

## **OCTAVIA'S OUTLOOK** **VOLUME 3: FALL 2015**

In this issue of Octavia's Outlook, we discuss our views on emerging markets and the implications for the global macro investment environment. Additionally, Octavia manages a contrarian strategy that is currently 100% focused on energy securities. In the next Octavia's Outlook, we will provide a summary of our analysis and conclusions on the energy sector. In the meantime, if you have any questions regarding our energy sector analysis, please feel free to reach out to us.

### **Global Macro Investment Environment**

#### In Summary ...

Six years of easy money created by global central bank policies has been the primary factor contributing to strong global financial asset returns. The question that keeps us up at night is whether central banks will continue with their easy money policies, and even if they do how big do they need to be to continue to push risk asset prices higher. The market sell off in August and September was the result of a contraction in global liquidity (we go into exhaustive detail on the following pages walking you through what we believe happened). But, October has seen a market rebound as the forces of liquidity contraction have retreated.

Looking forward, the most important factor in determining the direction of financial asset prices is the US Federal Reserve bank's ("Fed") interest rate policy, due to its impact on the value of the US dollar. And, this has put the Fed in a no win situation. On the one hand, if the Fed raises interest rates, the US dollar will increase in value against global currencies. This will further hurt the earnings of US companies with overseas sales and further hurt the competitiveness of US exports. This will also lead to further capital flows out of emerging markets ("EM"), putting downward pressure on EM currencies, forcing EM central banks to use their FX reserves to support their domestic currencies, and result in the contraction of global liquidity (a form of anti-QE).

All of this would argue for the Fed not to raise interest rates, yet we at Octavia believe that the Fed is worried about a building bubble in global financial assets. And, thus, they want to stop the bubble from growing further. Global central bank QE programs have enabled the issuance of too much EM debt. And, the slow-down in China's consumption of goods sold by other EM countries is now exposing the dangers of accumulating so much debt. If central banks continue with their easy money policies, it is likely that EM borrowers will continue to grow their debt levels since investors have no choice but to reach for yield. The greater the EM debt levels, though, the greater the impact on the global economy from a potential future EM debt crisis. This is the dilemma faced by the Fed. EM now makes up 40% of global GDP. An EM financial crisis will negatively impact the US.

Notice we have not once mentioned the impact of interest rates on the US economy, US inflation, or the US unemployment rate. The reason for this is that none of them are really impacting the Fed's

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policy decisions. **The Fed's top priority has been to prevent deflation in global asset prices.** If the unemployment rate really mattered, the Fed would have raised interest rates a long time ago (we explained our thinking in great detail in the prior Octavia's Outlook (Volume 2)).

So, what's the Fed to do? We wish thinking about these issues were black and white. It would make investing much easier. But, it is far more nuanced and fluid than that. And, it is very difficult to anticipate what the Fed will do. We would rather react to what the Fed does than try to position our portfolios based on guessing what the Fed will do. That said, our base case is that the Fed will not raise rates or at most raise rates one time over the next six months and then will not do so again for a long time (i.e., years). Its one and done at most. Putting aside what we think the Fed will do, we see four potential scenarios and outcomes:

1. Fed raises rates and clearly states they are on hold for further rate increases (the one and done scenario): global financial assets will rally to new highs.
2. Fed raises rates and states that future rate increases are "data dependent": global financial assets will sell off hard hitting new 2015 lows. This is the worst-case scenario for global equities and other risk assets.
3. Fed does not raise rates and clearly states they do not plan to raise rates: Similar to scenario one, global financial assets will rally to new highs. This is the best-case scenario for global equities and other risk assets. Longer-term though, this scenario probably leads to a bubble that ends very badly.
4. Fed does not raise rates but states that future rate increases are "data dependent": the unknown will confuse markets and markets will trade sideways, with a slight downward bias.

While we are focused on the Fed as the lead actor among central banks, China's central bank ("PBOC") is an important actor also. Their policies as it relates to the Chinese currency ("RMB") will have a very meaningful impact on global liquidity. If the PBOC further devalues the RMB, global markets could sell off again as occurred in August and September of this year, independent of Fed policy. And, we can't ignore Europe's central bank ("ECB") and Japan's central bank ("BoJ") as it relates to their QE policies and resulting impact on global liquidity. All these actors matter in considering the direction of global asset prices, it is just that the Fed's actions have the greatest impact on EM countries. Looking at all of the central banks together, we actively monitor central bank balances sheets and FX reserve levels to assess whether global liquidity is expanding or contracting.

While the above summarizes our big picture views, let's go down into the weeds to understand how we came to our conclusions. While this document is 24 pages, about 75% is charts. Please don't be scared off by the page count.

### What is Liquidity?

Given the importance of liquidity throughout our writing, before starting we want to make sure you understand what it means. Liquidity is the money or credit necessary to buy things and is created in three ways: via the extension of credit by banks, via the extension of credit by central banks (i.e., quantitative easing ("QE") programs), or via the creation of money by government treasuries. In all cases, there is more money in the global financial system, which can then be used to buy financial assets. This increase in money can lead to an increase in prices if there is not an offsetting increase in the supply of things being purchased. We will explain more thoroughly later, but during the past six years the reason that goods price inflation has been non-existent while financial asset price inflation

has been substantial is that the manufacturing capacity to supply goods and the labor pool to make such goods has grown even faster than the supply of money, while the supply of financial assets (including global real estate in select markets) has grown slower than the supply of money growth.

### Let's Start with China...

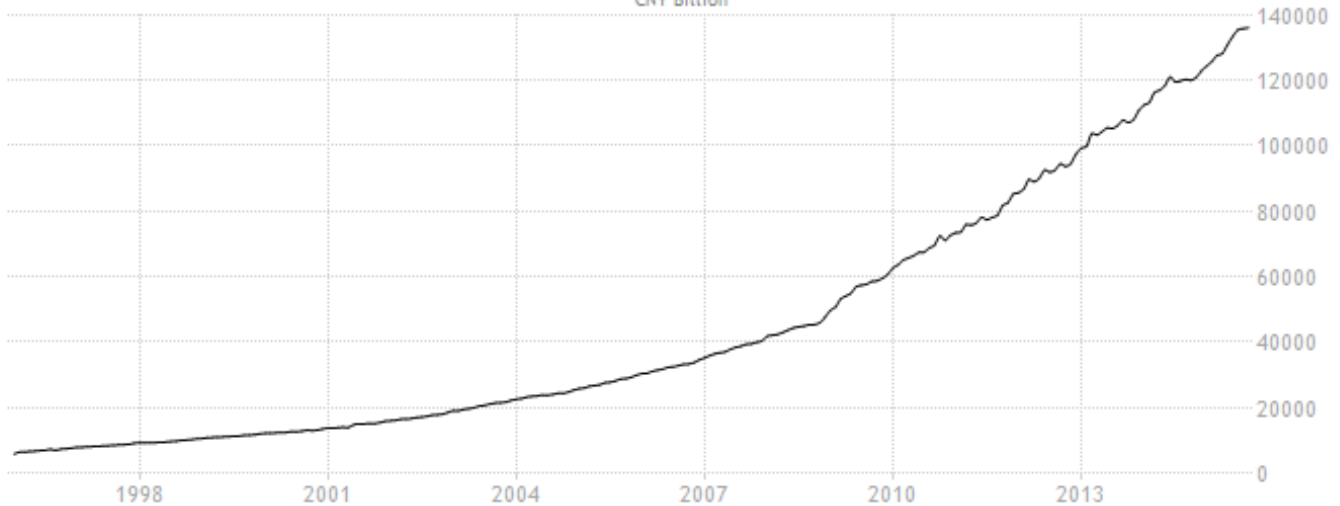
Because the interplay of EM and the US dollar is at the core of determining the direction of global financial markets, we need to start with China since China is the dog that wags the tail that is the rest of the EM countries. China has been a growth machine. Over the past 10 years, officially reported annual GDP growth has averaged about 12%. Chinese GDP is reported at \$10.4 billion as of 2014, the second largest GDP in the world. While there is great debate on the validity of the government generated GDP numbers, everyone should agree that China runs large trade surpluses and has been a significant recipient of foreign direct investment ("FDI"), both contributing to large Chinese current account surpluses. But, these current account surpluses create a problem for China in that they put upward pressure on the RMB due to the resulting significant demand for RMB. A strong RMB historically was a problem for China as exports were a key element to China's growth strategy and a strong RMB made China's exporters less competitive. Therefore, the PBOC intervenes in foreign currency markets to main the RMB at a ratio to the US dollar that the PBOC deems appropriate.

Over the past several decades, as China was receiving significant FDI and running large trade surpluses, there was significant demand for RMB. Thus, to offset this upward pressure on the RMB, the PBOC needed to sell RMB and buy US dollars, maintaining an equilibrium of the two currencies within whatever range the PBOC deemed appropriate. To access the RMB necessary to sell, the PBOC has three options:

1. Issue Debt. The PBOC can sell RMB denominated debt. The RMB proceeds can then be used to buy US dollars, which would then be used to buy US treasuries and other US securities deemed "safe". In this scenario, global liquidity is not created since the issuance of RMB debt takes money (RMB) out of the global market and the purchases of US treasuries puts back an equal amount of money into the global market.
2. Use Deposits. The PBOC holds deposits of banks. Sometimes banks have more money than they need to run their businesses. In that case, instead of having the cash sit idly, the banks will deposit the money with the PBOC and earn a return. The PBOC can then use the deposits (which could be RMB deposits, US dollar deposits, etc.) to buy other currencies, invest in foreign sovereign debt, etc. In this case, global liquidity is increased since money sitting idly at a bank is "out of circulation" but money deposited with the PBOC that purchases US treasuries pushes that money into global financial asset markets.
3. Create Money. Finally, the PBOC can simply create money. Over the past 20 years, annual money supply growth has averaged 17%, as evidenced by the following chart. FYI, since 2008, annual money supply growth has been about the same, at 16%. And, it goes without saying, that money printing absolutely increases global liquidity.

### CHINA MONEY SUPPLY M2

CNY Billion

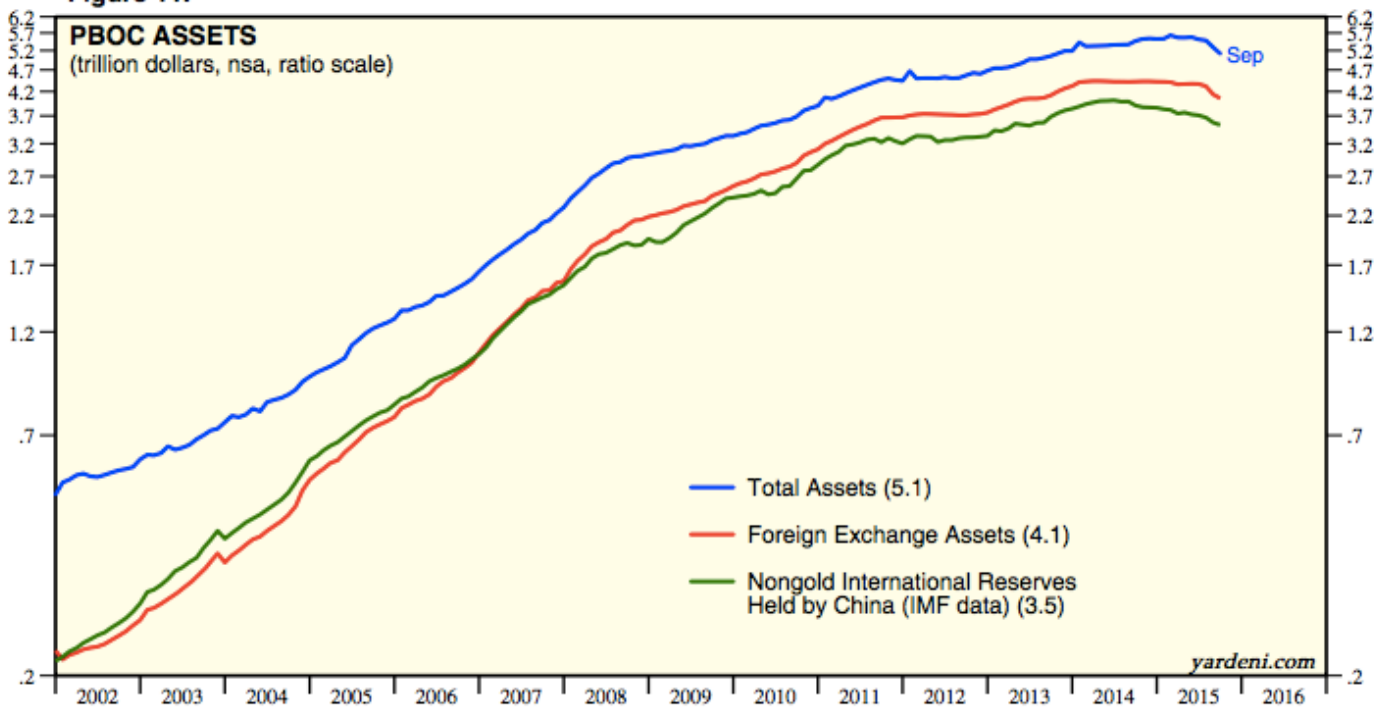


SOURCE: WWW.TRADINGECONOMICS.COM | PEOPLES BANK OF CHINA

These three factors together are what led to the size of China's foreign currency reserves. As the demand for RMB increases, the PBOC has to sell RMB and buy US dollars, and to a lesser extent Euro, Yen, etc. After peaking this summer at about \$4 trillion in FX reserves, China's current FX reserves are about \$3.5 trillion. Below is a chart with the PBOC's historical balance sheet levels.

## PBOC Balance Sheet

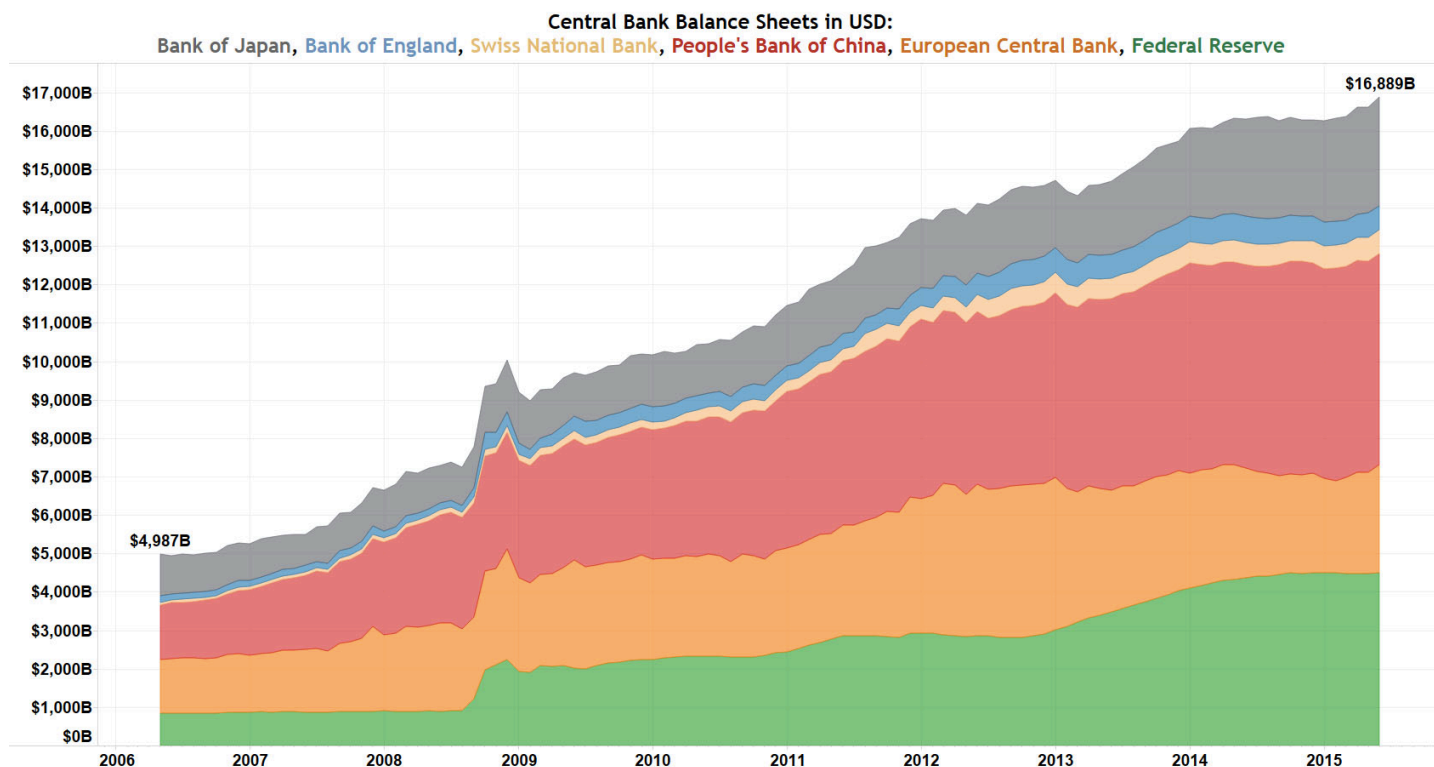
Figure 11.



Source: People's Bank of China and IMF.

To give perspective to these numbers, let's look at the Fed's balance sheet before and after the Fed's QE program. In September 2007, the Fed held about \$800 billion in securities and had about \$35 billion in deposits from financial institutions. In September 2015, the Fed held about \$4.2 trillion in securities (the result of debiting banks' accounts (i.e. creating money) and buying securities from such banks) and had about \$2.2 trillion in deposits from financial institutions. Thus, the net amount of liquidity created by the Fed in the past 8 years is about \$1.2 trillion (deposits from financial institutions counter the impact of security purchases in considering the net impact on global liquidity). Over this same period, PBOC FX reserves have increased from \$1.5 trillion to \$3.5 trillion. Since bank deposits equal about 70% of PBOC assets, bank deposits would have increased from about \$1 trillion to \$2.5 trillion, or the creation of \$500 billion in global liquidity.

Before moving on, below is a chart to put into perspective the various central banks and their balance sheets. Since 2006, the major central banks have increased their combined balance sheet by about \$12 trillion. While not all of this \$12 trillion has created liquidity, since some is offset by deposits and other liabilities beyond simple money creation, a large part of the \$12 trillion can be interpreted as liquidity creation. And, the largest liquidity creators have been the Fed and PBOC, with the largest balance sheets of any of the major central banks.

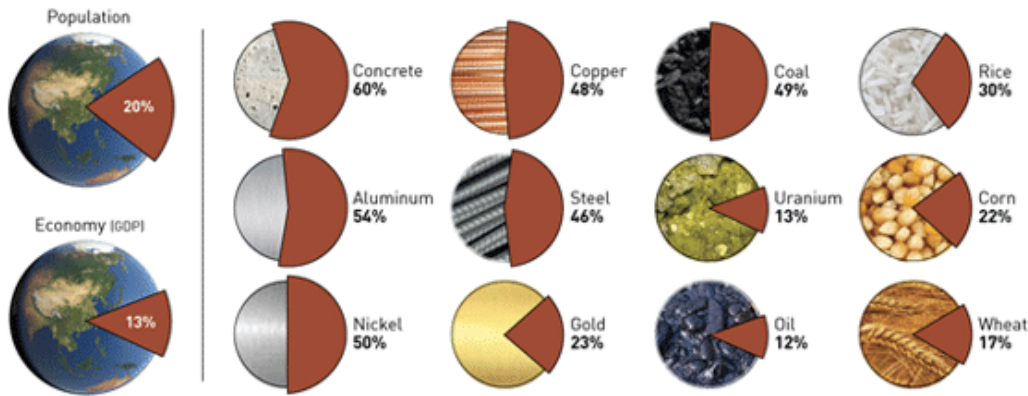


### ... And What China Has Meant to Other Emerging Market Economies

China's economic growth has been driven by domestic investment in infrastructure, housing and industrial production capacity ("IH&P"), as well as by goods exports. The IH&P investments require massive amounts of raw materials, as well as the purchase of industrial equipment. The following chart summarizes China's share of global raw materials consumption.

## CHINA CONSUMES MIND-BOGGLING AMOUNTS OF RAW MATERIALS

...and that's why slowing growth may continue to cause headaches for commodity producers



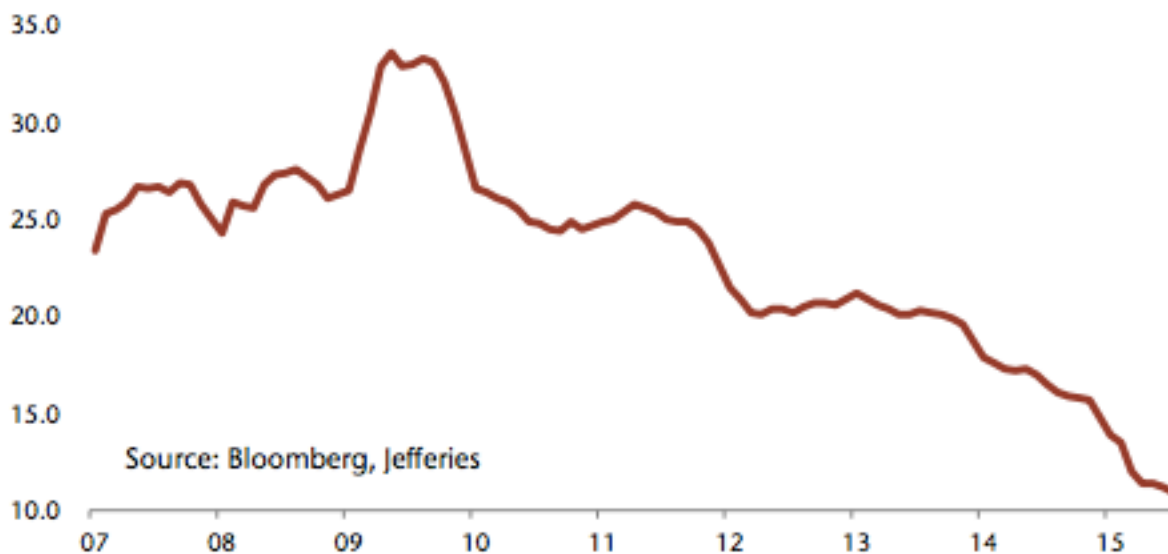
visualcapitalist.com

This raw materials consumption has been a boom for other EM countries. China's seemingly endless demand for raw materials lead to heavy investments in other EM countries to produce more and more of such commodities. And, much of this investment was financed with debt (we will expand on the implications of this in a bit).

But, China has decided to transition its economy away for IH&P and toward domestic consumption of goods and services. The next chart shows the change in China's fixed asset investments.

### Exhibit 7: China Fixed Assets Investment (Excluding Rural Households)

% y-y, cumulative

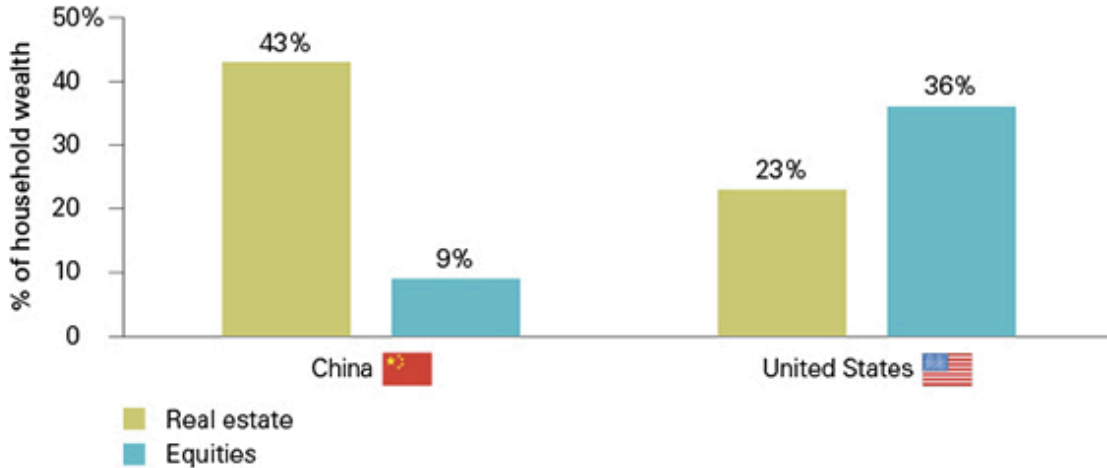


Source: Bloomberg, Jefferies

Source: Bloomberg, Jefferies

Additionally, China's GDP growth has been heavily dependent on the housing market.

### Housing is much more vital to China's wealth than the stock market



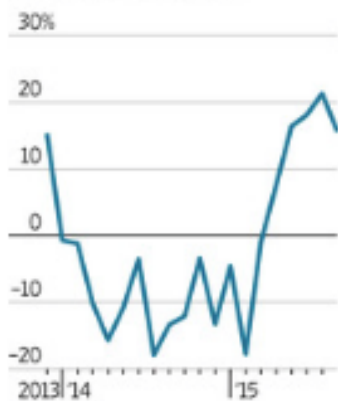
Sources: Board of Governors of the Federal Reserve System, Z.1 Financial Accounts of the United States (First Quarter 2015), CEIC Data, and Vanguard calculations.

But, growth in housing investment has declined materially in 2014 and 2015.

### Empty Nests

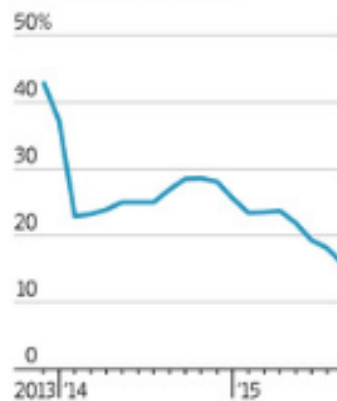
Housing sales in China have been improving since the start of this year...

#### Home sales by volume, change year-over-year



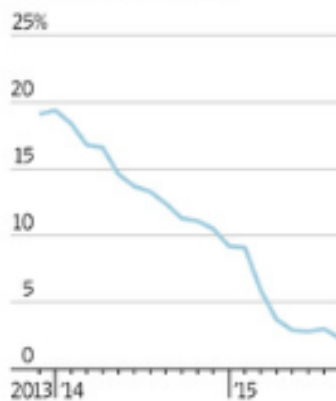
...and growth in national housing inventories is coming down...

#### Housing inventories, change year-over-year\*



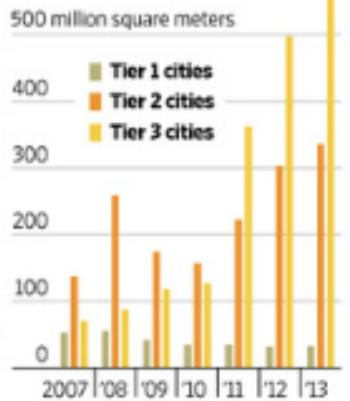
...while investment in residential real estate development remains sluggish..

#### Investment, change year-over-year\*



... because local housing authorities issue higher inventory levels for each city.

#### Inventory levels



Note: January and February data are combined to account for distortion stemming from the Lunar New Year holiday for housing sales, growth of inventory and growth in investment.

\*Figures are cumulative year to date, not monthly figures.

Source: WSJ calculations from National Bureau of Statistics (housing sales); National Bureau of Statistics Local (growth of inventory and investment) housing authorities, Wigram Capital Advisors, IMF Staff calculations (Inventory levels)

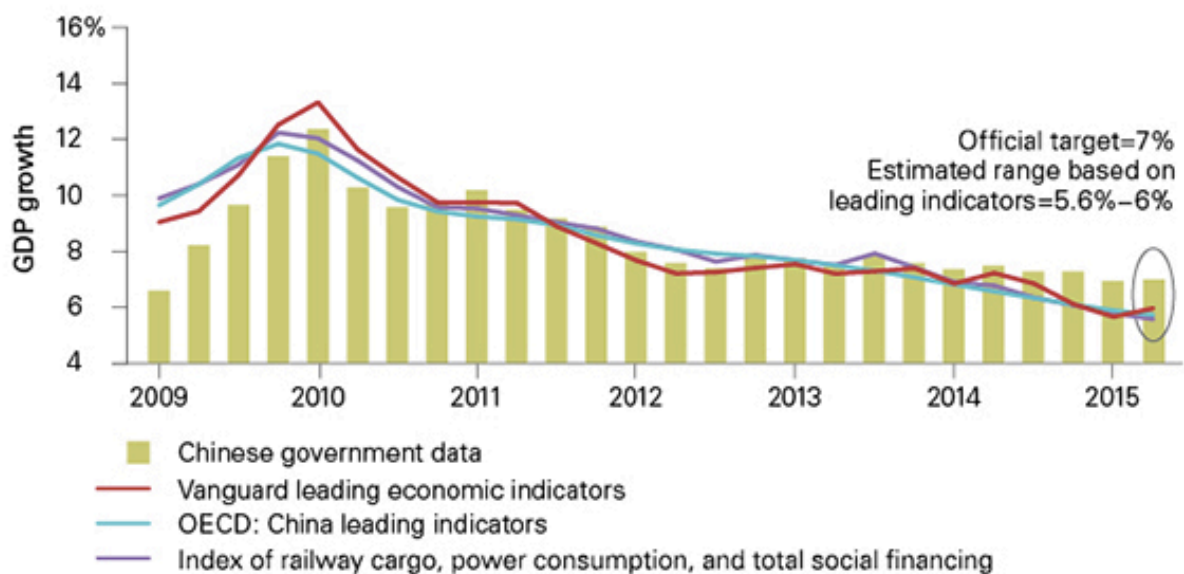
THE WALL STREET JOURNAL.

According to Vanguard, "China's housing decline explains 75% of China's economic slowdown since 2008. Housing has been essential to China's growth, growing an average of 25% per year from 2003

to 2013; it now represents about 10% of GDP. In comparison, U.S. housing construction peaked at 6% of GDP in 2006. Our calculations show that China's housing market alone accounts for nearly a quarter of the world's demand for aluminum, steel, and zinc. Based on our analysis, a 10% decline in housing investment sheds more than 2% from headline GDP growth. Despite housing's impact, it is unlikely to trigger a U.S.-style home-price collapse because China's property market is much less leveraged than in many developed economies. The ratio of mortgage debt to property assets is less than 7%, and Chinese buyers need a 30% down payment for a first-time mortgage and up to 60% for a second one.” The conclusion from this is that the slow-down in housing negatively impacts suppliers of global commodities but will not necessarily create a mortgage debt crisis within China as was experienced in the US during the financial crisis.

The next chart shows the overall trend in China's growth path. The declines in IH&P investment growth rates are a major drag on overall GDP growth.

### Growth below 7% would fall short of China's target for second straight year



Notes: Data cover first quarter 2009 through second quarter 2015. GDP values represent fitted values after adjusting for trend using the Hodrick-Prescott filter for all but the Chinese government values.  
Sources: CEIC Data, Citi, China's National Bureau of Statistics, Organisation for Economic Co-operation and Development (OECD), Thomson Reuters Datastream, and Vanguard calculations.

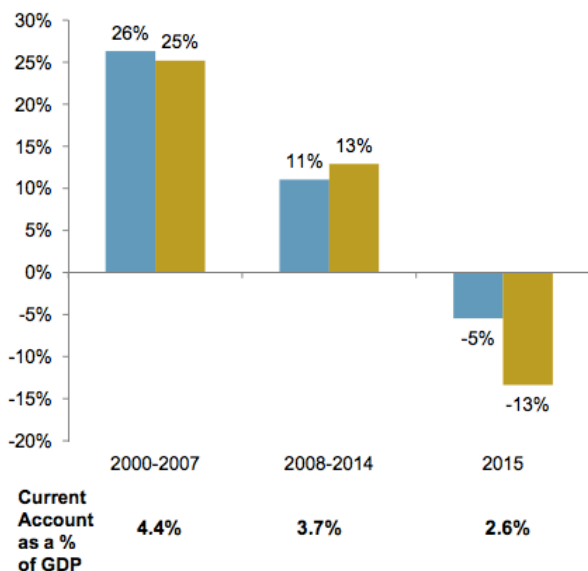
This next chart shows the dramatic slow-down in global imports and exports in 2015 and the impact this slow-down in imports is having on industrial exporters to China.



## China Trade

■ Value of Exports ■ Value of Imports

Change (Year-Over-Year)

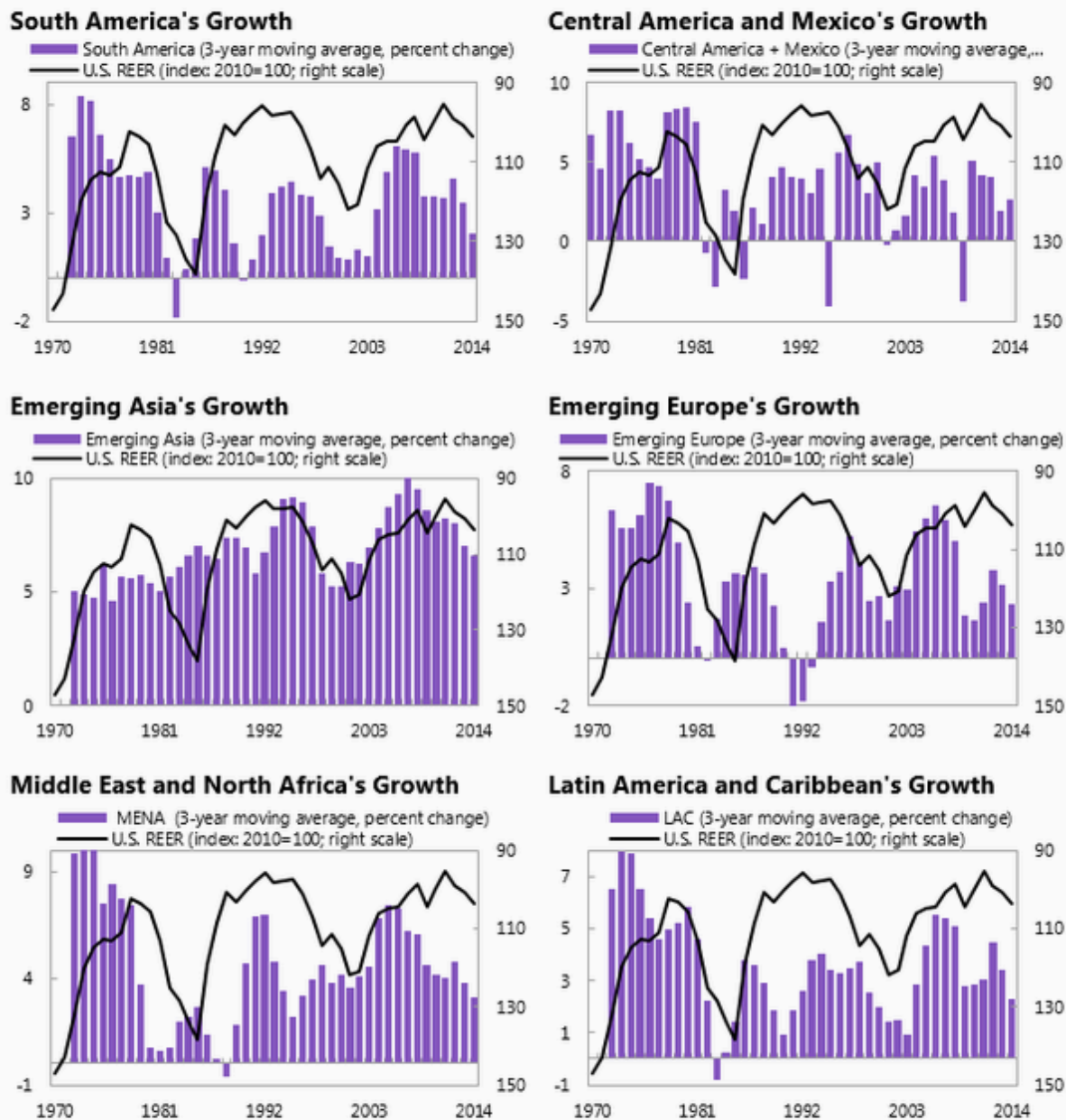


## Manufacturing PMIs: New Export Orders

Country	Latest (>50 = Expansion)
Mexico	53.5
Eurozone	52.1
U.S.	50.6
Brazil	50.0
Canada	50.0
South Korea	48.4
Japan	47.8
Russia	47.8
China	45.8
Taiwan	44.3

Simply put, China's slow-down as it transitions from an investment led economy to a consumer led economy is having a very negative effect on the economies that have benefitted from the IH&P investments. The result has been brutal on raw materials suppliers (think Brazil, South Africa, Indonesia and other EM countries, as well as Australia) and a headwind for industrial equipment suppliers (think Germany, Japan, the US and other developed countries). Not only is the rate of growth in purchasing of these items slowing, but they are slowing as new capacity to produce them comes online via investments made over the past several years. All of these factors are working together to slow down real economic global growth, especially in EM. Below is a chart specifically looking at EM GDP growth rates. Every region's growth is decelerating, and countries like Brazil are experiencing negative GDP growth in 2015.

**Figure 1. US dollar strength and real GDP growth in emerging markets**

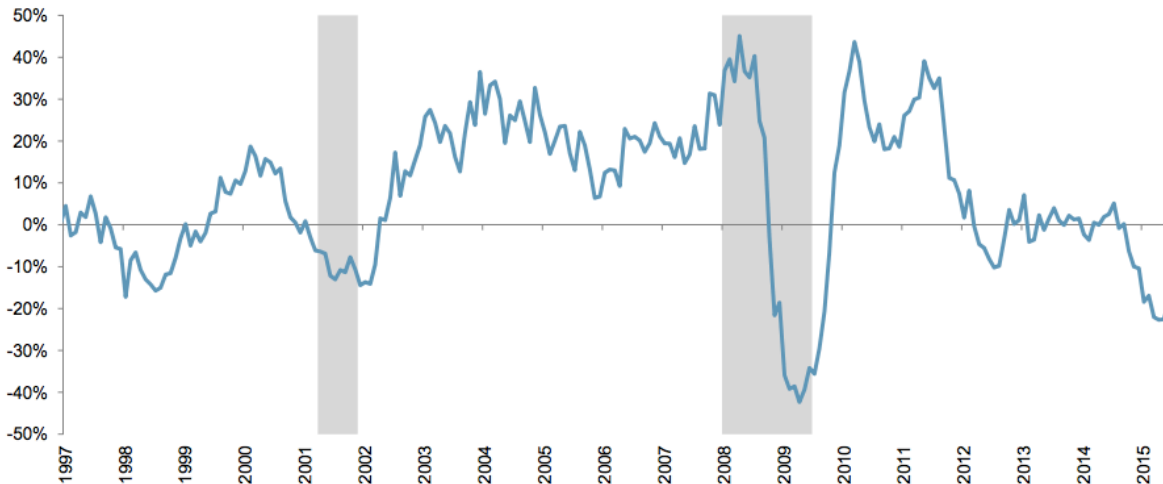


Sources: IMF, World Economic Outlook; and IMF, International Financial Statistics; and IMF staff calculations.  
 Note: REER = Real Effective Exchange Rate. Increase = depreciation.

Next is a chart showing trends in global trade, which impacts export economies the most. Starting in 2014, export growth is actually negative versus the prior year and has gotten progressively worse through 2015.

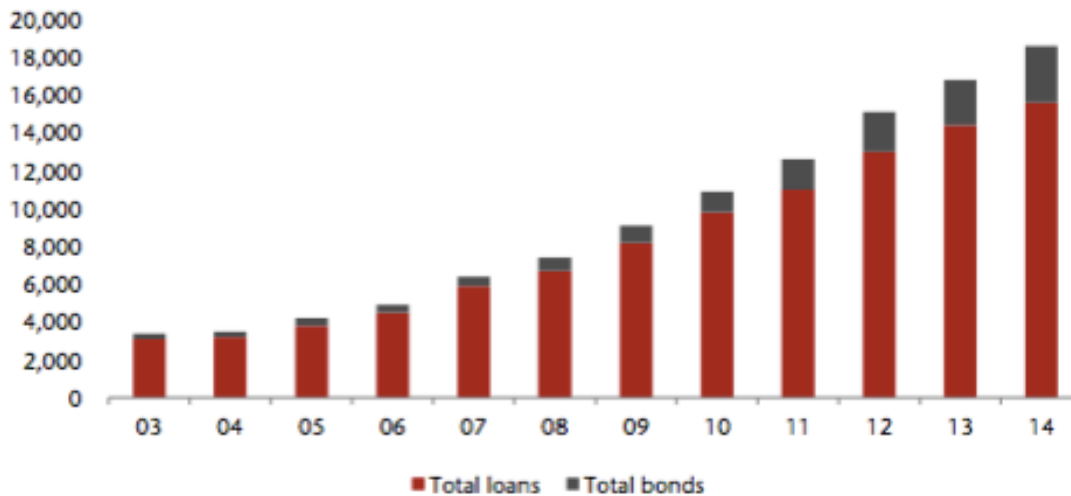
## Global Export Growth

— Value of World Exports (\$) Change (Year-Over-Year)



And, the reason this economic slowdown is so critical is that EM countries have incurred huge debts to fund their investments. The following chart shows historical EM debt. In the past five years, EM corporates have doubled debt. And, of the roughly \$18 trillion at the end of 2014, about \$3 trillion was in bonds (which are often held by global investors), versus loans which are typically provided by domestic banks.

### Exhibit 3: EM Corporate Debt Composition (US\$ bn)



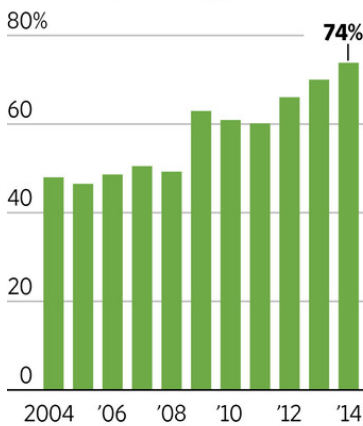
Source: IMF, Jefferies estimates

In addition, relative to EM GDPs, EM debt is at record levels, as demonstrated by the next chart.

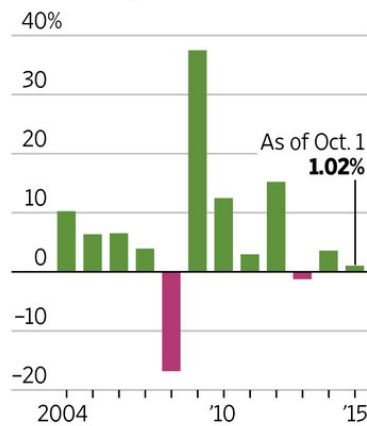
## Emerging Fears

Companies in developing economies issued trillions of dollars in bonds during the commodity boom, but returns have dwindled as the boom has gone bust.

**Emerging-market corporate debt as a percentage of GDP**



**Total return on emerging-market corporate bonds**

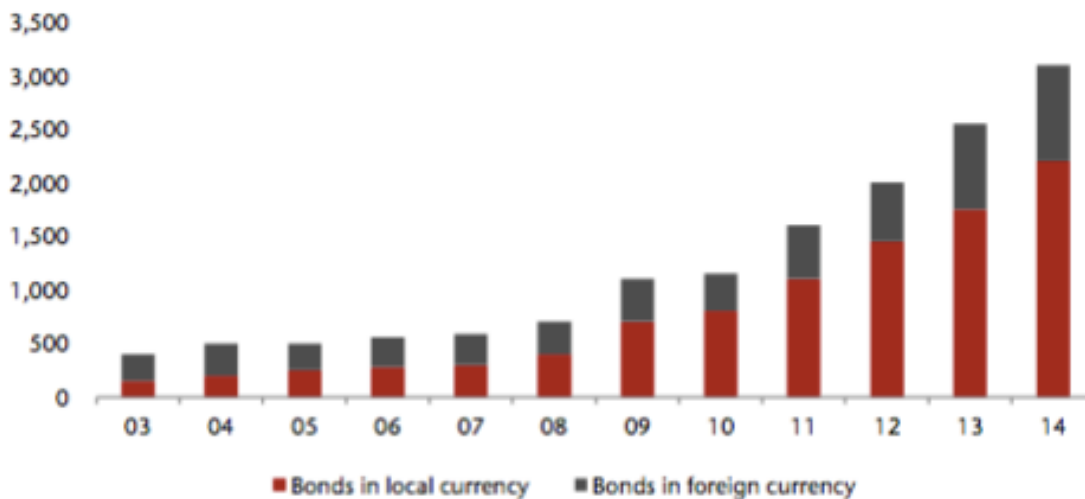


Sources: International Monetary Fund (debt as a share of GDP); J.P. Morgan Securities (returns)

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The next two charts show the breakdown of the bonds issued in local currency and foreign currency.

**Exhibit 4: EM Corporate Bond Composition (US\$ bn)**

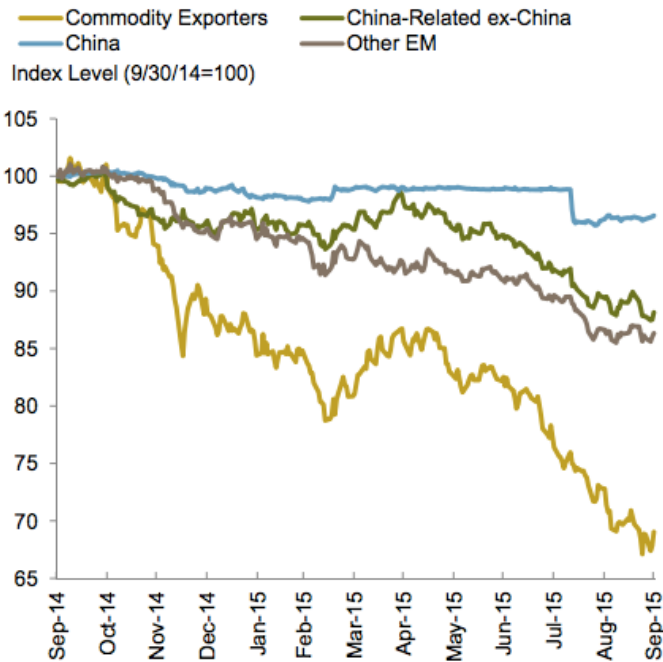


Source: IMF, Jefferies estimates

There are about \$1 trillion in bonds issued in foreign currencies. The reason this matters is that if the local currency falls versus the foreign currencies (typically the US dollar), then the bond liability actually increases. This debt increase hurts the credit worthiness of the issuer, leading to potential selling of the bonds and a resulting increase in borrowing costs. Or, the risk of currency translation losses can cause foreign investors to want to sell the bonds. Selling by foreigners can also lead to

selling of the local currency. After selling a local currency denominated bond, the investor may want to re-invest in a US dollar asset. Or, maybe the investor used borrowed Euro's to buy the EM bond and will need to repay the loan with Euros. This selling of the domestic currency puts further pressure on the currency, creating even greater stresses for the bond issuers. This process can create a vicious cycle of selling leading to more selling. The following charts show the impact on EM currencies over the past year. The commodity exporting countries' currencies have been destroyed.

### Emerging-Market Currencies vs. USD



### China Currency Devaluation Small Relative to EMFX Performance



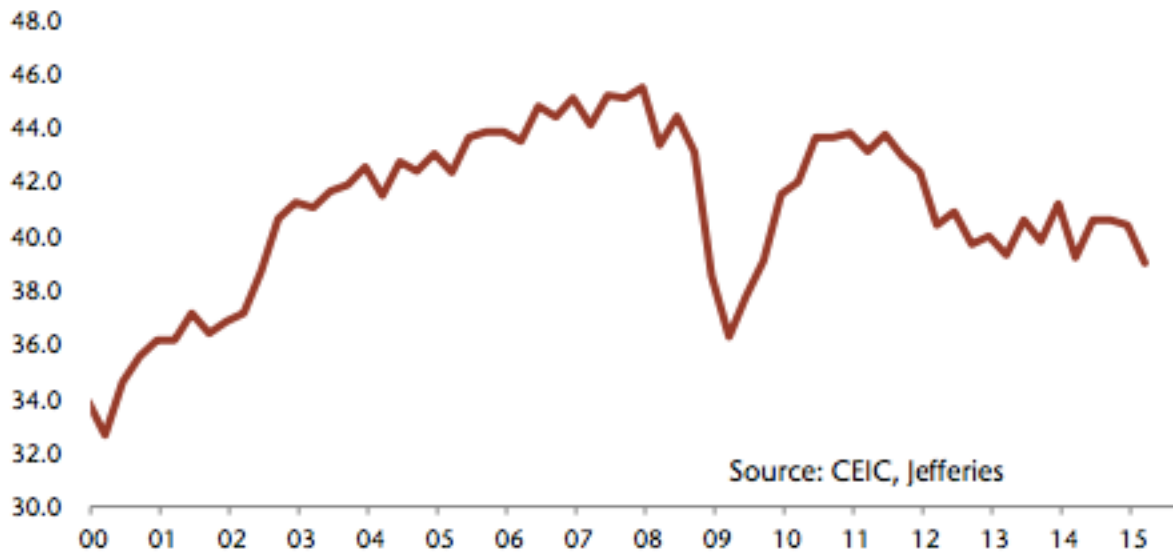
### ... And What China Has Meant to Developed Economies

In its pursuit of economic growth, China has built too much manufacturing capacity. The result is increased competition among Chinese manufacturers, leading to lower goods prices for end consumers in developed economies. This is why QE has not resulted in price inflation at the consumer level. And, this is why the Phillips Curve (the economic relationship between inflation and wages) is not working as expected. The Phillips Curve basically says that as US unemployment reaches a certain level, then wages of US employees will rise as employers compete for fewer workers. This rise in wages will then lead to higher incomes, which will lead to great spending and finally increases in goods and services prices. The problem with this theory is that it assumes a closed economy. But, with the free flow of trade, labor and capital, the appropriate unemployment rate to consider is not the US rate but the global rate. As long as there is excess labor globally, it is very difficult for US employees to drive higher wages unless they have a skill that can't be performed by overseas labor. Certain Fed governors are finally publicly acknowledging this. This is a huge issue and has major implications for Fed monetary policy.

Getting back to the issue of Chinese manufacturing capacity, **until global demand for goods gets into equilibrium with global manufacturing capacity, there will be little to no pressure on consumer goods prices. This statement has huge implications because if there is no price inflation, then there is no pressure on the Fed to raise interest rates.** Here is a chart showing

China's production capacity utilization. The current level is near a 13 year low (excluding the financial crisis period).

### Exhibit 12: China 5000 Industries Enterprises Production Capacity Utilization (Diffusion Index)



Source: CEIC, Jefferies

As a side note, we at Octavia believe that China's current slow-down in IH&P spending is the greatest potential contributor to future goods price inflation and is the most likely reason that central banks would have to abandon easy money policies. Steady increases in fixed asset utilization rates will trigger goods price inflation and resulting central bank increases in interest rates. This will be when things could get really ugly due to a global bond market route. But, this is still years out since it will take time for population growth to eat into the existing manufacturing base and bring goods supply and demand more into balance. If you are looking for what could cause global inflation, though, we believe this is where you need to look.

### Where Do the Developed Market Central Banks Fit Into All of This?

The developed market central banks (Fed, ECB, BoJ and the Bank of England ("BoE")) were leaders in increasing global liquidity via their QE programs and zero interest rate policies and by extension key enablers to EM debt issuance. Through their low interest rate policies, they pushed investors to seek higher yields, including via EM debt. Remember that trillions of dollars are managed by pension funds that need to make regular payments to pensioners. These pension funds simply can't invest in securities that earn 0.5%. They need to earn closer to 8% annually to satisfy the payouts to an increasing elderly population. So, through their QE programs, the developed nation central banks provided the funds to buy the EM debt. But, while 5% returns on EM debt may be superior to 1% returns on developed market debt, that does not mean in absolute terms that 5% is an appropriate risk adjusted return. Regardless, the EM debt issuers feasted on the low rates resulting from global central bank policies, in conjunction with the credit upgrades from seemingly endless demand from China for raw materials. Add to that, with developed nation base rates at zero or negative in the case

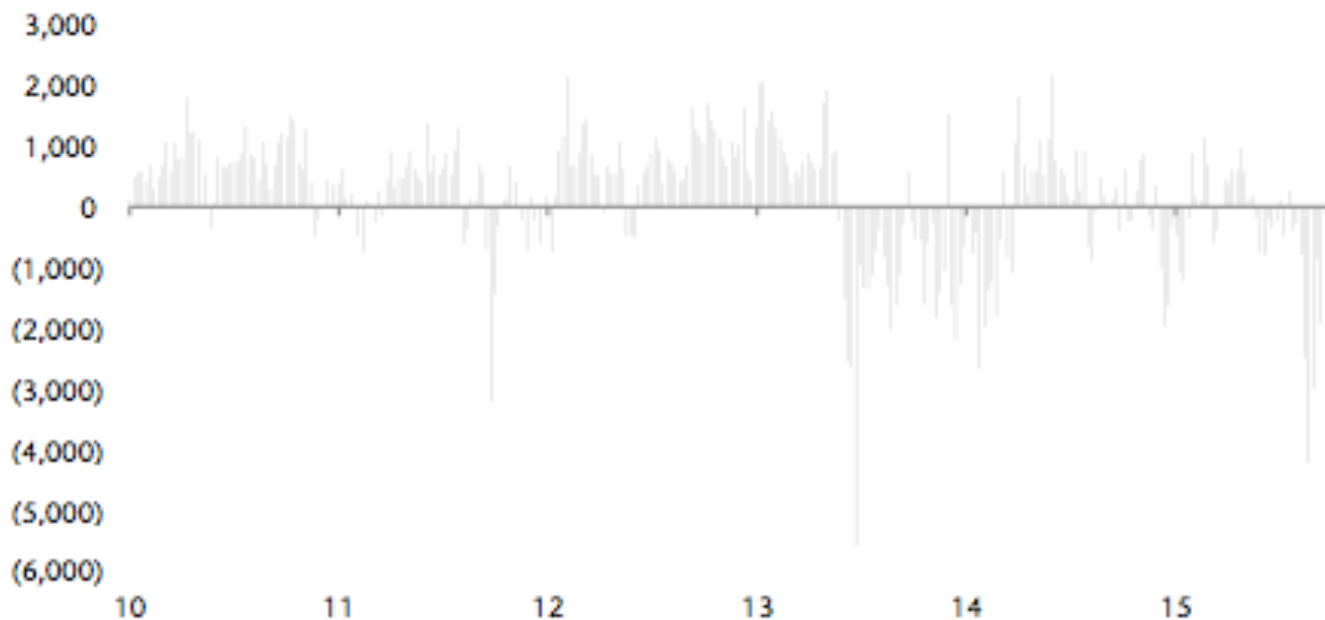
of the ECB, global investors would borrow in Euros or Yen or US dollars at close to zero and then buy the 5% EM debt. With leverage, investors in EM debt could achieve mid-teens returns. That is, as long as the currencies in which the EM debt were denominated did not decline. If that occurred, then the global investors might want to sell the EM debt, sell their EM currency to buy back the developed country currency in which it borrowed and then pay back its loan.

### What Happened in August and September?

A quick recap on what we have laid out so far. China's rapid growth in FDI and exports has required high levels of RMB printing to prevent the RMB from appreciating too much. This has created significant global liquidity as the RMB have been used to buy foreign securities, mostly in US dollar terms. Also, China's rapid growth has created a boom for raw materials suppliers in EM countries and industrial equipment manufacturers. At the same time, developed nation central banks have flooded the world with low cost liquidity, which found its way to cheaply finance investments by EM countries. But, China's recent transition from IH&P growth to domestic consumption growth has resulted in a decrease in demand growth for the inputs to IH&P, just as new capacity to supply China's IH&P is coming online.

These trends have been in place all year. A progressively stronger US dollar, slower growth in China IH&P investments and the resulting decline in EM growth rates had already led to global investor liquidations of their EM investments throughout 2015. Here is a chart showing EM fund flows.

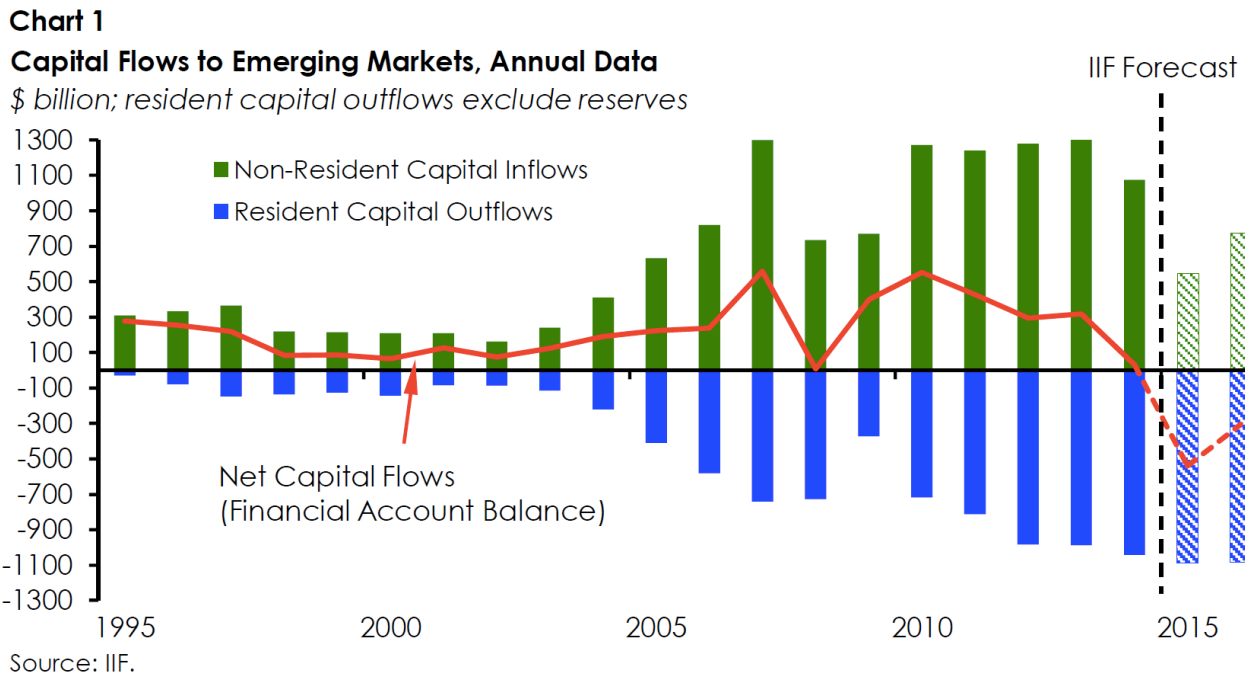
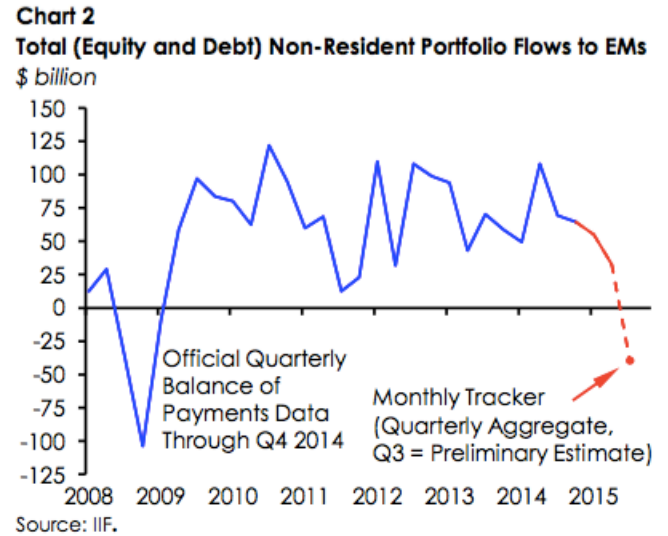
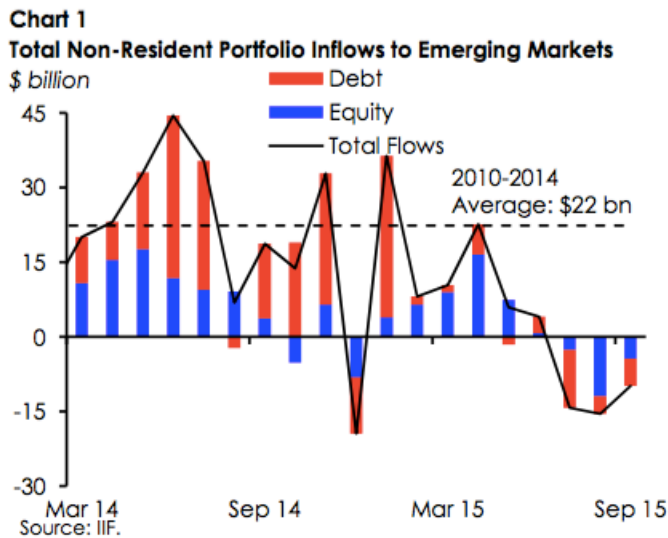
### **Exhibit 3: EM Debt Outflows Worst Since Taper Tantrum (US\$mn)**



**Source: EPFR, Jefferies**

According to the Institute of International Finance, "Investors are estimated to have pulled \$540 billion from developing markets in 2015. Foreign inflows are expected to fall to \$548 billion, about half of

last year's level and below the amounts recorded during the financial crisis in 2008. At the same time, domestic outflows are accelerating amid heightened market volatility, pushing net flows into negative territory. Capital outflows from emerging markets are on track to exceed inflows this year for the first time since 1988 amid concern that a slowdown in China, a currency selloff and higher interest rates in the U.S. will make riskier assets less attractive." Some of these trends are demonstrated in the following charts.

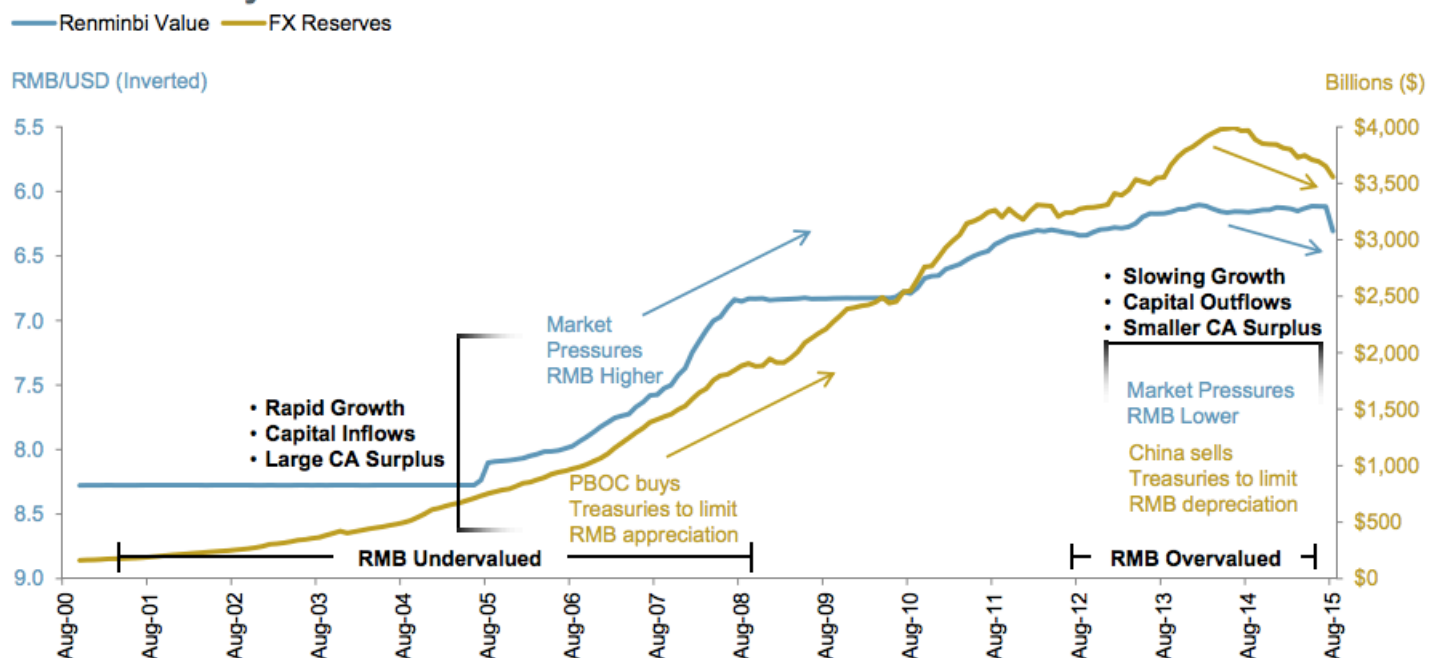


So, what triggered the market sell-off in August and September? While markets are dynamic and there are typically numerous factors in play that impact security prices, we believe that the PBOC's decision on August 11 to lower the currency peg between the RMB and the US dollar (i.e., devaluing the RMB) was the fuse that lit the match. On top of this, Fed indications of raising interest rates in 2015 added fuel to the fire.



What works in one direction can also work in the other direction. And, that is what happened in August and September and what **Octavia believes is the greatest threat to financial asset prices today**. The PBOC has pegged the RMB to the US dollar. The US dollar has appreciated meaningfully against global currencies over the past several years, and especially since June 2014. US\$:Yen has gone from 75 to 120; Euro:US\$ has gone from 140 to 110; US\$:Singapore\$ has gone from 1.25 to 1.40; Aussie\$:US\$ has gone from 1.10 to 0.70. You get the point. The problem this creates for China is that the RMB by extension has appreciated against all other countries, which is a problem for Chinese competitiveness in global trade. So, what is the PBOC to do? The PBOC needed (and still needs) to lower the value of the RMB versus the US dollar. Contrary to what US politicians tell you, the RMB is over-valued, not under-valued. To lower the value of the RMB, the PBOC announced on August 11 that the official peg between the RMB and US dollar would be changed from roughly 6.20 to about 6.30. Then, a few days later the peg was moved again to about 6.40. Before we explain what happened next, below is a chart from Fidelity Investments showing the historical trend in the RMB versus the US dollar.

## China Currency vs. FX Reserves



The PBOC devaluation had multiple ripple effects. First, a lower RMB makes China a stronger competitor for exports with other EM countries. This would result in slower EM economic growth, which lowers EM creditworthiness, leading to capital flight, which leads to falling security prices and a declining domestic currency. Second, global investors interpreted the PBOC devaluation as China's growth prospects being worse than thought. And, a slower growing China means declining exports by EM countries to China. Which has the same ripple effect as just described. Finally, a declining RMB versus the US dollar results in an increase in the size of US dollar denominated debt. China was already considered highly levered, and a decline in the RMB only makes the leverage levels worse. The result was an acceleration in capital outflows (both resident and non-resident) from EM countries.

On top of the RMB devaluation, key Fed officials were stating that the Fed intended to raise interest rates in 2015. This would have the affect of increasing the value of the US dollar versus all other global currencies and thus add flame to the fire.

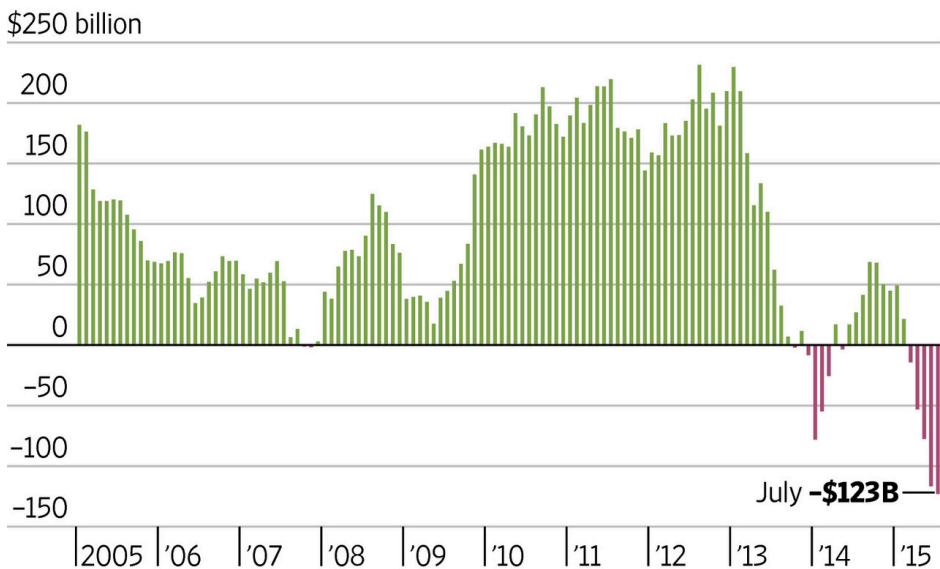
The combination of these two factors put tremendous pressure on EM currencies. While EM countries like a low currency so they can be more competitive in global trade, EM countries don't want the currency too low or else they will experience price inflation for all the goods they import. But an even bigger issue is the \$1 trillion in foreign currency denominated debt outstanding. As the EM currencies decline versus the US dollar, the debt liability increases. Add to this the issue of higher interest rates on the \$18 trillion in outstanding EM debt.

Therefore, the EM central banks had to defend their currencies and needed to use their FX reserves to do so. They needed to sell their US treasuries (or the like), take the US dollars they received and buy their domestic currencies. But, as described earlier, this acts as a reduction in global liquidity, which means there is less money in the global system chasing after assets. This is why global financial asset prices fell during August and September. Also, this is why the US treasury market did not rally much during this time period. When there is financial turmoil, typically global investors flee to the safety of US treasuries. But, rates on US treasuries moved very little during this time period. The reason for this was that while some investors were fleeing to the safety of US treasuries, EM central banks were selling US treasuries to raise funds to protect their currencies. Here is a chart showing such. This data is only through July but the trend continued in August and September.

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## The Tide Turns

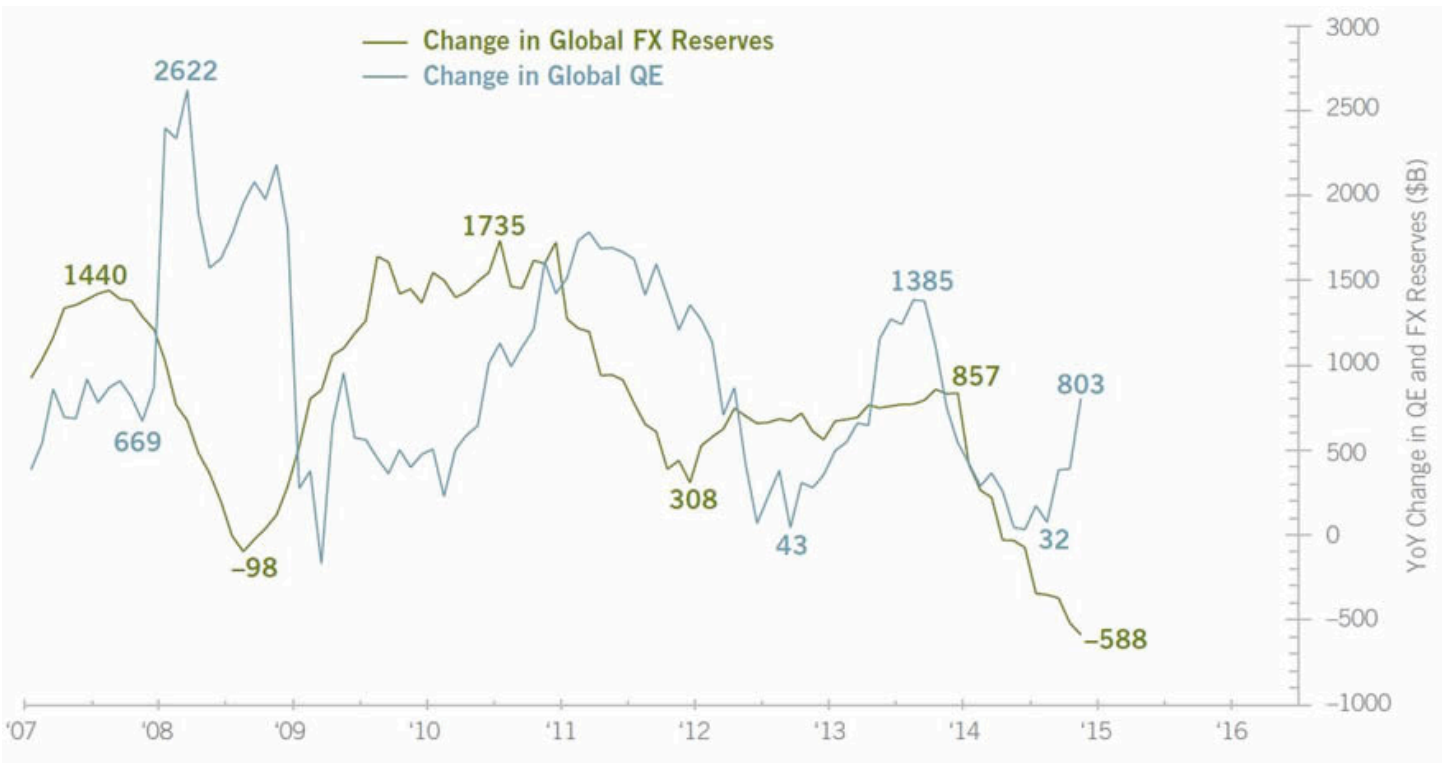
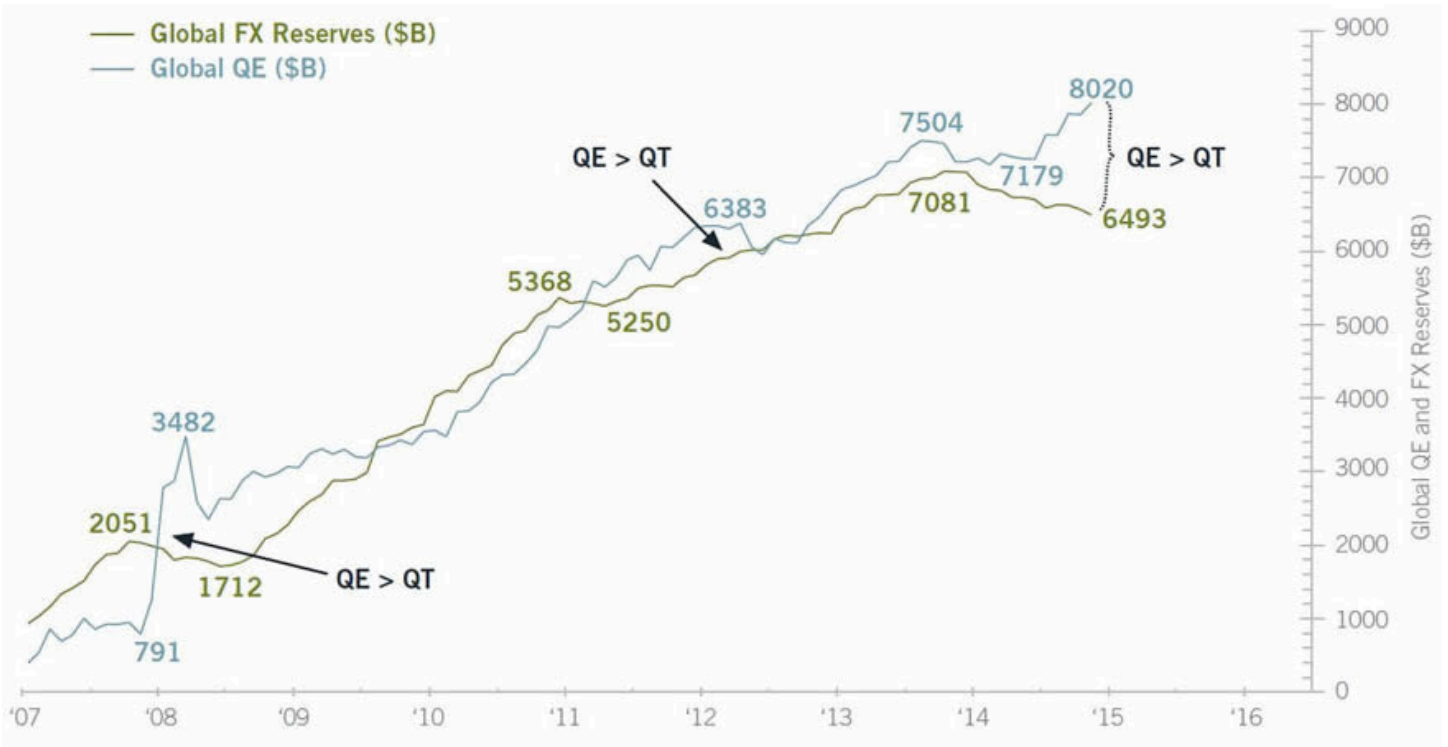
Net foreign official purchases of U.S. Treasury notes and bonds,  
12-month rolling sums



Source: Deutsche Bank

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And, finally, below are two charts that sum up everything. Instead of QE, global markets have been experiencing what is described at Fidelity Investments as QT, or quantitative contraction. EM central banks have had to use FX reserves to defend their currencies, which has reduced global liquidity.

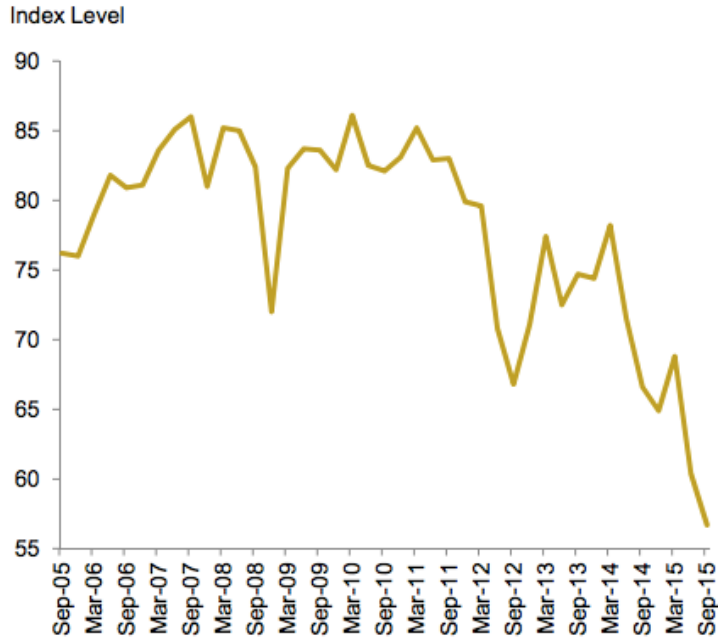


## What's Next?

October has been a very strong month for global financial assets. EM currencies stabilized, so EM central banks could pull back on liquidating their FX reserves and thus stop taking liquidity out of the system. But, why did EM currencies stabilize. First, Fed officials were making more dovish statements, such that global investors now believe the Fed will not raise interest rates in 2015. Additionally, the ECB and BoJ have made statements giving global investors the impression that they will increase their QE programs, resulting in added global liquidity. And, finally, on October 22 the PBOC lowered interest rates, as well as lowered bank's loan reserve requirements, theoretically freeing up about \$100 billion for new loans.

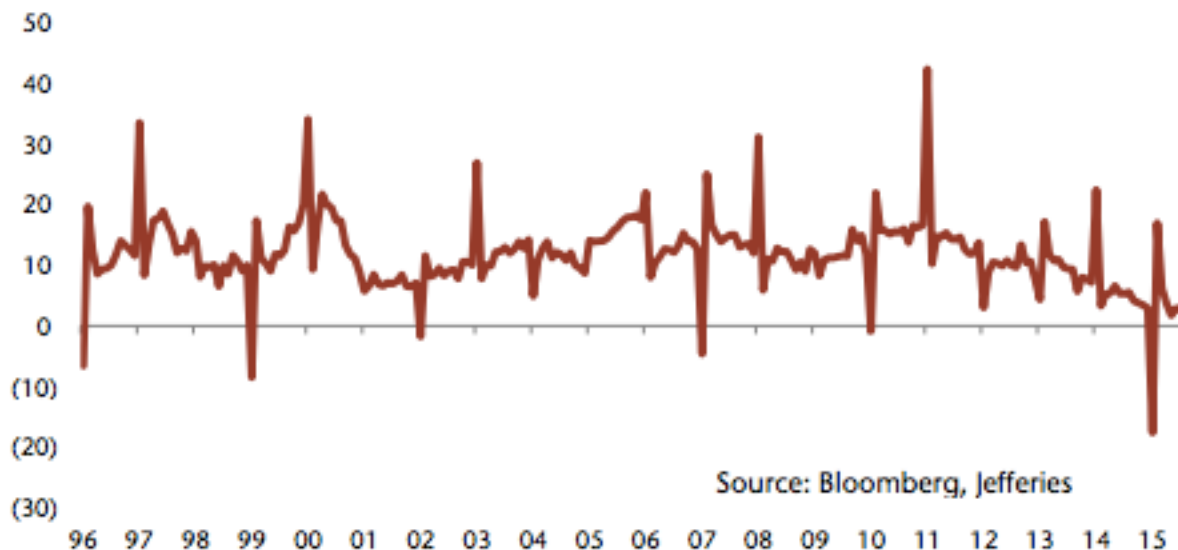
Regarding the PBOC action, Octavia believes the market got this one wrong. The PBOC action will have little to no real impact. First of all, loan demand in China is on the decline. And, lowering rates and reserve requirements are unlikely to change that. Thus, adding credit to the global economy is unlikely to come from the PBOC action. The next chart characterizes Chinese loan demand.

### China Loan Demand



Also, lowering the loan reserve requirement will have no impact on liquidity even if the new access to funds are lent. The current bank loan reserves are on deposit with the PBOC. Thus, they have likely been invested in US treasuries and the like. If the banks decide to take these loan reserves and lend them, the PBOC will have to sell the US treasuries to raise the funds. Thus, it's a liquidity push. That said, the PBOC could create money to satisfy the return of loan reserves, which would create liquidity. But, with the PBOC selling FX reserves to support the RMB, we are hard pressed to see the PBOC print more RMB, which has the effect of weakening the RMB. And, in actuality, money supply growth has been declining as the PBOC endeavors to increase the value of the RMB, per the next chart.

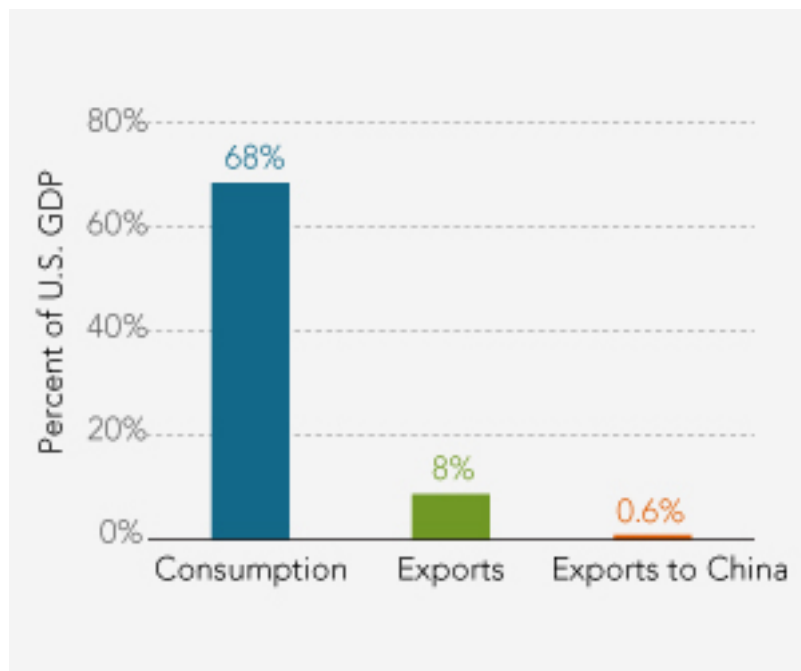
#### Exhibit 4: China Monthly Money Supply M0 % YoY



Source: Bloomberg, Jefferies

Looking forward from here, the direction of financial asset prices depends on central bank policy. If the Fed raises rates, that is contractionary since it will lead to declines in EM currencies and the use of FX reserves to defend the EM currencies. If the BoJ and ECB increase their QE programs, that is expansionary and thus good for financial asset prices.

And while all we have discussed is liquidity, we can't ignore fundamentals also. And, fundamentals are deteriorating. I have heard pundits state that the slowdown in China does not matter for the US because US exports to China make up only 0.6% of US GDP.



But, 46.6% of US exports are too EM. So, as EM countries slow down due to China, US exports slow down.

## The Boomerang Effect

Developed nations are dependent on their emerging counterparts...

...so, as troubled emerging markets buy fewer goods...

...developed countries' domestic production is declining as well.

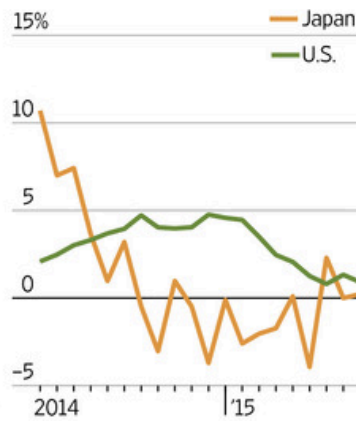
### Share of exports to emerging markets, 2014



### Contributions to year-over-year growth in world goods trade



### Year-over-year change in industrial production



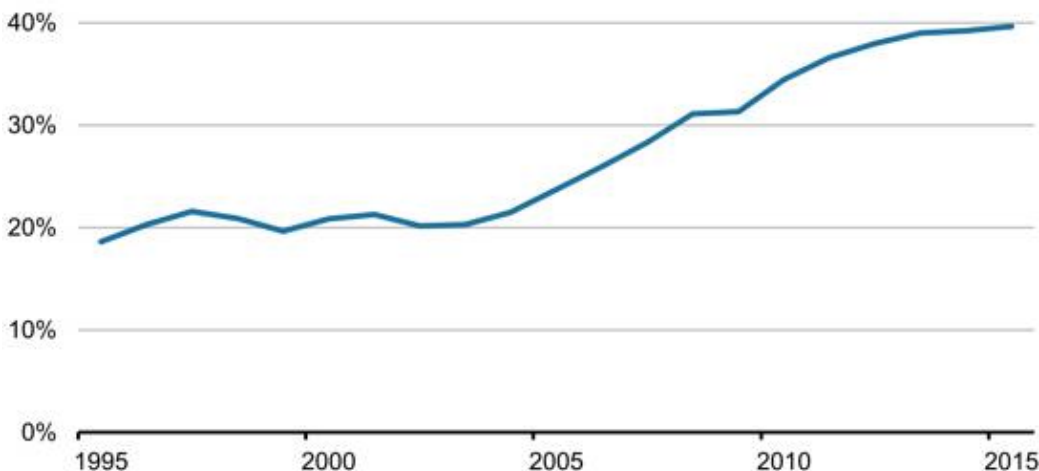
Sources: Oxford Economics (share of export and contributions); HSBC (Japan industrial production); U.S. Federal Reserve (U.S. industrial production)

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Further, EM is now 40% of global GDP (per the below chart), versus 20% just 10 years earlier. While the US economy is doing well, we at Octavia are hard pressed to understand how continuing deterioration in EM economies does not impact US corporate earnings, especially for S&P 500 companies.

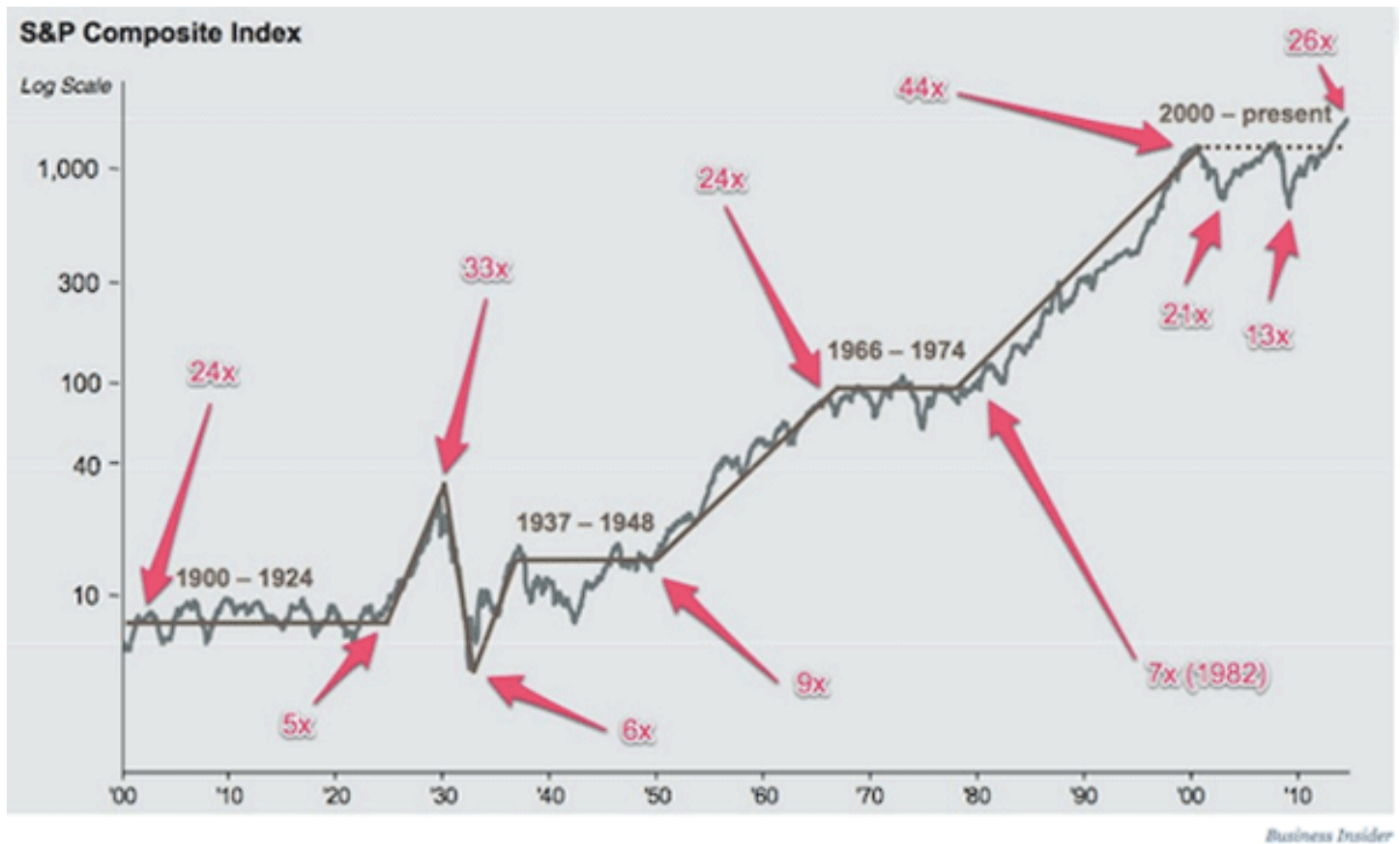
## Emerging Power

Developing economies' share of global gross domestic product



Source: International Monetary Fund | WSJ.com

Finally, while global economic fundamentals are not strong, US equities trade at very high valuations, as demonstrated in the next chart from Business Insider. The beginnings of bear or sideways markets typically occur at high valuations, and bull markets start at low valuations. Currently, we are at high valuations.



In conclusion, depending on central bank policy, global liquidity could shrink, especially if the Fed raises interest rates. At the same time, global fundamentals are weak and US equity valuations are high. This combination of factors makes us cautious at Octavia. Without increasing liquidity from global central banks, it is hard to understand how markets go higher. That said, while overall markets could decline or move sideways, that does not mean that individual securities can't increase in value. As we saw in August and September, though, it all depends on the magnitude of the central bank actions as to whether a contraction in liquidity will take all securities down. We continue to closely monitor these fluid events as we consider how to position our model portfolios.

## **Portfolio Strategy Update**

Octavia continues to invest in a mix of equities, fixed income and currencies.

Given the concern about contracting global liquidity, Octavia is actively monitoring its exposure to all risk assets (primarily equities). If central banks continue to be highly accommodative, then we will maintain our overweighting in equities. If the central banks are neutral in their policies, we will favor company specific stories with clear catalysts (such as acquisitions) versus investing in broader indices (such as the S&P 500). And, if central banks are contractionary, we will look to underweight equities or run more market neutral equity portfolios. While US companies continue to buy back their

stock (which we described in detail in the prior Octavia's Outlook), the global forces of liquidity contraction would be too powerful for share buybacks to counteract. Regarding Japan equities, we currently have no position given Japan's large industrial equipment exposure to China and other EM countries.

Regarding long-term US treasuries, Octavia has reconsidered its stance. Previously, we believed that long-term US treasuries could generate excellent returns in a deflationary/dis-inflationary environment. But, the risk of US treasury sales by EM central banks gives us pause. We are actively watching how these competing forces play out. Octavia is maintaining a core position in closed-end muni bond funds based on attractive yields, the belief that they are undervalued based on our longer-term view on the direction of interest rates and that these securities are rarely held by hedge funds (or central banks for that matter).

Octavia is short the Euro versus the US dollar. If the Fed raises rates, the US dollar should rally against the Euro. If the Fed does not raise rates, the ECB will have to expand QE to lower the Euro and support increases in exports. And, its possible the Fed could raise rates and the ECB still expands QE. Over the past few months, we believe that Euro strength has been more about unwinding of Euro carry trades than strong European fundamentals. While an EM sell-off could again lend support to the Euro as carry trades get unwound, we still believe that versus the US dollar the direction of the Euro is down.

Sincerely,  
Octavia Investments LLC