The GailFosler Group

Engaging the Global Cycle:
A Bridge Too Far?

Global Economic Dynamics Series

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I. Executive Summary

This report, *Engaging the Global Cycle: A Bridge Too Far?*, identifies the importance of trade and credit in the global growth cycle and evaluates whether these two powerful growth drivers will emerge to transform the dynamics governing global growth. This report further extends the analysis of trade and credit to generate a direct estimate of global growth that can be used to “pressure test” global growth projections based on the aggregate of individual country/region projections.

This new “top-down” approach shows that both trade and credit are advancing together for the first time since 2007 but at rates that fail to support global growth above 4 percent in 2014. The cyclical dynamics we had expected to take hold by now are still not in place.

We therefore have scaled back our 2014 and 2015 global growth projections (derived from the sum of individual country projections) from 4.1 percent to 3.7 percent in 2014 and from 4.6 percent to 4.3 percent in 2015. Although 2014 represents the first year since 2010 when growth in most global economies is expected to match or exceed the previous year, underlying investment, trade and credit trends have not yet ignited the self-feeding growth dynamics of a true global expansion.

These projections compare to global growth rates of 3.4 percent in 2014 and 4.2 percent in 2015 that we obtain from using trade and credit as tools for projecting global growth directly. While the results of both the top-down and bottom-up exercises result in lower growth than our previous forecasts in both years, a major acceleration in growth from 2014 to 2015 remains intact. We are, therefore, comfortable with a global growth projection based on our 2014 country/region projections above 3.4 percent because an acceleration in global growth momentum appears to be in place.

Among the key countries and regions, we have revised down 2014 growth rates in the United States, China and Europe (EU-15),¹ as all three had disappointing first quarters. We also scaled Japan back despite a strong first quarter because of the expected impact of the April sales tax hike and uncertainty surrounding structural reforms, but we left our outlooks for other advanced

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¹ The EU-15 region includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.
economies and emerging markets other than China relatively unchanged from our September 2013 forecast.

Beyond 2014, we continue to believe that the global expansion will gather strength as investment and housing take hold in the advanced economies and trade and credit support the global cycle as a whole. We resist the tendency to significantly downgrade the future in response to recent disappointments, like the poor first-quarter U.S. performance, because we believe that ultimately the cyclical dynamics will make themselves felt to the upside. Notably, we expect these same indicators and analytical approaches to give us an early warning signal in the event of an impending downturn.

Among the regions, we remain distinctly positive on the advanced economies, in particular the United States and Europe. With respect to emerging markets, we continue our view that China’s upside potential is as great as its downside risks but have notched down China’s 2014 growth rate from 7.8 percent to 7.5 percent in a nod to adverse credit, investment and real estate dynamics in the first quarter of 2014.

While some of the commentary on China can be only characterized as grim, our work indicates that China’s growth is largely determined by policy intention. A credit slowdown and decline in real estate prices are likely to affect sectors and regions in the short term but not the macro economy as a whole in the long term unless the consumer sector fails to pick up the slack. Further, we believe that it would be highly unlikely that China would slow to the 7 percent rates over the next few years shown in the April 2014 International Monetary Fund (IMF) forecast in the face of an improving global growth cycle.

Chart 1 compares our current global outlook to our September 2013 projection and to the IMF April 2014 outlook.
The new GailFosler Group (GFG) outlook extends only through 2016 because the expected economic cycle has not taken hold. If we are wrong about the cyclical pattern of growth going forward, then the whole context of the outlook will need to be reevaluated.

For now, the nearly uniform improvement in economic performance among most global regions expected in 2014 suggests that the change in outlook is one of timing but not direction. The detailed region/country projections are shown in Appendix A.

The “zone of risk” concept first introduced in our February 2013 report, Global Growth, Structure and Stability, begins this year (2014) and extends for the foreseeable future. The premise behind the “zone of risk” is that we have fundamentally changed the financial system as a result of the financial crisis and the considerable regulation of the banking system that followed.

Given that credit demand is an important dimension of any global expansion, it is difficult under these changed regulations and institutional channels to determine how the cost and risk profile of credit will change relative to the past (although both cost and risk will likely be higher) and which institutional and non-institutional sources will supply this credit. Should the global cycle engage, the resulting uncertainty surrounding financial and currency markets could lead to greater volatility and an increased likelihood of unstable financial events. We add to the “zone of risk” the possibility that financial regulation will suppress the supply of credit sufficiently to impede the global cycle — but that is not now our central conviction.
II. Engaging the Global Cycle

The GFG Global Dynamics series is designed to explore what drives economic cycles, the relationships among countries/regions and the global cycle, and other global drivers like investment, credit, trade and commodity prices. The emphasis on economic cycles is important because not only do they change the dynamics of the operating environment in terms of market opportunity, employment, wages and interest rates, but as we witnessed in the financial crisis, credit and financial market conditions change the risk profile of the cycle itself.

The GFG approach to global projections involves not only building up the global outlook from individual country/regional analysis but also using a top-down approach to assess global growth drivers and, where possible, global policy levers. A top-down analysis provides a valuable cross-check on how country and region dynamics interact with one another.

This approach is intended to counterbalance the tendency in projections to overemphasize current trends. A comparison of IMF forecasts over the past two years, for example, shows that projected global growth rates in 2014 and 2015 have come down about one full percentage point, almost exactly the drop in global growth in the 2012 and 2013 period.

The emphasis on cyclical dynamics attempts to capture economic drivers like credit that can have a geometric effect on growth. The dynamic quality of these economic drivers is one reason why economic performance tends to be better during good times and worse during bad times than we expect (Chart 2).
Chart 2: Future expectations can be influenced by current disappointments

Trade and Credit Are Important Global Growth Drivers

Trade growth is a powerful tool for analyzing global growth. Statistical analysis indicates that global trade growth can explain about 70 percent of the change in global GDP. Trade growth is an important cyclical force because trade typically grows at 1½ to 2 times global GDP growth (Chart 3).

Chart 3: Global trade drives the global cycle
Global economies get injections of demand that are a multiple of domestic demand growth. Even though exports are often a relatively small share of domestic output relative to other sectors, increases in exports can have important multiplier effects on domestic activity. This analysis also shows how powerful trade can be for small open economies like Singapore where trade volumes are the equivalent in rough terms to total GDP.

The most important problem with using exports as a global forecasting tool is that they change along with GDP. In other words, exports are not a leading indicator of global GDP growth. Nevertheless, trade is such an important part of the global growth puzzle that it is worth finding a useful counterpart to help project trade growth.

Enter global credit. Analysis of the relationship between global credit growth and global GDP growth shows credit growth is an effective leading indicator of global GDP and, to a lesser extent, global trade growth. Credit growth in the current year can explain about 30 percent of the change in global GDP in the following year (Chart 4).

**Chart 4: Credit plays an important cyclical role and lack of credit helps explain slow growth**

While credit plays a subsidiary role to trade as a driver of global growth, this analysis underscores its importance. Credit growth in a given year also appears to be a prerequisite for trade growth in the following year, particularly since 2000. The fall in credit growth in 2008 prompted the drop in trade and growth in 2009, and slow credit growth in 2010 and 2011 pre-empted declining trade and GDP growth in 2011 and 2012.
Global credit is dominated by four major countries/regions: the United States, Europe, Japan and China, which together have consistently accounted for about 70 percent of global credit over the last three decades. Notably, credit growth in the United States, Europe and Japan slowed dramatically since the crisis, but China has picked up the slack (Chart 5).

Chart 5: Global credit is dominated by the “Big 4”

This high and stable concentration of global credit provides a bridge for estimating current global credit trends based on just these four countries/regions. Using historical World Bank data and Bureau of International Settlements (BIS) quarterly data as a proxy for 2013, it appears that global credit has risen steadily since the end of 2011 and appears to have been rising at about a 4 percent annual rate going into 2014.

Credit can be a channel for estimating future trade growth and by implication global GDP growth. For example, credit growth at 4 and 6 percent in 2013 and 2014, respectively, yields expected trade growth of 6 and 9 percent in the following years, 2014 and 2015. Together, these relationships suggest a global growth rate of only 3.4 percent in 2014 but a rate as high as 4.2 percent in 2015.

A few conclusions are in order. First, this analysis strongly suggests that the previous GFG global growth forecasts need to be scaled back. The new GFG global outlook is more moderate but still remains above the growth rates indicated by this statistical analysis alone.
Second, the dynamics of higher credit and higher trade growth are emerging. Higher credit and higher trade point to an acceleration in the global cycle — the full realization of which is not likely to be apparent until 2015. Nevertheless, the fundamentals for a cyclical rebound in terms of global trade and credit appear to be in place (Chart 6).

Chart 6: Trade and credit are advancing together for first time since the crisis

It is noteworthy that China’s credit growth has slowed sharply in recent years from an annual rate over 30 percent in 2009 to about 16 percent today. Nevertheless, these are still very high rates that along with the recovery in U.S. credit growth have lifted global credit growth to an estimated 4 percent in 2013 — consistent with the uptick in 2012.

Continued recovery in credit growth in the advanced economies will be necessary to compensate for the possibility of an extended credit slowdown in China. If credit growth in China continues to slow to around 10 percent by 2015, combined credit in the United States, Europe and Japan would need to grow in the 4 to 6 percent range to maintain a sufficient supply of credit in order to drive the global cycle. Credit growth in this range would represent only a slight increase from current rates in the United States and Japan, although a somewhat a bigger increase for Europe — certainly plausible given the expected pace of the European growth in 2014 and 2015.
III. U.S. Outlook

Where Is the Cycle?

Recently released economic data underscore the confusion about where the U.S. economy is and where it’s headed. The second estimate of first-quarter GDP growth came in at a low -1.0 percent, thanks mostly to a sharp decline in business investment, private inventories and exports. Meanwhile, May’s employment release reported a payroll employment gain of 217,000, consistent with solid gains thus far in 2014.

The unemployment rate dropped sharply from 6.7 percent to 6.3 percent in April and stayed unchanged in May — although notably, the household survey on which the unemployment rate is based showed a total gain of only 72,000 workers over the past two months. Nearly the entire decline in the unemployment rate was due to an exodus of more than 600,000 workers from the labor force in April and May.

Despite the fall in labor force participation, the payroll data mark the first four consecutive months of 200,000+ jobs added since before the recession — even during the latter stages of one of the coldest winters on record. Indeed, private-sector employment is now 7.6 percent higher than at the end of the recession, accounting for all of the job growth to date. Public-sector employment appears to have stabilized but is still showing few gains (Chart 7).

**Chart 7: Private-sector gains dominate U.S. job market while public-sector growth remains stagnant**
The Institute of Supply Management (ISM) indexes support the positive tone in the payroll data. Both the manufacturing and nonmanufacturing indexes signal that a spring rebound is under way (Chart 8).

Chart 8: ISM indexes of economic activity remain at high levels

![ISM Manufacturing and Nonmanufacturing PMI chart](chart�)

Still, the cycle has not picked up as quickly as we expected. The first-quarter GDP data requires us to reduce our annual 2014 growth rate from 3.9 percent to 2.5 percent and, as an extension, the 2015 growth rate from 4.5 percent to 3.8 percent.

We expect cyclical forces to gather strength through the rest of 2014 and into 2015. The 2016 U.S. growth rate is lifted slightly to reflect the fact that because the cycle is taking longer and is less powerful than originally expected, it will likely be extended (Chart 9). Appendix B contains the U.S. forecast detail for 2014-16.
Sector Dynamics: Business and Housing Investment Stall

The primary reason the U.S. cycle is lagging is the recent slowdown in private business investment and housing. These sectors are two of the most important cyclical sectors that help to power economic growth during expansions. Year-over-year growth in business investment in the first quarter is running at a 3.4 percent annual rate while residential investment is up only 2.4 percent—hardly different than the 2 percent rate for the economy as a whole.

One possible explanation for both shortfalls is the slow growth in credit, which has been adversely affected by the regulatory and policy environment in both cases. Credit growth is running well below past cycles and credit channels are dominated by credit markets rather than lending institutions. (See Section VII: Zone of Risk below for further detail.)

Moreover, both business and housing investment require long-term visibility on market conditions, economic context (tax, regulation, energy supply access and cost), and credit access, which govern the risk and the return on investment. This forward visibility has been missing for a long time in the business sector. A March 2014 GFG report, Jobs and Investment: The Missing Link, identified the slow pace of investment as a key driver of the shortfall in employment since 2000 and estimated the investment levels required to increase labor market dynamism. Recent surveys and buying patterns suggest that similar uncertainties affect housing markets (Chart 10).
Chart 10: Disappointing performance in business investment and housing slows the growth cycle

We expect the housing market to recover, although more slowly than before. Housing starts in April were the highest since January 2008 and should continue to grow as employment and incomes continue to improve and drive higher demand. Still, at our modified growth rates, residential investment will remain below its 2007 levels until 2016.

Is GDP a Good Measure of the U.S. Economy?

While many accept the low reported growth rates as the “new normal” (some refer to these rates as “secular stagnation”\(^2\)), volatility in the reported GDP data and the conflicting signals between the jobs and growth data raise questions about whether we are underestimating the actual growth rate in the economy.

For the reported numbers to be believed, one would have to believe that businesses have been hiring workers without regard to market growth or productivity growth. Profits are created from top-line revenue growth, bottom-line cost containment or both. In no case can you have rising corporate profits, weak market conditions, stable to declining inflation and declining productivity. In short, the economic numbers do not add up.

We use Okun’s law as a prism through which to gain insight on economic growth. It is important to qualify this exercise at the outset. Okun’s “law” is really more of a rule of thumb. The statistical

\(^2\)\text{http://larrysummers.com/secular-stagnation/}
relationship between growth and the unemployment rate was reasonably strong until about 1980, after which the relationship has somewhat deteriorated. Nevertheless, the long-term relationship provides some useful information for reconciling the apparent conflict between the decline in the unemployment rate and GDP growth since 2009.

Using the 1950 to 2013 period as a guide, the four-percentage-point drop in the unemployment rate over the last four years is consistent with a GDP growth rate in excess of 4 percent since 2009. Adjusting the unemployment rate for a more reasonable labor force participation rate that is more representative of real labor market dynamics does not alter this conclusion much.

Instead of the reported 6.3 percent rate, the adjusted unemployment rate would be 8.6 percent, but it still would have declined significantly, albeit from a higher peak. Implied GDP growth would still have remained close to 4 percent and would have accelerated in the first quarter rather than declined (Chart 11).

**Chart 11: Pace of unemployment decline points to higher GDP growth**

An alternative is to look directly at what employment growth says about GDP growth. This relationship is significantly weaker than the relationship between unemployment and growth but still suggests average quarterly GDP growth of about 3 percent (annualized) and, once again, an acceleration in growth in the first quarter of 2014 rather than a slowdown (Chart 12).
This analysis is important for several reasons. First, it indicates that future “surprises” are more likely to signal strength rather than weakness. Second, if business activity is stronger than GDP indicates, resource utilization might also be higher. And, finally, and maybe most important, the tone of the economy could change suddenly toward higher growth — setting the stage for tighter Federal Reserve policy and renewed turbulence in financial markets.
IV. Other Advanced Economies

Europe: Moving Forward

Economic growth in the EU-15 expanded in four straight quarters through the first quarter of 2014 for the first time since mid-2011. It appears that the worst of the prolonged crisis has passed and an expansionary cycle is beginning to engage.

We have slightly reduced our EU-15 outlook due to the slower-than-expected pace of growth since our last report. Still, we are convinced that Europe will gradually return to its long-term trend output level by 2016, which would mean higher growth rates ranging from 1.7 percent this year to 3.0 percent in 2016 (Chart 13).

Chart 13: Europe is still set to expand through 2016

In our July 2013 report, *Can Europe Come Back?*, we identified exports and credit as two important drivers of the European cycle. On the trade side, exports have advanced, but inconsistently, as slower-than-expected growth in other advanced economies in recent quarters has stunted the global trade cycle. European exports rose at less than half the growth rate of global trade in 2013.

The credit outlook is somewhat more encouraging. Sovereign debt yields have come down to near pre-crisis levels in most countries, although private credit creation has yet to take hold. In
Europe, credit rises in tandem with the overall economy. The ongoing rebound, even if somewhat more subdued than we expected thus far, suggests that credit growth should begin to establish a more solid footing this year and support the economy going forward.

Indeed, the most encouraging picture of the European outlook comes from the Markit Euro area Manufacturing Purchasing Managers Index (PMI), which has signaled expansion for the last 11 months. Here again, this external measure of business activity is rising while the GDP measure is moving sideways (Chart 14). The U.K. Index, which is reported separately, sends an even stronger growth signal.

**Chart 14: Markit PMI data suggests the rebound in Europe is under way**

Japan: Cautious Optimism

In our September 2013 report, *Global Growth Update*, we noted that while the Japanese rebound depends in the short term on monetary stimulus and the low yen, its sustainability requires decisive progress in the third arrow of Abenomics, structural reforms. Since that time, sluggish growth in the second half of 2013 and slow progress on structural reforms have caused us to scale back our growth projections through 2016. Still, we expect growth to improve to above 2 percent in 2014 and approach 3 percent in 2015 and 2016 as economic policy continues to drive growth and the global cycle engages (Chart 15).
Near-term signals are mixed. Consumer spending was lethargic in the second half of 2013, as was export growth in response to the sluggish upturn in the global trade cycle. By contrast, GDP growth surged to 5.9 percent in the first quarter of 2014, the highest rate since the third quarter of 2011.

Much of the first-quarter growth was the result of consumer spending (running at an 8.5 percent rate) in advance of the April sales tax rise from 5 percent to 8 percent. Our 2.2 percent growth projection for 2014 assumes that the Japanese economy will contract in the second quarter and then resume moderate growth rates for the rest of the year.

While these projections may appear optimistic, we regard the rapid investment growth in recent quarters as an important positive signal. Japanese business investment has declined in recent years (and even recent decades). Rising investment along with rising business confidence signals that the Japanese economy may be repositioning in favor of higher growth.

The Yen and the Euro Remain Closely Linked

For regions that historically rely heavily on exports as a growth engine like Europe and Japan, exchange rates are an important policy tool. In our July 2013 report, *Can Europe Come Back?*, we looked at exchange rates between the euro and the yen relative to the U.S. dollar as well as the euro-yen cross rate as a test of reasonableness for our U.S. dollar projections.
The euro has moved above our projected ranges in part as a result of huge net flows of capital coming into the Eurozone. However, the euro has also been boosted by a lower-than-expected yen as Japanese monetary authorities continue to ease policy and push the yen down to support the economy. This weakness in the yen has thwarted efforts by the ECB to let the euro move down.

As a result of the lag in both economies relative to the U.S., we expect both currencies to remain at their current levels or lower through 2015, until their growth rates are firmly established (Charts 16 and 17).

Chart 16: The euro is approaching 2011 peaks against the U.S. dollar, boosted by the yen decline

Chart 17: Abenomics has pushed the yen to low levels relative to its longer term trend
V. China Analysis

Rebalancing: Stagnation or Progress?

In response to subpar first-quarter GDP growth (7.4 percent), we have revised down our 2014 growth forecast slightly, from 7.8 percent to 7.5 percent. We have further scaled back our 2015 and 2016 forecast from 8.4 percent and 8.5 percent to 8 percent in both years (Chart 18).

These changes in our projections respond to slower-than-expected progress in boosting the consumer sector and a greater-than-expected slowdown in investment. Our 2014 and 2015 growth rates require consumer spending to pick up to 9 to 10 percent annual rates along with a stable net export surplus of 2 to 3 percent of GDP. These are not atypical growth rates for Chinese consumption, but they have not been sustained for several years. The corresponding investment growth rates hover around 7 percent annual rates.

China’s already high household savings rate has risen to over 50 percent in recent years and constitutes a bow wave of future consumer spending power that can emerge under the right conditions. Government policy will have to implant a degree of forward-looking institutional confidence that reduces the clear bias of the average household toward precautionary savings. We retain the expectation that these policies will evolve but not without serious reservation in part because they are politically difficult.
At the same time, China’s policy efforts to restrain investment growth have a “leaning with the wind” quality about them. China’s economy is overinvested by almost any measure, and returns on capital have been declining since 2007. These market forces alone would lead to slower investment. The extent of the recent slowdown suggests that the Chinese government may have temporarily overreached.

While China is increasingly subject to market-based economic assessments, our analysis shows that there are few good predictors of China’s growth rate. We conclude that China’s growth rate is largely policy determined. In this context, the high reported unofficial rates of unemployment constitute an effective limit on how much the Chinese government can allow growth to slow.

Nothing illustrates the impact of the ongoing credit slowdown more than its effects on real estate construction. Outstanding loan growth has slowed from a 35 percent annual rate at the 2010 peak to about 16 percent today. Construction, as measured in square feet, is today declining at about a -20 percent annual rate (Chart 19).

Chart 19: Credit growth is a tightening noose on the property market

Still, even with a radically more restrictive credit policy and private restructuring that puts downward pressure on business investment, the underlying trends in the available high-frequency data appear relatively stable. For example, both Manufacturing Purchasing Managers Indexes (PMI) published by HSBC bank and the Chinese National Bureau of Statistics (NBS) exhibit periodic cycles over the past two years but don’t appear to be trending either up or down (Chart 20).
To be sure, fixed asset investment (FAI) has been trending down along with investment growth over the last few years and slipped another notch in early 2014. This drop is likely at least in part due to the fall in land and real estate prices. Fixed asset investment is only a general proxy for business investment because it measures all spending on capital items, including land and structure acquisition as well as construction, operations and maintenance (Chart 21).

**Chart 21: Fixed-asset investment continues to tumble in 2014**
Unfortunately, there is no evidence of a simultaneous pickup in consumer spending thus far in 2014. Retail sales growth appears to be running at almost the same rate in early 2014 as early 2013 (Chart 22).

**Chart 22: Growth in retail sales has fallen in 2014 and remains stuck in neutral**

![Retail Sales (Adjusted for Inflation), Year-on-Year Growth](chart)

**A Boost From Trade?**

On the plus side, China should receive a boost from the global economy if trade picks up as we expect. China’s export growth moves in tandem with both global growth and global trade growth. Both the GFG outlook and baseline IMF trade growth projections suggest a global trade cycle is emerging (Chart 23).
The People’s Bank of China (PBOC) also appears biased toward a weak yuan in order to further boost exports as other parts of the economy slow. Although net exports have constituted a slight drag on China’s GDP in the last few years, even a small increase in the trade surplus could benefit the domestic economy and help support the Chinese economy during its economic transition.
VI. Emerging Market Growth Challenge

China’s Role in Commodity Prices and Emerging Market Growth

China’s economic rise has spurred enormous demand for food, metals and energy, and other resource-rich developing countries have reaped the benefits. China has expanded its global reach outside of Asia, investing heavily in Africa and Latin America.

The increased demand for commodities has been reflected in rapidly rising commodity prices. While China’s direct impact on the commodity price cycle is relatively weak, China’s high growth has clearly helped sustain the surge in commodity prices during the last decade (Chart 24).

Chart 24: Commodity price trends follow China’s growth path but direct impact is unclear

Looking forward, China’s commitment to stable growth and increasing emphasis on resource-light high technology and consumer services will diminish the demand for commodities that dominated commodity and financial markets in the pre-crisis years. While this news is encouraging for many commodity-consuming countries, it is not good news for other emerging markets. Many emerging markets have ramped up trade relationships with China and are now reliant on Chinese demand to drive their commodity exports. Moreover, many emerging markets are commodity producers, which are set to lose market opportunity by virtue of the change in China’s growth profile.
It is therefore not surprising that other emerging markets are much more closely tied to commodity price cycles than is China. Global commodity price changes explain almost 60 percent of the change in emerging market growth rates over the last two decades.

Because China’s GDP growth has moved in tandem with emerging market GDP growth since 2000, we take the stable Chinese growth rate in the 7 to 8 percent range as a signal that emerging market growth generally will also remain moderate. There are important demographic growth opportunities for emerging markets as well as a likely lift from global trade. However, we believe that emerging market growth will remain subdued in the 5 to 6 percent range relative to the high dynamic pre-crisis rates (Chart 25).

Chart 25: China’s growth path suggests a similar trajectory for other emerging markets

![Emerging Markets vs. China, GDP Growth](image-url)
VII. Zone of Risk

Our “zone of risk” discussion began in our February 2013 report, *Global Growth, Structure and Stability*. The notion of a “zone of risk” was rooted in the observation that we have changed the financial system in material ways that make it difficult to predict how the financial system would react to economic incentives and cyclical forces going forward.

Simply put, how would the financial system and central banks respond to faster economic growth, higher risk and a greater risk appetite? By implication, how would growth respond to potential market volatility and likely greater central bank restraint?

We have not faced these challenges yet because the cycle has not yet engaged. Under slow and uneven growth, businesses can serve markets without adding workers or investing in new equipment. These behaviors neither put pressure on economic resources or on the financial system.

When growth accelerates not only does the competition for resources heat up but the competition for markets does as well. Central banks, businesses and financial markets have all been able to operate in a becalmed economic environment marked by precautionary stores of liquidity and limited risk-seeking.

**Will Credit Growth Support Economic Growth?**

As a consequence, credit demand is limited and the new regulatory order in the global financial system has not been tested. We have to consider the possibility that credit growth may be inadequate to support a cyclical rebound although this is not our central conviction.

In the United States, for example, total credit has advanced at the slowest pace of any recovery in the post-World War II period. Total credit is only about 10 percent above its mid-2009 level. Private credit and mortgage credit both remain below their 2009 levels (Chart 26).
This slow recovery in credit helps explain the failure of the U.S. economic cycle to engage. Statistical relationships show that credit growth generally leads GDP growth in the United States, though they can move in tandem, such as during the credit boom of the late 1990s.

The U.S. economy has actually performed somewhat better than credit growth would suggest. Using credit growth as a loose predictor of GDP growth, for example, points to GDP growth of only an average of 1.7 percent over the last four years compared to the already low 2.3 percent growth we have actually experienced.

Correspondingly, global credit growth is also lagging. Global credit growth, which was depressed by the European sovereign debt crisis, began to tick up only in 2012 after years at or below its 2009 level (Chart 27).
This shortfall in credit is a significant concern for the global economy. As in the United States, global credit growth leads global GDP growth; if credit fails to expand, the global economy may be stuck in neutral. Still, as discussed above in Section II: Engaging the Global Cycle, BIS data suggest that credit growth is stabilizing at rates that will support higher global growth in 2014 and especially 2015.

**Are Regulation and Central Banks Working at Cross Purposes?**

This question is too complex to answer analytically in this report, but the quick and dirty response is “yes.”

Given the importance of credit to the global growth cycle, it is more than passing strange that central bankers and financial markets virtually ignore private domestic credit growth as a policy target in favor of what we regard as an overemphasis on interest rates. Looking at the history of both short- and long-term interest rates in the United States, there appears to be little if any correlation between the level of interest rates and credit growth — especially in recent years.

Between 1970 and 1990, movements in the Fed funds rate up or down seemed to have the expected effect of slowing or accelerating credit growth. While these relationships are directionally correct, they don’t bear up to any consistent statistical test.
After the 1990s, the Fed funds rate and credit growth appear to move together. When the Fed funds rate rises, credit growth picks up. When Fed funds rate declines, credit growth slows. The Fed funds rate has remained at approximately zero for four years. The rate of change in credit is just now moving into positive territory.

Long-term yields as measured by the 10-year Treasury rate bear even less of a relationship to private credit growth. Long-term Treasury rates trace the long decline in inflation, while credit growth moves according to the economic cycle (Charts 28 and 29).

Chart 28: Interest rates have a less direct impact on credit growth in recent years

![Credit Growth vs. Fed Funds Rate](chart28.png)

Source: U.S. Federal Reserve
Interest rates have little predictive value in projecting either credit growth or GDP growth for individual countries and for the global economy. The importance of credit versus interest rates calls into question central bank emphasis on low interest rates in their monetary policy role rather than ensuring an adequate supply of credit in their financial institutional regulatory role.

Notably, in the United States, bank lending has picked up slowly and is running at about half the pre-crisis rate — accounting for only about 10 percent of total domestic U.S. lending. Almost all private domestic credit demand is corporate, and almost all of the net lending is conducted outside of the banking system, primarily in the corporate bond market.

Households are still drawing down mortgage debt in an attempt to raise the equity in their homes. The reported level of credit scores required for a mortgage further suggests that only borrowers with sterling credit ratings are getting mortgages.

We discussed this issue with respect to the housing shortfall in the “Where is the Cycle?” section under the U.S. outlook above. And, while 90 percent of all mortgages are held today by a government agency (Fannie Mae, Freddie Mac or FHA), the Administration and Congress are considering competing proposals for reducing or eliminating the government’s role as a secondary mortgage market for the housing sector. Government policy and regulatory uncertainty are upending the U.S. housing market, where forward visibility regarding prices, returns and access to credit is every bit as important as it is in the business sector.
VIII. Conclusion

In many ways 2014 is a year of transition toward a stronger global expansion. However, it has not unfolded with the intensity and clarity that we expected. Virtually all important global economies will match or exceed the previous year’s growth rates in the current year for the first time since 2010. Global credit growth has stabilized, and global credit and trade will both be growing together for the first time since 2007. Credit and exports are important global growth drivers for 2015.

There are admittedly a number of economic policy cross-currents, but these should not derail the acceleration in global growth. U.S., European and Japanese monetary policies will remain expansionary, while small steps toward fiscal restraint continue in all regions.

China’s rebalancing, which includes probably the most striking example of credit restraint globally, will be aided by higher global growth — offsetting central government pressure to stimulate the economy through other means. Other emerging markets will struggle to maintain neutral policies that keep both interest rates and currencies at levels that support growth.

This report contains what we believe are two important new features: (1) a top-down projection of global growth using key economic drivers against which to test the reasonableness of individual country analyses; and (2) a clear link between global economic dynamics and the functioning of the global financial system. The result of both sets of analytics is cautious optimism about the immediate future mixed with an abiding concern that the lack of interest in understanding the financial system as a “system” will impose unnecessary costs in the future.

For now, we focus on the acceleration in both growth and credit and what promises to be a better 2015 for all countries. This report, however, provides us tools for monitoring this progress as well as continuing to clarify the important links between the global economy and the global financial system.
## Appendices

### Appendix A: Global Forecast Table

<table>
<thead>
<tr>
<th>REAL GDP GROWTH RATES</th>
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<th>2014</th>
<th>2015</th>
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* Actual Historical Data  
Sources: The Conference Board, IMF, GFG
## Appendix B: U.S. Forecast Table

### Base Case U.S. Forecast

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### Interest Rates

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### Exchange Rates

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*Actual Historical Data  