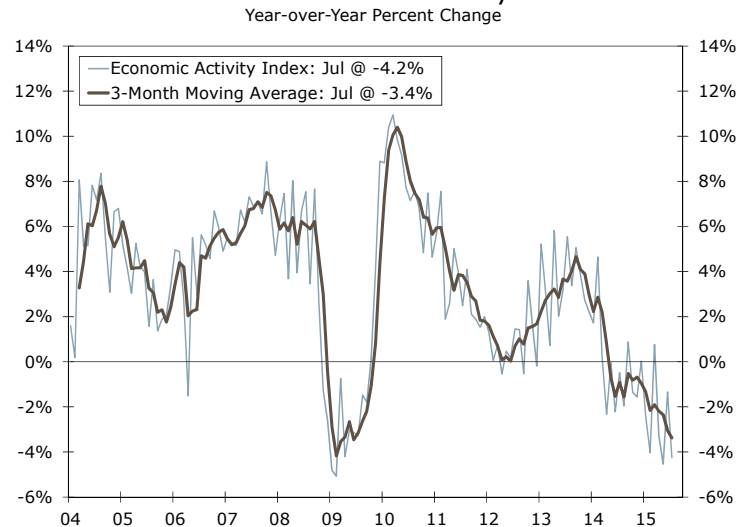
Despite the economic and financial turbulence in the developing world, economic activity in many advanced foreign economies appears to be holding up fairly well. For example, the purchasing managers' indices for the manufacturing and service sectors in the Eurozone both remained well above the demarcation line separating expansion from contraction (bottom chart). Some other "soft" indicators that were released this week were also positive. The September readings on the Ifo index of German business confidence and the comparable index in France were stronger than most analysts had expected with confidence in the French manufacturing sector rising to a four-year high.

The limited "hard" data that printed this week also pointed toward positive economic growth. Industrial orders in Italy rose 0.6 percent in June, which follows on the 3.0 percent rise registered during the previous month. Retail spending was up 1.7 percent in July, the strongest year-over-year rate so far in 2015. In sum, recent data suggest that the pace of economic activity in the Eurozone remains positive, if only modest, in the current quarter.

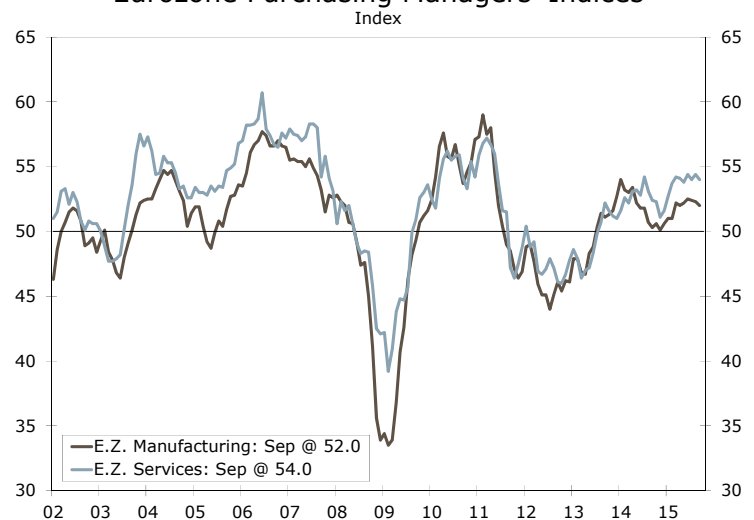
Taiwanese Industrial Production Index



Brazilian Economic Activity Index



Eurozone Purchasing Managers' Indices



Source: IHS Global Insight and Wells Fargo Securities, LLC

Japan Industrial Production • Tuesday

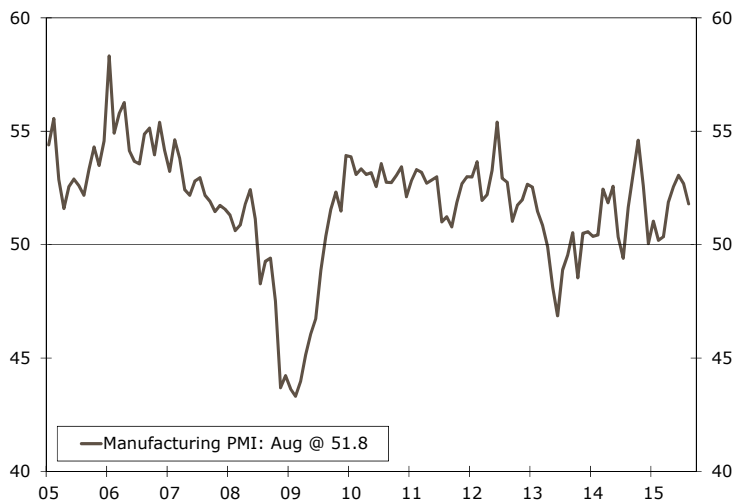
Japan is on the deck to release several economic indices including the industrial production index and the retail sales index for August. Markets are expecting a recovery in the industrial production index, from -0.8 percent in July to 0.9 percent in August. Meanwhile, retail sales, while not very strong, likely will continue to improve with the retail sales index expected to post a 0.5 percent in August compared to an upwardly revised 1.4 percent print for July.

On Wednesday, markets are going to be able to see the Tankan manufacturing and non-manufacturing indices for Q3 of the year, with an expectation of continuous weakness compared to Q2 of the year, not a real surprise considering the not so positive news coming from Japan during the past several months.

Previous: -0.8% (Month-over-Month)

Consensus: 1.0%

Mexico IMEF Manufacturing Index



Brazil Industrial Production • Friday

Brazil is scheduled to release its August industrial production index on Friday and the expectation is for a weak number. Industrial production in July plunged 8.3 percent with respect to a year earlier, and things have actually deteriorated since then so it will not be surprising to see an even larger drop in the August year-over-year number.

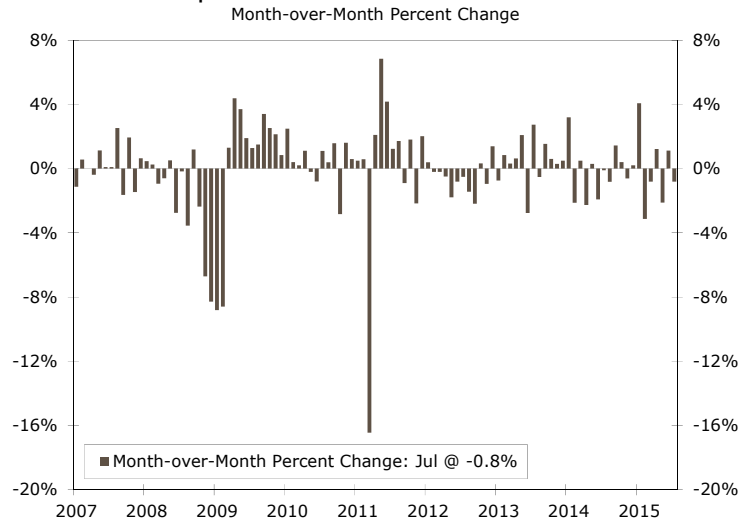
The August industrial production number will be preceded on Thursday by the release of the Markit manufacturing PMI and this number will probably show further deterioration in the sector during September and will be a good advance indication of how bad the industrial production index is going to be when it is released in about one month.

Thus, we do not expect the Brazilian economy to improve any time soon.

Previous: -8.3% (Year-over-Year)

Consensus: -9.2%

Japanese Industrial Production



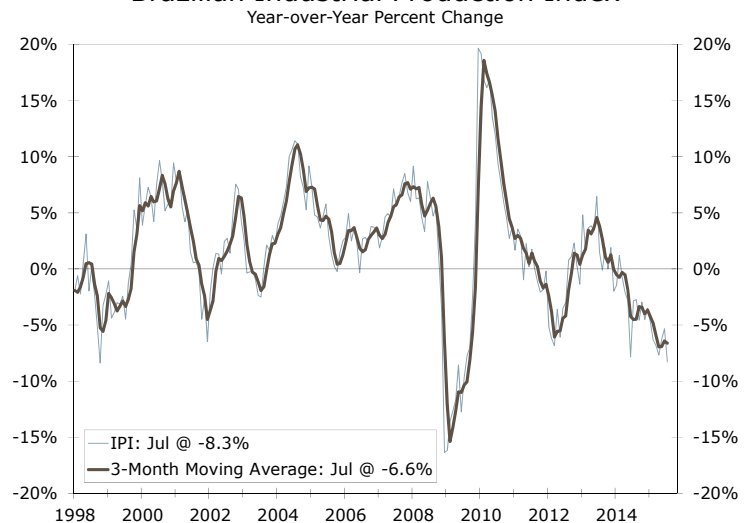
Mexico Manufacturing PMI • Thursday

After a relatively weak manufacturing PMI number for August markets will be looking to see if the weakness is temporary or something that has staying power. Although Mexico's manufacturing sector has continued to be supported by a strong U.S. automobile industry, the sector has also experienced some weakening over the past several months. This, together with a service IMEF (official PMI reading) that dropped below the 50 demarcation point in August speaks clearly of the troubles the Mexican economy has experienced during the past several quarters.

On the same day, we will get the private, Markit PMI manufacturing index, which has remained marginally stronger than the official one. Thus, the Mexican economy has continued to struggle to gain growth momentum at a time when the Mexican central bank is probably considering following the U.S. Federal Reserve in increasing interest rates in December of this year.

Previous: 51.8

Brazilian Industrial Production Index



Source: IHS Global Insight, Bloomberg LP and Wells Fargo Securities, LLC

Interest Rate Watch

What Is Our Discount Rate?

As illustrated in the top graph, the FOMC expects the fed funds rate to be at 2.75 percent by the end of 2017 and 3.5 percent by the end of 2018. In a prior essay—*FOMC Decides: Markets Assess What's Next*—we expressed our skepticism on the path of the rate increases implied in the graph.

In this report, we express our concern about the 2018 and longer-run expectation on the funds rate and its usefulness to discount short-term interest rates.

Funds Rate and Nominal GDP: Breakdown

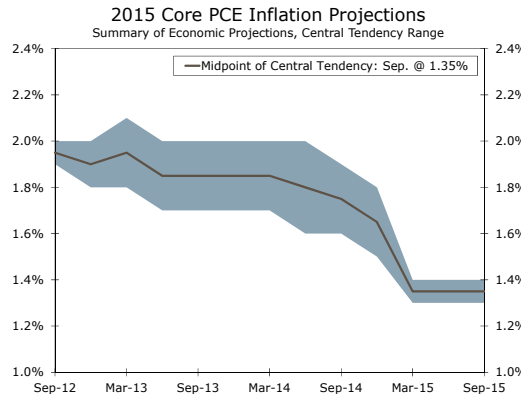
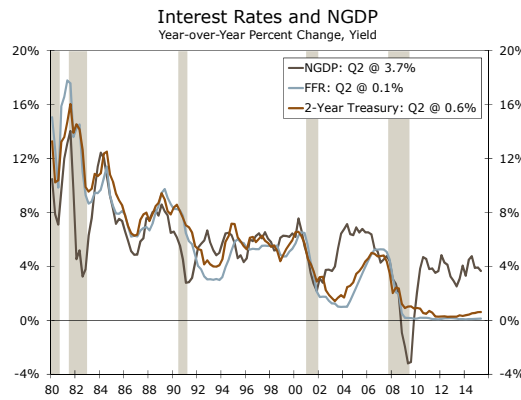
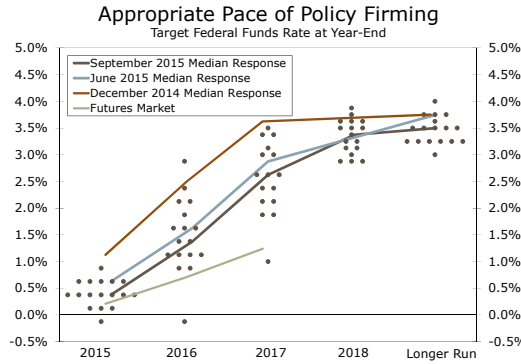
From 1982 through 2000, the funds rate tracked the growth of nominal GDP—the combination of real growth and inflation. However, this relationship broke down after 2000 and, in fact, when the Fed attempted to reestablish the link by raising the funds rate from 2004-2006, nominal GDP fell gradually from 2004-2006 and then rapidly from 2006 on. When tested, there has been a statistically significant structural break in the relationship since 2000.

This presents a problem. As implied by the projections from the FOMC, the deflator projection is illustrated in the bottom chart, plus the real GDP growth projection suggests a nominal GDP target of 4 percent by 2018. Meanwhile the target funds rate for 2018 stands at 3.5 percent. Given the recent history, since 2000, the level of the funds rate appears too high.

As a result, the projected funds rate is certainly not discounted in the current two- or three-year Treasury yields. Moreover, any attempt to regain the 3.5 percent funds rate level may give way to a negative reaction in nominal GDP, as was signaled in 2004-2006.

Lower Potential GDP?

Separately, we and others have noted that the potential growth rate of the U.S. economy has downshifted over the past 30 years, as labor force growth has slowed and productivity gains have moderated as well. Therefore, there is also a theoretical justification for a lower benchmark funds rate over time relative to the FOMC's current projections.



Source: IHS Global Insight, Bloomberg LP and Wells Fargo Securities, LLC

Credit Market Insights

Household Finances Improve in Q2

The Federal Reserve's flow of funds data for Q2 continues to signal broad improvements for U.S. household balance sheets. The total net worth of households and nonprofits rose to \$85.7 trillion during Q2, led by a \$499 billion increase in real estate value. Between 2007 and 2011, real estate assets saw significant contraction, and only increased on a year-over-year basis in two quarters. Household real estate asset prices have gained momentum in recent years, and in Q2 of this year were up a healthy 6.8 percent year over year.

Household debt increased at an annual rate of 3.9 percent in Q2. Consumer credit led the way, growing 8.1 percent, while mortgage debt increased at a more modest 2.2 percent annual rate. The value of directly and indirectly held corporate equities increased a healthy \$61 billion in Q2, but given the stock market's recent dip, equity assets will most likely weigh on total household net worth growth in Q3.

Rising asset prices and restrained credit growth have allowed households to rebuild their balance sheets and deleverage. Household liabilities as a percentage of assets, for example, were down to 14.3 percent in Q2 2015, well below their pre-recession peak above 20 percent and consistent with levels seen during the early 2000s. This improved household situation should help support stronger consumer spending in the coming quarters.

Credit Market Data

Mortgage Rates	Current	Week Ago	4 Weeks Ago	Year Ago
	30-Yr Fixed	3.86%	3.91%	3.89%
15-Yr Fixed	3.08%	3.11%	3.09%	3.36%
5/1 ARM	2.91%	2.92%	2.93%	3.08%
1-Yr ARM	2.53%	2.56%	2.62%	2.43%

Bank Lending	Current Assets (Billions)	1-Week Change (SAAR)	4-Week Change (SAAR)	Year-Ago Change
	Commercial & Industrial	\$1,911.2	-1.67%	7.10%
Revolving Home Equity	\$442.8	-6.76%	-5.26%	-3.97%
Residential Mortgages	\$1,605.9	-17.74%	-7.33%	1.85%
Commercial Real Estate	\$1,721.0	7.21%	9.83%	9.24%
Consumer	\$1,242.1	12.81%	7.69%	4.74%

Source: Freddie Mac, Federal Reserve Board and Wells Fargo Securities, LLC

Topic of the Week

Manufacturing and the Strong Dollar

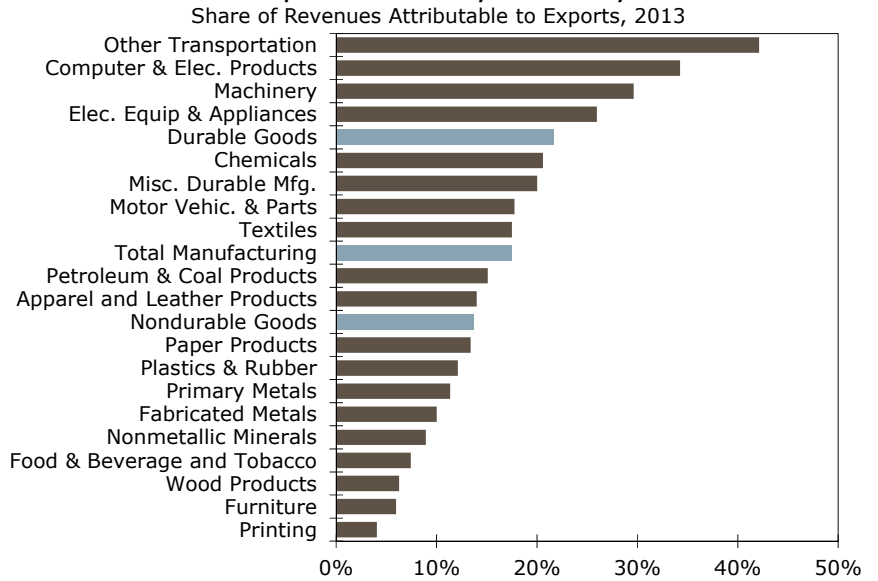
Protracted strength in the U.S. dollar is often cited as a key factor restraining activity in the U.S. manufacturing sector. A stronger greenback, many argue, makes U.S. manufactured goods more expensive and thus relatively less attractive to foreign buyers. Yet, while economic theory supports this claim, the relationship between the dollar and manufacturing is less straightforward. First, all manufacturing is not created equal—exposure to the effects of a stronger dollar varies greatly by industry, as some manufacturers derive a large share of their revenue from exports while others are more domestically oriented (top chart). Moreover, a stronger dollar also lowers the cost of imported inputs.

As a means of assessing manufacturers' exposure to the strong dollar, we use three measures: "export share," or share of revenues attributable to exports, "imported input share," or share of costs attributable to imported inputs, and "net external orientation," which is simply the difference between the two. Industries with positive net external orientation should be more exposed to negative effects of dollar strength than industries with negative orientation, everything else equal. With that in mind, the bottom chart shows that the "other transportation" industry, comprised of aircraft, boat and rail equipment manufacturers, is the most exposed to the stifling effects of the strong greenback. Yet, in aggregate, durable goods industries are relatively more insulated from these effects than their nondurable counterparts.

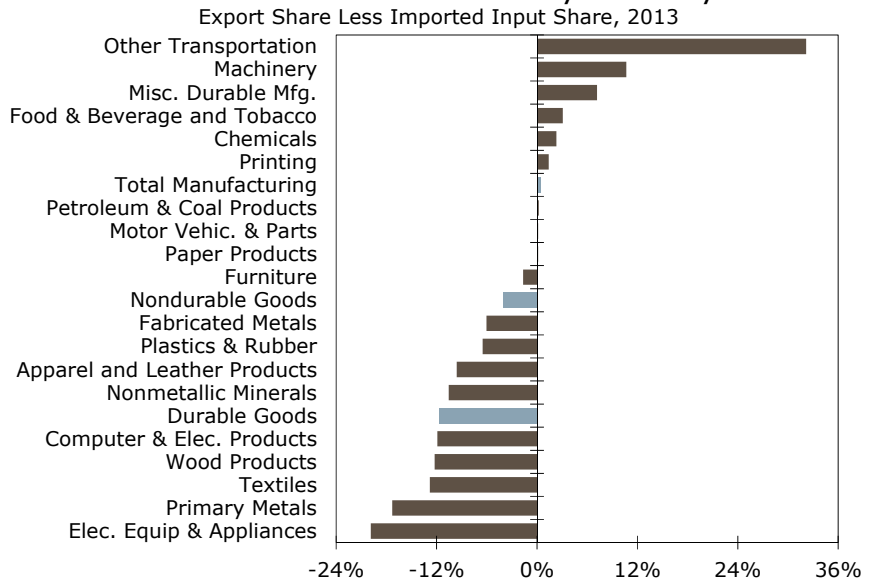
Of course, it is important to keep in mind that net external orientation is no perfect measure. The implicit assumption that firms are equally affected by cost and revenue factors does not necessarily hold in practice. Moreover, there are a number of other factors affecting manufacturing at present, including overall weak global demand and depressed commodity prices, so the strong dollar is merely a piece of the larger puzzle.

For more, see "U.S. Manufacturing and the USD: Setting the Record Straight," available on our website.

Export Share by Industry



Net External Orientation by Industry



Source: U.S. Department of Commerce and Wells Fargo Securities, LLC

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Market Data ♦ Mid-Day Friday

U.S. Interest Rates

	Friday 9/25/2015	1 Week Ago	1 Year Ago
3-Month T-Bill	0.00	-0.02	0.01
3-Month LIBOR	0.33	0.34	0.23
1-Year Treasury	0.37	0.44	0.13
2-Year Treasury	0.70	0.68	0.55
5-Year Treasury	1.49	1.44	1.75
10-Year Treasury	2.17	2.13	2.50
30-Year Treasury	2.97	2.94	3.21
Bond Buyer Index	3.71	3.78	4.11

Foreign Exchange Rates

	Friday 9/25/2015	1 Week Ago	1 Year Ago
Euro (\$/€)	1.117	1.130	1.275
British Pound (\$/£)	1.519	1.554	1.632
British Pound (£/€)	0.736	0.727	0.781
Japanese Yen (¥/\$)	120.800	119.980	108.750
Canadian Dollar (C\$/\\$)	1.332	1.323	1.111
Swiss Franc (CHF/\$)	0.977	0.969	0.947
Australian Dollar (US\$/A\$)	0.701	0.719	0.879
Mexican Peso (MXN/\$)	16.941	16.652	13.386
Chinese Yuan (CNY/\$)	6.375	6.364	6.137
Indian Rupee (INR/\$)	66.156	66.460	60.973
Brazilian Real (BRL/\$)	3.965	3.945	2.428
U.S. Dollar Index	96.259	94.863	85.195

Source: Bloomberg LP and Wells Fargo Securities, LLC

Foreign Interest Rates

	Friday 9/25/2015	1 Week Ago	1 Year Ago
3-Month Euro LIBOR	-0.04	-0.04	0.05
3-Month Sterling LIBOR	0.59	0.59	0.56
3-Month Canada Banker's Acceptance	0.78	0.77	1.27
3-Month Yen LIBOR	0.08	0.08	0.12
2-Year German	-0.24	-0.24	-0.07
2-Year U.K.	0.62	0.60	0.84
2-Year Canadian	0.54	0.47	1.12
2-Year Japanese	0.01	0.01	0.06
10-Year German	0.65	0.66	0.97
10-Year U.K.	1.85	1.83	2.45
10-Year Canadian	1.53	1.46	2.15
10-Year Japanese	0.32	0.31	0.53

Commodity Prices

	Friday 9/25/2015	1 Week Ago	1 Year Ago
WTI Crude (\$/Barrel)	45.67	44.68	92.53
Gold (\$/Ounce)	1144.89	1139.02	1221.53
Hot-Rolled Steel (\$/S.Ton)	443.00	449.50	643.00
Copper (¢/Pound)	228.90	239.70	306.00
Soybeans (\$/Bushel)	8.61	8.77	9.24
Natural Gas (\$/MMBTU)	2.56	2.61	3.97
Nickel (\$/Metric Ton)	9,875	9,959	17,331
CRB Spot Inds.	435.40	441.64	514.36

Next Week's Economic Calendar

	Monday 28	Tuesday 29	Wednesday 30	Thursday 1	Friday 2
U.S. Data	Personal Income & Spending July 0.4% & 0.3% August 0.3% & 0.3% (W)	Consumer Confidence Index August 101.5 September 94.0 (W)		Construction Spending (MoM) July 0.7% August 0.7% (W)	Nonfarm Payrolls August 173K September 192K (W)
	Pending Home Sales (MoM) July 0.5% August 0.5% (C)			ISM Manufacturing August 51.1 September 50.4 (W)	Unemployment Rate August 5.1% September 5.1% (W)
		Japan Industrial Production (MoM) Previous (July) -0.8%	Eurozone Unemployment Rate Previous (July) 10.9%	Mexico Manufacturing PMI Previous (August) 52.4	Brazil Industrial Production (YoY) Previous (July) -8.9%

Note: (W) = Wells Fargo Estimate (C) = Consensus Estimate

Source: Bloomberg LP and Wells Fargo Securities, LLC

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