

Periphery to Core

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Financial markets in 2018 have come to resemble an inkblot personality test. As Dr. Rorschach might have hypothesized, contemporary investors now see only what they want to see. These days, a quick glance at closing stock prices is all that is required to reinforce the **bullish** perspective. On the other hand, dwindling explanations for a collapsing yield curve increasingly tilt towards **bearish** narratives. Perhaps in reflection of today's political climate, the only certainty has become the **confidence** with which investors now espouse opposing viewpoints. Ironically, in tricky investment climates such as today, the value of diligent analysis appreciates precisely when investor discipline tends to relax.

In our April report, we presented the case that the FOMC's policy-mix of simultaneous rate hikes and balance sheet reduction would prove untenable in the contemporary environment of excessive debt levels. Since then, our analysis confirms that the Fed's dual-policy agenda is causing measurable stress in a wide range of financial markets. If anything, overseas dollar-funding pressures are developing **faster** than we would have anticipated, due to the massive liquidity drain of accelerated Treasury issuance to fund Trump tax cuts. All-in-all, we believe a tipping point was passed in early-April, when the Fed's QT program automatically stepped up to an annualized rate of \$360 billion. Since that time, global liquidity pressures have accelerated noticeably. As in past economic cycles, consensus has yet to pay much attention to Fed-related financial stress because investors remain focused on a narrow band of self-reinforcing price trends. As long as index funds continue to take in billions-of-dollars every day, reflexively driving **core** holdings to new highs, few investors are likely to fret over chaotic capital flows and souring credits in **peripheral** markets.

In this report, we employ the analytical framework of **periphery to core**. We have organized this letter around evidence that the Fed's dual policy goals are straining financial conditions in peripheral components of four critical sectors: **emerging markets, global financial institutions, U.S. corporate credits and U.S. consumer credits**. Should our analysis continue to pan out, the stress we had anticipated and are now monitoring in peripheral markets will spread to mainstream assets in short order. Given the speed at which liquidity pressures are now roiling emerging markets, we expect the second half of 2018 to prove quite challenging for traditional financial assets.

Déjà vu

At his 6/13/18 post-FOMC press conference, new Fed Chairman Jerome Powell furthered his reputation for seemingly simple communication. After noting he would deliver a "plain English summary," because, "monetary policy affects everyone," Chairman Powell dutifully summarized,

The main takeaway is that the economy is doing very well. People who want to find jobs are finding them, and unemployment and inflation are low.

Chairman Powell's message could not have been any clearer, **"We have things totally under control!"**

Of course, this was the identical message Mr. Greenspan attempted to convey three weeks into his own Chairmanship, by confidently hiking fed-funds (twice) in **early September 1987**. And come to think of it, it was the same message Chairman Bernanke struggled to project throughout the **second half of 2007**. Why do we cite these corollaries? Because in both instances **all-time highs for the S&P 500 distracted investors from the predictive significance of peripheral**

market stress. In the 1987 analog, financial stress first materialized in nascent junk-bond markets, and in the 2007 analog, (famously) in the subprime mortgage space. In both episodes, euphoric equity investors had little motivation to relate to the plight of investors in junk bonds (used to facilitate hostile raiders) or subprime mortgages (used to facilitate challenged borrowers). In our estimation, this type of cognitive dissonance is once again in full swing. Investors are reaching the erroneous conclusion, “If I don’t own it, it doesn’t affect me.”

New Sheriff in Town

As the world forms initial impressions of Fed Chairman Powell, a common observation has been praise for his down-to-Earth communication skills. Perhaps because he was never trained as an economist, Mr. Powell avoids dense platitudes and keeps his messages short and to the point. While we agree that Mr. Powell speaks more directly than past Fed Chairs, we have developed a unique perspective on his motive for such concise and emotionless delivery. ***In our view, Mr. Powell is preparing the world to become less dependent on the Federal Reserve.***

A study of Mr. Powell’s past policy positions and recent public statements portrays a distinctly different perspective on the appropriate scope of monetary policy than that held by the Fed’s three prior Chairs. Mr. Powell’s statements consistently reflect a view that the Fed has been overstepping its bounds in trying to remediate every economic and financial challenge coming down the pike since the great financial crisis (GFC). After joining the Fed in May 2012 (as Governor and permanent FOMC voter), Mr. Powell became a reliably vocal skeptic of the advisability of incremental asset purchases. Though protocol of his freshman status virtually insured acquiescence to Chairman Bernanke’s QE3 gambit, Mr. Powell’s reservations about asset purchases at the October 2012 FOMC meeting belie an intellect more cynical than popular perception:

I have concerns about more purchases...First, the question, why stop at \$4 trillion? The market in most cases will cheer us for doing more. It will never be enough for the market. Our models will always tell us that we are helping the economy, and I will probably always feel that those benefits are overestimated. And we will be able to tell ourselves that market function is not impaired and that inflation expectations are under control...

I think we are actually at the point of encouraging risk-taking, and that should give us pause. Investors really do understand now that we will be there to prevent serious losses. It is not that it is easy for them to make money but that they have every incentive to take more risk, and they are doing so. Meanwhile, we look like we are blowing a fixed income duration bubble across the credit spectrum that will result in big losses when rates come up down the road. You can almost say that that is our strategy.

My third concern—and others have touched on it as well—is the problems of exiting from a near \$4 trillion balance sheet. We’ve got a set of principles from June 2011 and have done some work since then, but it just seems to me that we seem to be way too confident that exit can be managed smoothly.

Well, at least in private deliberation, Mr. Powell seems a tad more wonky than his public persona as Fed Chair!

Our crystallization-moment in equating Mr. Powell’s low-key profile with underlying resolve to pack up the Fed’s safety blanket occurred while watching his performance at a recent IMF-sponsored panel at the Swiss National Bank [<https://www.snb.ch/en/ifor/research/id/researchtv-event?event=5pvl3SpmalhPuw59c79fJA>]. On 5/8/18, Mr. Powell traveled to Zurich to participate in a panel discussion at which his assigned topic was the “role of U.S. monetary policy in driving global financial conditions and capital flows.” While Mr. Powell’s language and delivery were low-key, his **message**, that “the role of U.S. monetary policy is often exaggerated,” was borderline combative. Indeed, a few of Mr. Powell’s fellow panel members

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appeared visibly startled by the degree to which he dismissed the “influence of U.S. monetary policy on global financial conditions,” especially with respect to emerging market economies (EME’s). We highlight Mr. Powell’s prepared remarks:

Monetary stimulus by the Fed and other advanced-economy central banks played a relatively limited role in the surge of capital flows to EME’s in recent years. [???] There is good reason to think that the normalization of monetary policies in advanced economies should continue to prove manageable for EME’s. Fed policy normalization has proceeded without disruption to financial markets...[???]

It also bears emphasizing that the EME’s themselves have made considerable progress in reducing vulnerabilities since the crisis-prone 1980’s and 1990’s. Many EME’s have substantially improved their fiscal and monetary policy frameworks while adopting more flexible exchange rates, a policy that recent research shows provides better insulation from external financial shocks. [???]

All that said, I do not dismiss the prospective risks emanating from global policy normalization. Some investors and institutions may not be well-positioned for a rise in interest rates, even one that the markets broadly anticipate.

It is fairly telling that Mr. Powell traveled to Zurich to headline an IMF conference with the simple message that the world better suck it up, because the Fed is draining liquidity. While it was hardly a novel concept for Mr. Powell to infer Fed policy-normalization is overdue, what **was** distinctly **different** was that Mr. Powell implied policy normalization has the potential to break a few things along the way, but don’t say we didn’t warn you. To us, the most worrisome aspect of Mr. Powell’s five minute speech was that he interspersed in his matter-of-fact narrative several **wildly specious claims**. We have highlighted above [???] three instances in which Mr. Powell distorted facts so torturously, we can only assume he is laying groundwork to deflect future blame.

Pulling this all together, the Fed has a new Chairman who seems quietly determined to roll back accommodation he originally opposed. Chairman Powell traveled to a European central bank confab to deliver the message that global impacts of U.S. monetary policy are highly exaggerated, but noted that if Fed normalization does indeed prove disruptive, emerging markets are better equipped to cope and investors were forewarned. Given historical precedent that Fed tightening cycles generally continue until something important breaks, the operative question becomes, how much collateral damage will Mr. Powell tolerate?

Emerging Markets

In one of his more curious Zurich observations, Chairman Powell suggested EME’s were less vulnerable to financial shock due to improvements in “fiscal and monetary policy frameworks.” While this claim may hold academic appeal, it ignores the fact that any improvements in policy frameworks have been dwarfed by skyrocketing EM debt levels. On 5/17/18, Fitch published a report estimating total EM debt had almost **quadrupled** during the past decade, from **\$5 trillion to \$19 trillion**. Monica Insoll (Fitch’s Head of Credit Market Research) commented:

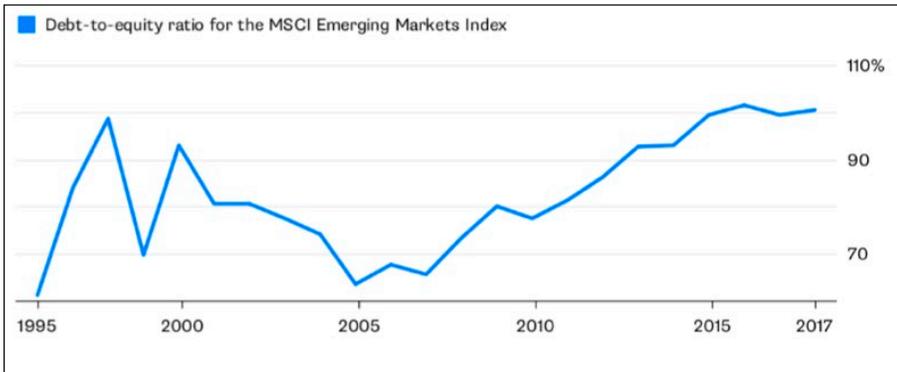
If easy financial conditions tighten more sharply than expected, EM debt would come under pressure. If investor appetite for EM risk reverses, issuers may face refinancing challenges even in their home markets, while capital outflows could put pressure on exchange rates or foreign exchange reserves.

Mr. Powell’s policy-framework comments no doubt refer to the fact that emerging market **governments** have bolstered foreign exchange reserves and loosened currency pegs since the challenges of the 1990’s. While this is all well and good, this focus sidesteps exploding leverage at EM **corporates** during the past decade. By way of example, Bloomberg (5/20/18) reports that the weighted average debt-to-equity ratio of the 845 companies in the MSCI Emerging Markets Index now stands at an all-time high (Figure 1).

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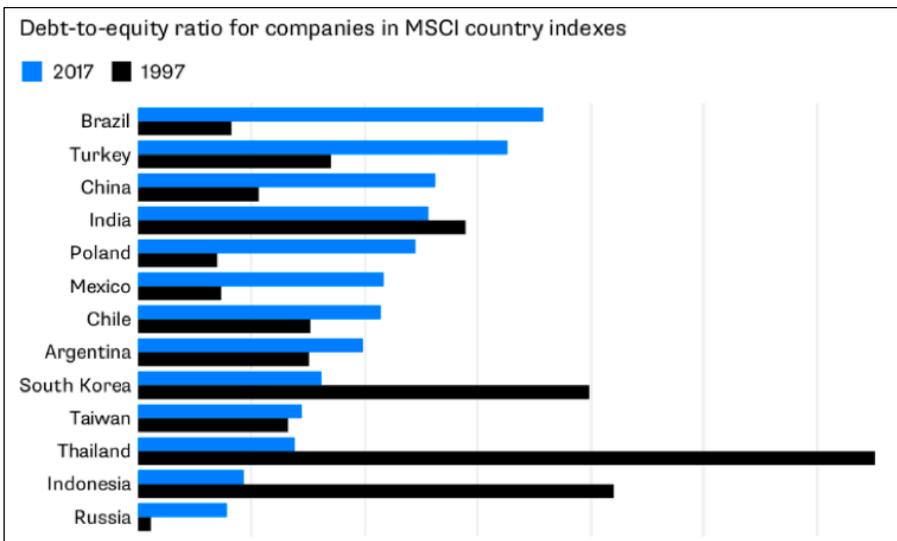
Figure 1: MSCI Emerging Market Index Debt-to-Equity Ratio (1995-2017)



Source: Bloomberg.

Figure 2, parcels aggregate debt into debt-to-equity ratios for individual EM countries. While 2017 debt-to-equity ratios in leading offenders Brazil and Turkey are not quite as extreme as Thailand and Indonesia in 1997, the **general** EM trend looks fairly troubling.

Figure 2: Debt-to-Equity Ratios for MSCI Emerging Market Country Indexes (1997 & 2017)



Source: Bloomberg.

Narrowing in on the portion of overseas debt most directly vulnerable to Fed tightening, the BIS estimates that **dollar-denominated** credit to non-bank borrowers outside the U.S. now stands at **\$11.4 trillion**, of which **\$3.7 trillion** has been borrowed in EME's. Even more specifically, Cornerstone Macro's Vulnerability Index identifies the four EM economies with the highest ratio of dollar-denominated-debt-to-GDP as Chile (33.3%), Turkey (22.4%), Mexico (22.0%) and Argentina (20.3%). With all due respect to improvements in policy frameworks, with this much dollar-denominated debt outstanding, **mathematics positively insure Fed tightening will inflict immediate pain on these EM economies.**

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Other than in various Chinese state periodicals, we cannot ever recall a foreign central-bank governor proposing specific policy prescription to a sitting Fed Chairman in written editorial in a leading financial publication. Perhaps reacting to the same specious claims we highlighted above, Bank of India Governor Urjit Patel penned a 6/3/18 op-ed in the *Financial Times* to explain to Mr. Powell exactly where he was wrong.

Dollar funding of emerging market economies has been in turmoil for months now...The upheaval stems from the coincidence of two significant events: the Fed's long-awaited moves to trim its balance sheet and a substantial increase in issuing U.S. Treasuries to pay for tax cuts. Given the rapid rise in the size of the U.S. deficit, the Fed must respond by slowing plans to shrink its balance sheet. If it does not, Treasuries will absorb such a large share of dollar liquidity that a crisis in the rest of dollar bond markets is inevitable...The Fed has not adjusted to, or even explicitly recognized, the previously unexpected rise in U.S. government debt issuance. It must now do so...Otherwise, the possibility will increase of a 'sudden stop' for the global economic recovery. That might hurt the U.S. economy as well. Circumstances have changed. So should Fed policy.

It is one thing for us to suggest, as we did in our April report, that the Fed will prove unable to continue its QT program on scheduled pace. It is quite another for the Governor of the Central Bank of India to suggest the same in an *FT* op-ed! In further proof of the pudding, South African central bank Governor Lesetja Kganyago (6/5/18) and Bank of Indonesia Governor Perry Warjiyo (6/7/18) chimed in with highly specific public comments along the same lines in the days immediately following Mr. Patel's published plea.

Figure 3: Worst Currency Returns versus U.S. Dollar (3/29/18 – 6/15/18)



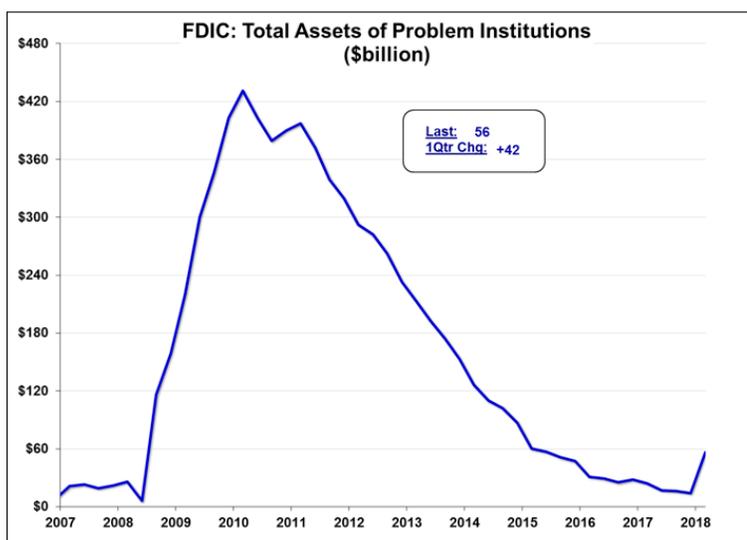
Source: Bloomberg.

Emerging market credit shocks generally trace back to events in individual countries which were originally dismissed as inconsequential. To date, 2018 emerging-market turmoil is being similarly downplayed because it seen as emanating from basket-case economies such as Turkey and Argentina (notwithstanding Argentina's 4x oversubscribed, June 2017 issuance of \$2.75 billion of 100-year bonds). Measured from our April 2018 tipping point, we present in Figure 3, the growing list of swooning EM currencies. On the backs of Turkey and Argentina, here come South Africa, Brazil, Mexico, and (gulp) **Italy**. **Periphery to core!**

Global Financial Institutions

No asset class is more prone to periphery-to-core trends than global financial institutions. Despite the fact that U.S. banks have sustained negative price divergence since early February, equity bulls still dismiss this underperformance due to lack of confirmation from prominent stress measures such as bank CDS. We offer in Figure 4, an image worthy of reflection. The FDIC defines “Problem Institutions” as those with “financial, operational, or managerial weaknesses that threaten their continued financial viability.” Suffice it to say, once one important institution makes this list, it is fairly common for at least a few others to follow suit.

Figure 4: Total Assets (\$billions) of Problem Institutions (2007-Q1 2018)



Source: FDIC Quarterly Report; Meridian Macro.

Truth be told, the recent bump in Figure 4, above, arises entirely from FDIC re-categorization of Deutsche Bank, which at its 6/15/18 close of \$11.10 now trades 44.4% below its 1/24/18 high of \$19.98. Obviously, Deutsche Bank’s latest share-price collapse stems from a litany of proprietary challenges. Unfortunately, rationalization that Deutsche’s plight is uniquely “contained” due to epic mismanagement will provide zero relief from the stored force in Deutsche’s \$157 trillion CDS book (2x global GDP).

Derivative book aside, we recognize that investors have had plenty of opportunity to insulate portfolios from Deutsche Bank’s slow motion train wreck. What surprises us, however, is how little attention is being paid to the fact that the Deutsche “bug” seems to be infecting a growing number of prominent peers. In fact, as of 6/12/18, 41% of the 39 global financial institutions designated by the Basel-based Financial Stability Board as “Systemically Important” were trading more than 20% below recent peaks (in USD terms), placing them in bear market territory: Nordea, ICBC, UniCredit, Credit Agricole, ING, Santander, Societe Generale, BNP Paribas, UBS, Agricultural Bank of China, AXA, Mitsubishi UFJ Financial Group, Bank of China, Credit Suisse, and Prudential Financial. With the list of bear-market banking behemoths getting this crowded, how long can the Fed maintain that its tightening agenda is not impairing global liquidity? **Periphery to core!**

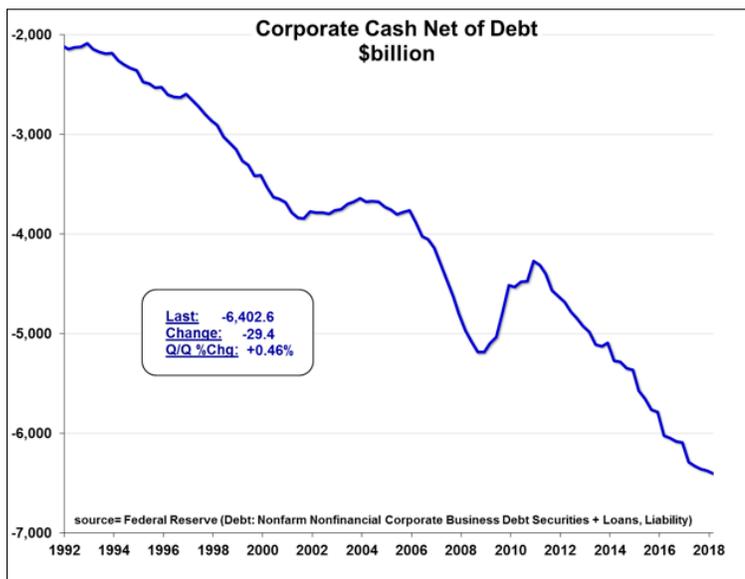
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U.S. Corporate Credits

A popular perception in recent years has been that U.S. corporate balance sheets are in great shape due to record cash balances. We offer in succinct rebuttal the image in Figure 5. The Fed's 2018 Q1 Z.1 Report discloses that, while Q1 corporate cash balances did indeed register an all-time high of \$2.66 trillion, this cash is more than offset by exploding bank borrowing and debt issuance. Amazingly, Figure 5 reveals that **total U.S. corporate-cash-net-of-debt registered an all-time low of negative \$6.4 trillion during Q1 2018.**

Figure 5: U.S. Corporate Cash Net of Debt (1992-Q1 2018)



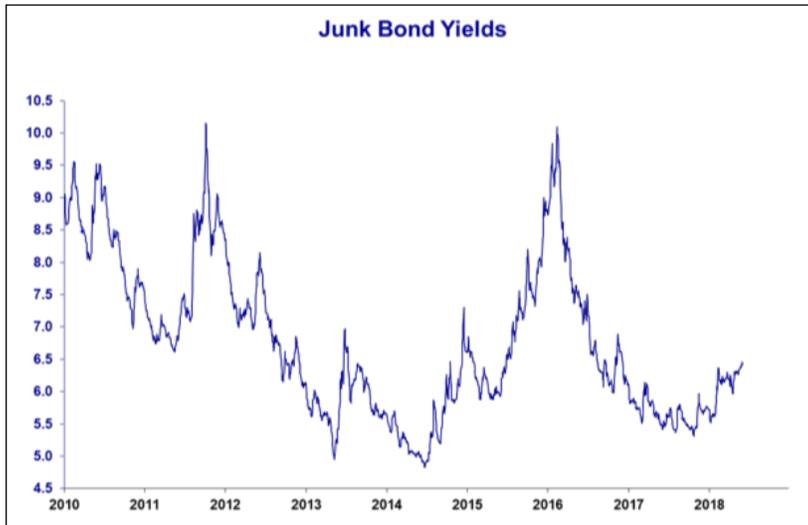
Source: Federal Reserve; Meridian Macro.

We consult MacroMavens for a short reality-check on just how stratified U.S. corporate liquidity has become. Since the GFC, total corporate debt has grown 62% (from \$5.3 trillion in 2007 to \$8.5 trillion at Q1 2018). A record 37% of U.S. corporates now sport debt-to-EBITDA ratios of 5x or above, and 14.6% have debt service exceeding EBIT. The top 25 companies in the S&P 500 hold 56% of the \$1.9 trillion in total index cash, and the top 50 hold 68%, meaning the bottom 250 companies hold next-to-no cash.

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Figure 6: Percentage Yield of Bloomberg Barclays High Yield Index (2010-6/15/18)



Source: MacroMavens.

The upshot of all this is that **\$1.5 trillion in U.S. corporate debt is now rated “junk,” with another \$3 trillion dangling just one rung above.** Not to mention another \$1 trillion in levered loans with almost no covenant protection. This means roughly **\$5.5 trillion** of hot potato debt stands **directly exposed** to any deterioration in credit trends. As shown in Figure 6, the Bloomberg Barclay’s High Yield Index suggests such a trend may already be afoot. **Periphery to core!**

U.S. Consumer Credits

In developing any analysis of credit deterioration, it seems almost unfair ever to use the term “subprime,” given its superstar status following the GFC. Nonetheless, it is no secret that a contemporary subprime sequel has been developing in the automobile sector. Fitch discloses in Figure 7, that the 60+ day delinquency rate of subprime auto loans registered 5.8% in February, significantly exceeding GFC peaks.

Figure 7: Delinquency Rate (60+ Days Past Due) For Subprime Auto Loans (2/28/98-2/28/18)



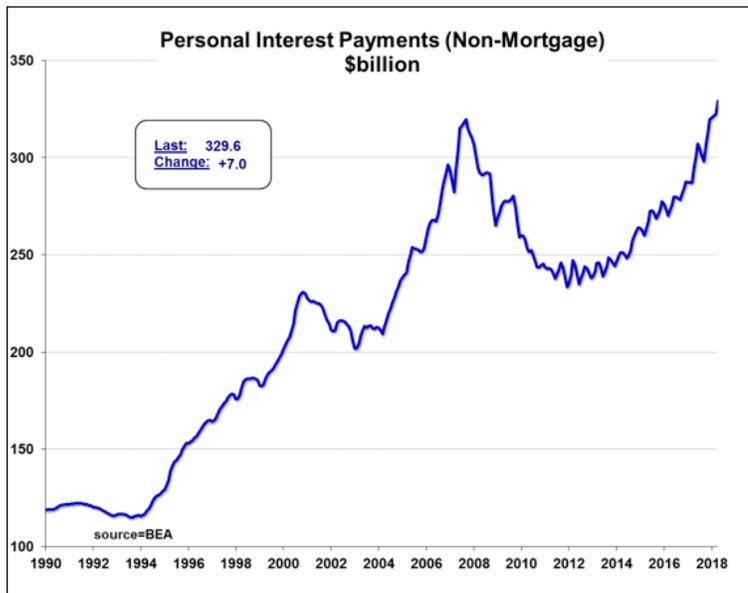
Source: Fitch.

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In our February report, we highlighted how quickly Fed rate hikes have translated into higher credit-card interest rates (now over 15%) which are pressuring consumers even to the point of collapsing personal savings rate. Given BEA calculations that Fed rate hikes have already driven U.S. personal interest payments to a new all-time high of \$329.6 billion (Figure 8), it is not surprising that personal savings rates have been under such pressure.

Figure 8: Personal Interest Payments (1990-4/30/18)



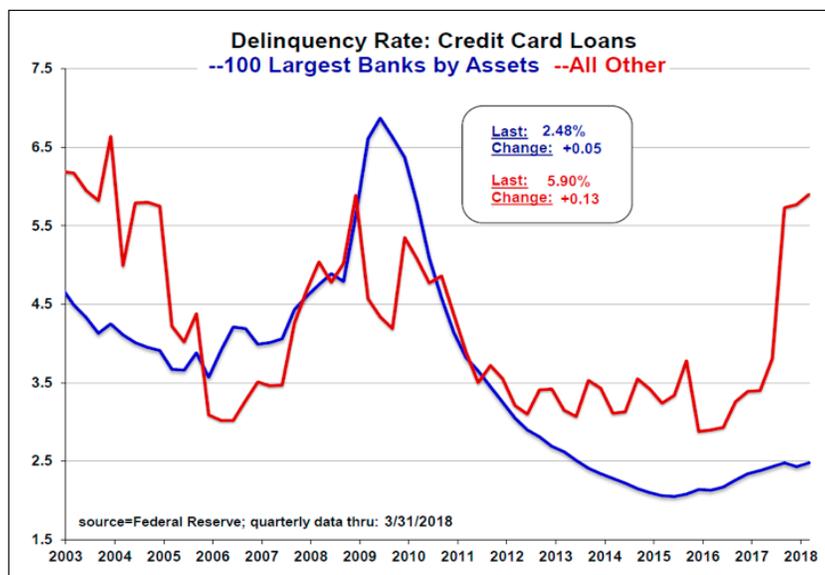
Source: BEA; Meridian Macro.

Each month, new evidence suggests the interest-rate pinch is spreading upward through the full range of credit scores. On 5/23/18, Equifax reported that the share of private-label credit card balances at least 60-days delinquent hit 4.65% in March, up from 4.08% in March 2017, and the highest since early 2011. Equifax attributes this trend to consumers' mistaken belief that they can avoid paying credit card bills when the retailers go out of business, declare bankruptcy or close local stores. On 6/19/18, the Fed released its Q1 Bank Delinquency Report, which disclosed that 2.48% of credit card loans at the 100 largest U.S. banks are now delinquent, but the delinquency rate for all other credit card issuers has already soared to eye-popping 5.90%. **Periphery to core!**

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Figure 9: Credit Card Delinquency Rates at 100 Largest U.S. Banks vs. All Other Lenders (2003-Q1 2018)



Source: Federal Reserve; Meridian Macro.

Nyet!

We want to highlight a recent sequence of global events to illustrate just how rapidly negative peripheral developments can reverberate to the very core of U.S. financial markets, especially in an environment of declining dollar-liquidity. On 4/6/18, President Trump announced aggressive sanctions against selected Russian oligarchs and their associated companies. The most severe sanctions were directed at Russian oligarch Oleg Deripaska and Rusal, the world's largest aluminum producer (7% global market share). President Trump appears to have singled out Rusal because Mr. Deripaska is a close Putin ally and banning Rusal from selling its aluminum in U.S. dollars would logically amplify domestic benefits of Trump aluminum tariffs. Trump sanctions froze all Rusal assets at U.S. institutions, banned U.S. firms from conducting business with Rusal, and threatened add-on sanctions against any foreign individual or firm engaging in future commerce with Rusal. Rusal's Hong Kong-listed shares promptly collapsed 72% and bids for Rusal bonds imploded.

What the Trump administration appears to have underestimated, however, is just how important Rusal is to the global aluminum value chain. Aluminum prices promptly surged to six year highs (hurting U.S. buyers), raw material providers such as Rio Tinto were left with gaping holes in alumina order books, and an important Rusal plant in Ireland was slated for closure, threatening the EU with job losses and aluminum shortages. By 4/23/18, global blowback proved so intense that Treasury Secretary Mnuchin extended to six months the wind-down period before sanctions take effect.

It now appears the whole Rusal episode may end up being a Trump warning shot to show the world how tough he can be on Russia. Other than commodity traders, few U.S. investors have attributed much significance to the April Rusal flap, and certainly **no one** perceived any connection between Trump's Rusal sanctions and April's sharp surge in 10-year Treasury yields through the psychologically significant 3.0% barrier, to a 4/25/18 high of 3.03%. Well here is where periphery-to-core can be so intriguing.

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Figure 10: Russian Holdings of U.S. Treasuries (2007-4/30/18)



Source: U.S. Treasury TIC Report; Meridian Macro.

It turns out Russian President Vladimir Putin was not amused by Mr. Trump's attacks on both his close friend and one of Russia's most important industrial corporations, not to mention collateral pressure felt by Russian banks such as VTB and Sberbank. Stabilizing dollar-denominated bonds of critical Russian corporates and plugging the gaping dollar-denominated accounts-receivable hole on Rusal's balance sheet became matters of national priority. Where could Mr. Putin mobilize sufficient U.S. dollars to fund a Russian version of repo and QE? The U.S. Treasury's April TIC Report (released 6/15/18) provides the graphic answer. As shown in Figure 10, the Central Bank of Russia (CBR) dumped during April an unprecedented **\$47.5 billion** of Treasuries (roughly half its \$96.1 billion holding).

Answering questions about these Treasury sales at a hearing in Russia's Duma on 6/19/18, CBR Governor Elvira Nabiullina refused to disclose where the CBR had reinvested the \$47.5 billion of proceeds:

We pursue the policy of safe and diversified holdings. We assess financial, economic and geopolitical risks while allocating the country's financial reserves...We reveal the information about investments with a time lag of around six months. That's the Central Bank's policy...When we publish the data, the entire new structure will be clearly seen.

As the world waits to learn exactly what the CBR did with proceeds from its epic April Treasury liquidation, an operative question comes to mind. Could Trump's Rusal sanctions have prompted such aggressive liquidation of Russia's Treasury holdings that these concentrated sales in turn helped drive April's 35-basis-point jump in 10-year Treasury yields, in the process even breaking the psychologically important 3.0% ceiling for the first time?

You betcha'! Periphery to core at its finest!

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