The GailFosler Group

A Rising Tide Does Not Lift All Boats

Global Outlook

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Executive Summary

This report, *A Rising Tide Does Not Lift All Boats*, updates our June 2014 Global Outlook by examining new developments across key countries and regions over the past six months and evaluating their impact on the global growth cycle. We also extend our analysis of trade and credit growth as global growth drivers and consider the importance of commodity prices for emerging market growth in greater detail.

Our June forecast projected 3.7 percent growth in 2014 as the cycle began to engage. We have scaled that forecast back to 3.2 percent and, although we have also cut the out-year projections to 4.1 percent and 4.2 percent in 2015 and 2016 respectively, our expectation for faster growth in 2015 and 2016 remains intact (Chart 1).

**Chart 1: Global growth outlook moderates but cycle remains in place**

![Global Real GDP Growth Forecast](image)

Despite a number of counterforces, recoveries across global regions are synchronizing going into next year as are economic policy commitments to pro-growth strategies. As a result, a solid, though certainly not universal, consensus has emerged that global growth will improve next year.

Among the major countries/regions that we follow, our United States’ outlook remains largely unchanged from our June forecast and our projections for China are modified only slightly.
We have revised our 2014 U.S. growth rate from 2.5 percent to 2.3 percent solely as a result of the further downward revision in the first quarter. U.S. economic performance over the last nine months has been the best among the advanced economies and sets the stage for 3.5 to 4.0 percent growth in 2015.

In the case of China, we also scaled back our projections only marginally to 7.4 percent growth for 2014 and 7.8 percent for both 2015 and 2016. Our projections for China are more optimistic than many because, in our view, the worst of the real estate downturn is ending and lower interest rates and higher government infrastructure spending will stabilize the economy.

Our Europe (EU-15) and Japan projections have changed more significantly. For the EU-15, growth has been scaled back by half a percentage point to only 1.2 percent in 2014 and its ability to accelerate growth back toward its post-2000 trend is less certain. While exports have picked up to a degree (mostly in Germany), a shortfall in private credit is restricting investment and hampering the European recovery.

One of the striking attitude changes in recent months is the tendency of European policy makers to counter evidence of economic weakness with macro efforts to stimulate growth. Fiscal and monetary policies have, in the main, turned stimulative and include new infrastructure proposals, a willingness by the EU to tolerate larger deficits among member countries and a benign view of currency weakness.

With respect to Japan, the issues are more profound. The devastating impact of the VAT increase on both consumer spending and investment, with large residual effects lasting through the fall quarter, calls Prime Minister Abe’s entire strategy into question.

What had appeared to be a marked break from the past with a steady upward economic trajectory over several years, even taking account of the likely shock from the VAT increase, has collapsed. Even with better growth in 2015 and 2016, the pattern of Japanese performance looks no different today from the erratic patterns of decades past.

Unanswered is whether Mr. Abe will try to use a weak yen as a tool to force economic activity and investment back to Japan. Our base case calls for the yen to pull back from its lows relative to the U.S. dollar and remain in the 115-120 range through 2015.

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[1] EU-15 is comprised of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.
However, we also propose an alternative view in which the yen/dollar breaks structurally from the trading patterns of the past 15 years toward much lower levels (i.e., 150 yen/dollar). In this case, the euro follows the yen down (to about 1.13 dollars/euro) although not to quite the same degree. This alternative scenario introduces a new degree of volatility and uncertainty in the post-2010 economic environment.

A second source of uncertainty and potential volatility is the sharp drop in commodity prices in recent months. While there are benefits for consuming countries and sectors, lower commodity prices have hurt growth in many commodity-producing emerging markets. We have, therefore, scaled back 2014 growth rates for commodity-producing regions, thereby reducing our emerging market forecast by half a percentage point.

Like exchange rates, commodity prices are notoriously volatile. Prolonged weakness at or below current levels would hold emerging market growth back relative to our forecast in 2015 and 2016. However, we also consider an alternative case in which commodity prices respond to economic stimulus and better growth prospects. In this case, commodity prices rise above pre-crisis levels and emerging market growth approaches pre-crisis rates.

While the overall tone in this update remains positive, we believe that a new period of uncertainty and volatility is emerging that could have widespread global consequences for both economic and financial market performance. Many parts of the world face reform and restructuring challenges and are turning in increasing numbers to pro-growth strategies — including currency depreciation.

What is less clear is whether recent declines in most currencies against the dollar are temporary or not. The weaker yen and euro provide a potentially important tailwind to their respective economies. However, Japan’s benign neglect of the yen is opening the door to a more aggressive and enduring use of currency depreciation as an economic growth strategy. We will tackle currency and commodity issues in greater depth in the “zone of risk” section as part of our next Global Outlook report in 2015.
I. Where is the Global Cycle?

Our key conclusions from our June 2014 Global Outlook report, Engaging the Global Cycle, remain intact. Although the past six months constitute a mixture of good news along with some significant disappointments, 2014 clearly represents the transitional year toward broader based economic recovery and a significant acceleration in global growth in 2015.

For example, the downgrades in 2014 for both Japan and the EU-15 have suppressed global economic performance but virtually assure that growth will be higher in 2015. At the same time, the United States and China constitute important offsets to problems elsewhere, with the United States setting the stage for nearly 4 percent growth in 2015 and Chinese growth remaining reasonably close to its 7.5 percent official target despite dire predictions.

Still, investment, trade and credit conditions are not yet strong enough to support a truly dynamic rebound. While our projected 4.1 percent global growth rate in 2015 represents a welcome improvement after four years of flat or declining growth, it is still a long way from accelerations in investment and consumer spending that build on one another to produce a truly dynamic economic cycle.

Trade and credit growth trends that drive our top-down global growth projections approach help to explain why global growth rates are below what they might otherwise be. This approach finds an important concurrent correlation between global export growth and GDP growth and identifies credit growth as a leading indicator of future GDP growth.

We use these relationships to monitor the dynamics of the global cycle as well as to test the reasonableness of our bottom-up global forecast. While credit growth was higher in 2013 than anticipated (7.2 percent), export growth (which is relatively more important in this growth model) looks to be lower than expected in 2014 (only 3.8 percent) according to the latest International Monetary Fund (IMF) forecast.

Moreover, even though global credit growth was higher than expected in 2013, it appears to be unevenly spread among individual countries and sectors. Important regions like the EU-15 are still deleveraging while credit growth is improving in the United States and Japan. And while credit growth in China slowed slightly in 2013 and has continued to decline in 2014 according to official statistics, it remains high relative to other major regions according to World Bank data (Chart 2).
Chart 2: While credit growth is rising globally, it continues to decline in the EU-15

As a result, our top-down global growth projection has also come down to 3.2 percent global growth in 2014 (from 3.4 percent in the June report) and 4.0 percent growth in 2015 (down from 4.2 percent in the June report). These changes, along with individual country and related analysis, have encouraged us to reduce our formal global growth outlook from 3.7 percent to 3.2 percent in 2014 and from 4.3 percent to 4.1 percent in 2015. Our 2016 projection is scaled down to 4.2 percent.

The message here is two-fold. First, 2015 will be the best economic year globally since the rebound in 2010, though well below near-term potential global growth. Second, and more cautionary, are the mixed growth dynamics from country to country and across sectors. Many countries have undertaken reform and/or restructuring efforts. As a result, there remain important cross currents that suppress growth well below the 5 percent rates that were common in the years leading up to the financial crisis in 2008.
II. The United States as a Global Bright Spot

The United States has turned in two consecutive quarters of 4 percent annualized growth with another 3 to 4 percent likely in the fourth quarter of 2014. Our 2014 GDP forecast is revised slightly down from 2.5 percent to 2.3 percent due to further downward revision in the first quarter, but the fundamentals are still in place for 3.5 to 4 percent growth in 2015 and 2016 (Chart 3).

Chart 3: The United States is poised to reach pre-crisis growth rates in 2015 and 2016

The structure of growth, with strong foundations in investment and exports, has propelled the manufacturing sector to its highest level of activity in two years. Both manufacturing and nonmanufacturing have accelerated steadily throughout 2014 (Chart 4). Indeed, U.S. manufacturing activity levels are among the highest in the world (Chart 5).
Chart 4: U.S. economic activity has continued to accelerate since June

![ISM Manufacturing and Nonmanufacturing PMIs](image)

Source: Institute for Supply Management

Chart 5: U.S. manufacturing activity is among the highest in the world

![Markit Manufacturing PMIs by Country/Region, November 2014](image)

Source: Markit Economics

This improvement is further reflected in non-residential (business) investment, for which year-over-year growth has accelerated for five consecutive quarters. Investment is a foundation for jobs and growth and is running ahead of our June outlook. We have, therefore, revised business investment up in the 2015-2016 period (Chart 6). The strength of investment is an important reason why 2014 has turned in relatively strong job growth, including 314,000 new jobs in November, the highest number in any month since January 2012.
What has been notably absent in this recovery is a rebound in the housing sector. Housing investment has been flat since mid-2013 and well below our expectations. Limits on mortgage lending as a result of new bank regulations, legal liabilities surrounding mortgages, and credit and down payment standards have offset the benefits of job growth and low interest rates.

Recently a number of these restraints have eased and our current projections call for housing investment to resume its 2010-2013 path. However, even at reasonably steady double digit growth rates, housing investment may not reach its 2007 pre-crisis peak until 2016 or later (Chart 6).

**Chart 6: Residential investment has stalled and may not reach 2007 levels by 2016**

![Business and Residential Investment Forecasts](image)

Sources: Bureau of Economic Analysis, The GailFosler Group
III. Europe and Japan Stuck in Neutral?

Europe remains a basket of unresolved issues

Among all the global regions, the two biggest disappointments this year were the EU-15 and Japan. In the first case, the EU-15 has continued to grow, but rather than the 1.7 percent we expected in 2014, growth is likely to come in at about 1.2 percent. Instead of moving back toward its post-2000 growth trend, the EU-15 is continuing to idle along its current low growth path. As a result, the level of GDP in the EU-15 is still below its 2007 pre-crisis peak.

One hopeful sign is that European policy attitudes have shifted toward stimulus. Whether due to the ultimate acceptance of French and Italian fiscal deficit plans, the developing commitment of the European Central Bank (ECB) to quantitative easing or the EU proposal to finance a $300 billion infrastructure plan, Europe is clearly taking a more aggressive pro-growth stance. We have scaled our earlier projections back but continue to anticipate modestly higher growth for the EU-15 in 2015 and 2016 (Chart 7).

Chart 7: EU-15 recovery continues but at a slower rate than expected

In point of fact, some of the EU-15 countries are performing relatively well. Germany has outpaced all the other countries since the crisis, while the United Kingdom has enjoyed better overall economic performance dating back to 2000 (Chart 8).
Most notable, however, is the strikingly poor performance of Italy. Since the introduction of the euro in 1999, Italy has underperformed relative to all of the other major EU-15 countries, except for Germany in the early 2000s, which restructured its economy to become one of the economic stars of Europe.

Of greatest concern is that Italy appears to be in the early stages of a long-term decline. Italy never really recovered after the financial crisis and is currently heading deeper into recession. Without the Italian recession, the “EU-14” would already be headed back toward its long-term trend growth.

This discussion is not intended to single Italy out unfairly, but it does suggest that one clearly identifiable growth challenge for Europe is Italian economic reform. Although Italy’s economic output is only 12 percent of the total EU-15 output, taking it out of the EU-15 composite raises the growth in the absolute level of GDP for the remaining countries by 3 percentage points relative to 2000 levels (Chart 9).
To be sure, Italy is not the sole reason for Europe’s stall this year. Europe has lost two important growth engines as a result of recent German weakness and continued French stagnation. Nevertheless, there is very little room for error on the part of any one of the EU-15 partners given Italy’s chronic economic weakness.

Another way to look at European economic performance is by sector relative to long-term trends. In our July 2013 report, *Can Europe Come Back?*, we concluded that while exports and credit are two of the most important drivers of European growth, pervasive weakness in investment throughout the region is a broader and more intractable European challenge.

Exports are largely external to the domestic economy and often have little impact on investment, but the shortfall in private credit makes the situation worse. Despite the fact that investment trends vary somewhat from country to country, Europe as a whole has an important investment deficit that can only be remedied in the long-term by a dynamic domestic economy supported by a reasonable level of private credit growth (Chart 10).
Whatever Europe’s structural challenges, they are not helped by the post-crisis credit picture as indicated above. One of the benefits of the common currency was the creation of a single European financial market to provide a platform for private credit creation at much lower interest rates. Whether the doubling of private credit in the pre-crisis years was too great an increase is a question for another day. What is clear is that the collapse of the private credit system post-2007 is an almost insurmountable barrier to economic recovery that cannot be overcome simply by quantitative easing by the European Central Bank (Chart 11).
Japan: a setback for Abenomics

While Japan’s second and third quarter declines in GDP are viewed in the narrow context of the April VAT increase, they are actually a more devastating critique of Abenomics than they appear. The Japanese economic challenge is to be able to sustain several years of solidly positive economic growth that signal a newly dynamic and globally competitive economy.

The introduction of the VAT so early in the reform process essentially sunk the economy. Even if the economy resumes a solid growth path in 2015 and 2016, which we expect, the opportunity for early evidence of a new dynamic Japan has been lost.

We believe that Mr. Abe will adopt new and more potent policies and that Japan will benefit from stronger global trade growth. Whether Japan has truly turned the corner toward greater domestic dynamism will not be clear for years into the future (Chart 12).

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1 The private sector credit flow represents the net amount of liabilities in which the sectors Non-Financial corporations (S.11) and Households and Non-Profit institutions serving households (S.14_S.15) have incurred along the year. The instruments that are taken into account to compile private sector credit flow are Debt securities (F.3) and Loans (F.4). Data are presented in consolidated terms, i.e. data do not take into account transactions within the same sector and expressed in % of GDP and in million units of national currency. (Source: Eurostat)
Our June forecast included a large pullback in consumer spending as a result of the VAT and still showed modest growth for 2014. However, the effects of the VAT have reverberated across the economy, resulting in very large declines in real estate and business investment as well as consumer spending. Private residential investment, which had expanded for eight consecutive quarters through the first quarter of 2014, was hit particularly hard, declining 34.3 percent in the second quarter and 24.4 percent in the third quarter on an annualized basis.

The core of the problem is that Japan has never moved away from its export-dominated economic model of the 1980s. However, unlike in the early 1980s when Japan was an early entrant into the global marketplace and enjoyed an economic preeminence only replicated by China in recent years, today’s global economy is full of competitors. Japan’s export success does not have the same domestic benefits that it once did.

A more fundamental problem is that Japan operates as a dual economy. On the one hand, the export sector is dominated by a multinational manufacturing sector that is organized to compete globally with state of the art business practices and product innovation. On the other hand, the domestic market is highly controlled and uncompetitive, and the pace of progress on reforms needed to catalyze new industries, promote innovation and increase productivity has been slow. Domestic markets have little latitude or incentive to innovate and to invest, rendering domestic sectors like consumer spending and investment essentially stagnant (Chart 13).
Is a weak yen the only way out?

With domestic markets lagging, the Bank of Japan has allowed the yen to decline in order to spur exports and increase corporate profits. Between March 2013 and September 2014 the depreciation of the yen was controlled in the 95 to 105 yen/dollar range, but with the recent recession news it has declined more sharply to 120 yen/dollar.

At issue is whether the yen at the 115-120 level, which is outside of post-1999 trading ranges, is an aberration that will be self-correcting or a signal of continued yen weakness. It is certainly plausible that Prime Minister Abe could use currency depreciation, not only as a passive tool to support exports as he has thus far, but more aggressively as an active policy to drive economic activity back to Japan.

In the current outlook, we adopt the consensus view that a yen value at 120 yen/dollar is an aberration and the yen will rise gradually to more normal levels. Using our trend and standard deviation valuation approach, the current rate of 120 yen/dollar is more than two standard deviations from the post-1999 trend and would be expected to reach this level less than five percent of the time. This suggests that the yen is likely to appreciate in 2015, gradually reverting toward its historical trading range (Chart 14).
However, an alternative analysis based on a longer term trend (post-1980) indicates that a 120 yen/dollar rate is not at all unusual. In fact, 120 yen/dollar represents almost the exact median value since 1980. Using this alternative trend and standard deviation approach, the yen appears to have plenty of downside to depreciate further, perhaps as low as 150 yen/dollar, while still remaining within this longer-term trading range (Chart 15).
There is no right or wrong currency value but economic policy objectives can dictate whether currency appreciation or depreciation is desirable. In Japan’s case, quantitative easing has only weak domestic effects and domestic structural reform is politically hard to do with more long run results than short run effects.

An active policy of currency depreciation makes exports cheaper and imports more expensive and offers the opportunity, at least in the short term, to have a major impact on economic growth. A weaker currency also raises the costs of producing abroad and reduces the costs of domestic production and investment. Both would benefit domestic economic activity. While Japanese policy makers have applied currency depreciation sparingly thus far, the intransigence of their economic problems argues for a more aggressive policy approach using whatever tools are at their disposal.

With U.S. and Japanese central bank policies heading in opposite directions, this scenario is certainly achievable in a floating exchange rates system. We do not now regard the notion of 150 yen/dollar as the most likely outcome as it represents a clear structural break from the exchange rate regime of the last 25 years. But given the current policy constraints and challenges facing the economy, we regard it as a plausible solution to a seemingly intractable problem – Japanese economic stagnation.

**Implications for the euro**

This result would have significant consequences for currencies elsewhere in the world, most notably in Europe and for the euro, where export growth is a key driver of the economy as noted above. While the euro has been falling with respect to the dollar, it has been strengthening relative to the yen, with its cross rate rising over the last two months from 137 to 148 yen/euro.

Under our base outlook, the weak yen and euro begin to revert back toward more typical post-1999 trading ranges relative to the dollar. We assume the yen/euro cross rate remains roughly where it is today at about 150 yen/euro, in which case gradual yen appreciation to 115 yen/dollar could lead to appreciation in the euro up to about 1.32 dollars/euro over the course of 2015.

However, if the yen instead continues to depreciate to around 150 yen/dollar, even a higher yen/euro cross rate at the high end of its trading range around 170 yen/euro would not prevent the euro from continuing to fall significantly against the dollar. Under this scenario, it could fall to as low as 1.13 dollar/euro by the end of 2015 (Chart 16).
Movements of the yen and the euro and the implied strength of the U.S. dollar would rewrite the exchange rate landscape — not to mention create knock-on economic and political consequences. We will continue to develop the analytics behind these scenarios as we gain more information on Japan’s policy intentions. However, after years of economic stability verging on stagnation, these currency scenarios suggest an era of greater volatility and uncertainty could be ahead.
IV. China: Steady as You Go

Our China outlook remains pretty much intact. We have scaled back our projections only slightly to a 7.4 percent growth rate for 2014 and 7.8 percent for both 2015 and 2016 (Chart 17).

Chart 17: China’s growth is low and steady

Moreover, the basic structure of the outlook is unchanged. After a slight pickup in 2013, investment growth is still likely to be lower in 2014 and 2015 as a result of slowing credit growth and the downturn in the real estate sector. However, we have revised our 2014 and 2015 investment projections slightly up since our June forecast in a nod to higher government infrastructure spending and the fact that the worst of the real estate downturn appears to be nearly over.

In the face of slower investment growth, the consumer spending necessary for true economic rebalancing is still not in place. As a result, we have scaled back consumption growth for 2014 and 2015 considerably.

The consumer spending element of the rebalancing effort is the most challenging of China’s policy objectives because consumers react to a panoply of signals in the economic environment and are not directly responsive to government directives. Nevertheless, we remain convinced that structural supports such as continued urbanization, income growth, and high savings rates along

with better consumer confidence in the new policy direction represent an enormous upside growth opportunity that cannot be ignored.

The notion of a solid 7.4 percent growth this year and higher growth (7.8 percent) in 2015-2016 flies in the face of considerable China pessimism. Nevertheless, there is little change in many of the key monthly activity indicators to suggest the economy is moving either up or down to a significant degree in 2014.

Retail sales growth, for example, is still running at about a 10 percent annual rate; the manufacturing purchasing managers’ indexes (PMIs) remain in positive territory, and the non-manufacturing PMIs continue to be strong and are actually turning up as 2014 ends (Charts 18, 19, and 20).

**Chart 18: China retail sales growth remains stable**

![Chart 18: China retail sales growth remains stable](chart.png)

Source: China National Bureau of Statistics
The key issues of disagreement center on the state of the real estate sector and the outlook for private investment. To be sure, the real estate sector took a major hit with a 20 percent decline in new floor space started amidst falling home prices at the beginning of 2014.
Since then, however, construction has gradually recovered with the most recent data indicating that growth in new floor space over the past three months is currently about 13 percent over the same period last year despite credit growth continuing to fall (Chart 21).

**Chart 21: The housing sector was deeply depressed early in the year but is now recovering**

The impact of the volatility in new construction starts does not show up to the same degree in floor space under construction, which correlates more closely to real estate investment. Real estate has slowed dramatically since the credit-fueled days of the crisis and its immediate aftermath and fallen further in 2014, but there is no evidence of a collapse (Chart 22). Note that these levels are reported in actual yuan and not in volume terms so they reflect the effects of price.
The story is similar for investment. Fixed asset investment (FAI) has slowed from about a 20 percent annual rate at the beginning of 2013 to about 16 percent today.\textsuperscript{2} Some of this slowdown is certainly due to the slowdown in land prices. However, it is also clear that manufacturing and real estate investment (which constitute 60 percent of all investment) have slowed more than other sectors from about 20 percent year-over-year growth at the end of 2013 to 13 percent today.

What is particularly interesting in the sector data is the number of sectors where FAI is stable at high rates or even turning up. These include power and utilities, management of water, environment and public facilities, and warehouses and logistics support. While these sectors are all still a small share of total investment they signal a shift to the types of investments associated with a rapidly modernizing economy (Chart 23).

\textsuperscript{2} FAI, which measures all purchases related to investment, including land and structures and all operating and maintenance along with equipment, is a poor measure for estimating real investment growth but it is one of the only relevant monthly indicators available.
Chart 23: Investment has slowed in manufacturing and real estate but is holding up in new sectors

FAI Growth by Sector

Source: China National Bureau of Statistics
V. Commodities and Impact on Other Emerging Markets

In our June 2014 Global Outlook, Engaging the Global Cycle, we identified the close relationship between commodity prices and emerging market growth. As with our top-down approach for global growth, the relationship between commodity prices and emerging market growth provides an additional perspective by which to assess emerging market performance by region and as a group.

Commodity prices have declined dramatically in the last six months. Oil prices at $55-60/barrel have fallen by nearly half since mid-June to their lowest levels in five years. Metal prices have fallen as well, with the relevant IMF price index nearly 25 percent lower than at the beginning of 2013 (Chart 24).³

Chart 24: Commodity prices head down as supply outpaces demand and prices deteriorate

Declining commodity prices can have severe consequences for commodity-producing emerging markets. Analysis linking changes in the IMF commodity price index (including fuel and non-fuel price indexes) and emerging market real GDP growth reveals a strong correlation over the last twenty years (Chart 25).⁴ Notably, despite China’s importance as a driver of global commodity

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³ IMF Metals Price Index includes copper, aluminum, iron ore, tin, nickel, zinc, lead, and uranium price indices.
⁴ IMF Commodity Price Index data only goes back to 1992.
demand, the data do not bear out any statistically significant relationship between commodity price growth and China’s real GDP growth.

Chart 25: Emerging market GDP growth closely follows commodity price index growth

Looking forward, the fall in commodity prices in 2014 and IMF forecasts for continued declines out to 2019 indicate a prolonged slowdown in emerging market growth. The IMF projects emerging market GDP growth of just 4.4 percent in 2014 — the lowest rate since 2001 — before rebounding in 2015 and stabilizing at 5.2 percent growth through 2019.

Analysis of the commodity price data bears this out. Using a structural model that incorporates IMF forecasts for commodity price growth through 2019, we can produce a similar forecast for emerging market GDP growth that mirrors the IMF forecast. Our model suggests an even greater drag on emerging markets, with GDP growth of just 4.9 percent on average from 2015 to 2019.

Commodity prices are notoriously volatile and our expectation for stronger global demand as a result of better global growth next year should put a floor under commodity prices. Nevertheless we have scaled down our 2014 GDP growth estimate for emerging markets and have kept the very modest uptick in 2015 and 2016 which is in line with our top-down expectation for a pickup in global growth (Chart 26).
Inflation pop scenario

Given the volatility of commodity prices, what goes down is likely to go up and a resurgence in commodity prices would have a positive effect on emerging markets.

An alternative scenario, derived in broad terms from a scenario provided by our advisor Peter Goodburn and his use of Elliott Wave principles,\(^5\) anticipates a run-up in commodity prices to record levels after further consolidation below current levels in mid-2015.\(^6\) According to these geometric models, oil prices, metals, gold and other commodities are approaching the low-end of their post-2011 ranges and are set to emerge towards an “inflation pop,” whereby prices could double or more than double in the late 2015 through 2017 timeframe.

While this scenario is not now our central thesis it is consistent with the solid growth pattern we expect in 2015 and 2016 as well as continued quantitative easing, currency depreciation, and other growth-oriented policies dominating the policy environment. If inflationary circumstances arise under this scenario, the resulting surge in commodity prices could carry emerging market growth back towards pre-crisis levels by the end of 2015 and into 2016 (Chart 27).

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\(^5\) For an explanation of the Elliott Wave Principle, see: [http://www.wavetrack.com/tutorials/the-wave-principle.html](http://www.wavetrack.com/tutorials/the-wave-principle.html)

Chart 27: A commodity price surge could drive emerging market growth back to pre-crisis levels

The inflation pop scenario is intended to demonstrate the range of possibilities for future commodity price growth and the consequences for emerging market growth. As with the above discussion of currencies, these scenarios for commodities and emerging market growth suggest that, along with better overall economic growth, 2015-2016 could introduce wider swings in a range of fundamentals — well beyond what we have experienced since 2010.

Volatility leads to a higher degree of unpredictability and greater perceived risk. We will be developing these themes in our next Global Outlook report especially as they help define the “zone of risk,” which is a permanent feature in our longer term structural framework.
## Appendix A: Global Forecast Table

### REAL GDP GROWTH RATES

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* Actual Historical Data

Sources: The Conference Board, International Monetary Fund, The GailFosler Group
## Appendix B: U.S. Forecast Table

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*Actual Historical Data