Q2 2017
Composite Review & Commentary

July 31, 2017

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NWP Blended Emerging Markets Debt

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Summary

- In Q2 2017, the NWP Blended Emerging Markets Debt Composite gained 2.13%, exceeding the benchmark return by 0.59% for the period. On a year to date basis, the strategy has returned 6.02% through June 30, exceeding the benchmark return by 1.41%.

- Q2 2017 results reflect a benign environment for fixed-income assets, with both Treasury yields falling and credit spreads tightening over the course of the quarter. EM bond markets continue to track the overall strong performance of risk assets generally, with equity markets at or near all-time highs, implied volatility at historical lows and credit spreads at post-crisis tights.

- Incoming US economic data remains consistent with a moderate growth environment and should permit the Federal Reserve to extend its current slow pace of monetary tightening through year end. Recent economic data in Europe and EM countries has surprised positively relative to both expectations and the US, setting the stage for relative outperformance by EM assets and further US dollar weakness against the Euro and major emerging market currencies.

Q2 Review

The NWP Blended Emerging Markets Debt Composite advanced 2.13% in total return for Q2 2017, against a gain of 1.54% over the same period for its benchmark, the Bloomberg Barclays Emerging Markets USD Sovereign + Quasi-Sovereign Bond Index. The composite's relative excess return is thus 0.77% for Q2. On a year to date basis, the composite has returned 6.02% through June 30, outpacing the benchmark return 4.61% over the same period.

Returns for the NWP Blended Emerging Markets Debt Composite mirrored a generally strong environment for fixed-income investments during Q2, with the Bloomberg Barclays US Aggregate Bond Index advancing 1.45% during the quarter and the Bloomberg Barclays US Aggregate Corporate Bond subindice gaining 2.54%. US junk bonds advanced 2.17% during the quarter, although the Bloomberg Barclays US Corporate High Yield Bond Index trailed the Bloomberg Barclays US Corporate Bond Index for the first time since Q1 2016. Longer duration Treasury yields fell during the quarter as the US yield curve flattened in response to additional monetary tightening by the Federal Reserve and a newly announced plan to begin shrinking the Fed's balance sheet during the second half of 2017. 10Y Treasury yields declined 8 basis points (bps) during the quarter, while 30Y yields fell 18 bps, against a rise of 13 bps in 2Y note yields. The 30Y–5Y term spread for the US Treasury curve fell 14 bps during the quarter to 0.95%, marking the flattest level of the US yield curve since the pre-crisis levels of 2007.

Credit spreads maintained their relentless tightening trend in Q2 2017, although at a slower pace than recent quarters. The aggregate spread for the Bloomberg Barclays US Corporate Bond Index fell 9 bps during the quarter to 1.09%, while the aggregate spread for the Bloomberg Barclays US Corporate High Yield Bond Index fell 19 bps to 3.64%. IG corporate credit credit spreads have fallen for seven straight quarters and now stand near their lowest levels since 2007; high-yield spreads have tightened for six continuous quarters and have returned to the levels preceding the late 2014 collapse in oil prices. Emerging market bonds slightly underperformed US corporate bonds from a credit perspective during the quarter, with the aggregate spread on major EM bond indices mostly unchanged. The average spread on the JP Morgan Emerging Market Bond Index (EMBI) tightened just 3 bps during Q3, while the Bloomberg Barclays Emerging Market USD Aggregate Bond Index widened by 1 basis point and the benchmark tightened by 2 bps. The NWP Blended Emerging Markets Debt Composite experienced a net decline in credit spreads of 20 bps over Q2, reflecting both outperformance by our specific holdings and rotation out of higher risk into lower risk sovereign names.

In contrast to the dominant strong dollar trend of the past three years, local currency emerging market bonds have handily outperformed hard currency EM bonds during Q2 and on a year to date basis. The JP Morgan Global Bond Index – Emerging Markets (GBI-EM) rose 3.62% during Q2, and is up 10.36% on a year to date basis, outpacing all categories of US-dollar denominated EM bonds. The strong performance of EM local debt reflects significant nominal exchange rate appreciation across major EM countries, with the JP Morgan Emerging Market Currency Index (EMCI) Live Spot Index recording a 4.13% gain on a year to date basis. EM currency gains have been led by the Mexican peso, up 14.39% on a year to date basis, the Polish zloty (+13.09% YTD), the Hungarian forint (+8.91%), the Korean won (+5.58%) and the South African rand (+5.09%). EM currency gains have tracked overall broad weakness in the dollar, as the euro has rallied 8.64% against the dollar on a year to date basis. If the recent dollar weakness trend does not reverse by year end, EM local debt (the GBI-EM) is poised to outperform EM hard currency debt (the EMBI) on a full year basis for the first time since 2010.

The NWP Blended Emerging Markets Debt Composite outperformed its benchmark by 59 bps during Q2, and by 141 bps on a year to date basis, reflecting diverse sources of active risk. In terms of factor attribution, the composite's year-to-date outperformance breaks down as follows: Yield curve positioning has added 25 bps of relative performance, reflecting an overweight duration posture of 0.82 years versus the benchmark with a bias towards 30Y securities; carry income has added 9 bps based on the composite's slightly higher average coupon and yield characteristics relative to the benchmark; credit positioning has added 83 bps based on both general and specific spread tightening; and currency exposure has added 24 bps as the Mexican peso, South African rand and Brazilian real have performed strongly during the first half. During Q2, we have opportunistically increased our foreign currency exposure, with non-USD positions accounting for 3.0% of composite market value as of quarter end (split among MXN, ZAR and BRL). On the credit front, overweight positions in Turkey, Mexico, Indonesia and Argentina were the strongest positive contributors to relative credit returns, partially offset by an underweight position in Peru. Turkey was the overall strongest EM sovereign credit performer during Q2, followed by Argentina, Malaysia, Mexico and Peru. Venezuela, Nigeria and many Middle Eastern credits were laggards, reflecting lower oil prices over the course of the quarter.

Fly Away on My Zephyr

In Greek mythology, Zephyrus, the West wind, is the mildest of the winds, bringing perfect spring and early summer weather to the start of the growing season. Here in Milwaukee, the Red Hot Chili Peppers kicked off Summerfest (a two-week long outdoor music festival which draws approximately 1 million people each year) on June 28. Reflecting on the second quarter of 2017, it strikes us that the Chili Peppers' 2002 hit, "The Zephyr Song," is indeed a perfect soundtrack to accompany the performance of global financial markets over the first half of the year. For it has been all blue skies and gentle breezes for global stock and bond investors so far in 2017. Stocks, bonds, foreign currencies and commodities have rallied together, accepting the song's invitation to "fly away on my zephyr / I feel it more than ever / and in this perfect weather / we'll find a place together." Volatility, risk and increasingly risk premia of any kind, have become as distant a memory as President Trump's Mexican border wall, much less the existential financial crisis which began to embroil the US economy around ten years ago, this month.

Investors have their choice of variables by which to quantify exactly how lovely the market weather has been. Implied equity volatility, as measured by the CBOE Volatility® (VIX Index®) has dipped below 10% for the first time since 1993 and remains near all-time lows. Realized S&P 500 price volatility is even lower. The Merrill Lynch Option Volatility Estimate Index (MOVE) of fixed income implied volatility is likewise at record lows relative to an index history stretching back to 1988. Credit spreads, while not quite through all-time lows, hover at ten year lows against a backdrop of near record low yields for credit products of all kinds. Through June 30, JP Morgan notes that the largest intra-year drawdown observed so far for the S&P 500 in 2017, at -3.0%, is the smallest such drawdown seen in US stocks since at least 1980.

The quiescent state of financial markets has not been for lack of event risk in the US, Europe and elsewhere. Markets have been impervious to political dysfunction in the US, which has paralyzed the new Trump administration and ended the hopes for healthcare reform, tax cuts and trade policy changes which ostensibly fueled higher-interest rates, higher stock prices and a stronger dollar in the immediate aftermath of last autumn's electoral surprise. The Federal Reserve has continued to raise interest rates so far in 2017 and surprised the market in a hawkish direction in June by announcing plans for a balance sheet reduction program commencing as soon as September of this year. Likewise, the Bank of Canada surprised markets with interest rates hike, while even the Draghi-led European Central Bank (ECB) and the Bank of England (BOE) have begun to make noises about ending quantitative easing (QE) and raising interest rates. Unconcerned as they are with the withdrawal of the global central bank liquidity put, financial markets have also remained remarkably relaxed with respect to geopolitical risks. The spring and summer have seen a surprise US military intervention in Syria, a palace coup in Saudi Arabia, political violence in Venezuela, the imposition of martial law in the Philippines, a fracture in the Gulf Cooperation Council over Qatar and most recently, a successful intercontinental ballistic missile test by North Korea, among many other events, all without appreciable effect on financial risk appetites.

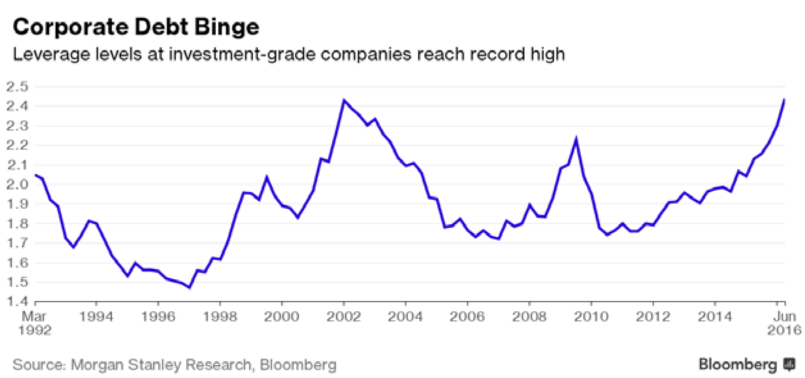
Last quarter, we voiced our concerns about cracks appearing in the consumer and asset-backed credit markets, specifically with respect to retail bankruptcies, commercial real estate and rising delinquency rates for credit cards, auto loans and student loans. Our suggestion then, as now, is that adverse trends in these admittedly peripheral credit markets are a sign of, if not the top, at least the near maturity of the current credit cycle. We believe it is only a matter of time before credit distress in consumer facing sectors filters upward into credit distress in the broader corporate bond market, where issuance and overall leverage have risen markedly in recent years.

According to Lipper data, IG corporate bond mutual funds and ETFs have grown from $400 billion in assets in 2009 to nearly $2.0 trillion in assets by 2017. These funds have in turn accommodated an even larger growth in corporate bond issuance, with total US corporate bonds outstanding growing from $4.6 trillion in 2005 to $9.0 trillion in 2017, using data from the Securities Industry and Financial Markets Association (SIFMA). Much of the additional $4.5 trillion in bonded indebtedness taken on by US corporates over the past decade has been used to pay dividends, buy back stock and to finance acquisitions using cash. The result has been a shrinking public equity market (in terms of number of firms and shares outstanding), accompanied by a notable rise in aggregate corporate leverage.

To fully appreciate the practical significance of this trend in corporate credit, we suggest (in keeping with the spirit of summer doldrums) watching paint dry—or more specifically, watching the paint dry on the recent acquisition of paint manufacturer Valspar by its 150-year old rival, Sherwin Williams. The paint business is low volatility, somewhat cyclical and mostly predictable, justifying high credit ratings. This was indeed the case for Sherwin Williams, which as recently as 2006 carried an A+ credit rating and a Net Debt to EBITDA ratio of only 0.4x. Yet, over the past decade, and especially in recent years, Sherwin Williams has borrowed to repurchase stock and make acquisitions, culminating in the bid to acquire Valspar for $10 billion in cash which just closed this quarter. Pro-forma for the acquisition, the "new" Sherman Williams now carries $11.3 billion in net debt (up from just $400 million in 2006), has a leverage ratio of 4.2x Net Debt to EBITDA (up from 0.4x 10 years ago) and barely clings to a BBB- investment grade rating (versus A+ 10 years ago). In the interest of retiring roughly $14 billion of public equity value (some of its own stock and all of Valspar's), a staid, mainline investment grade credit has been transformed into a highly-levered, near speculative credit on the cusp of junk status. And yet, over the course of this remarkable credit transformation, Sherwin Williams' newly issued 30Y bonds trade at a spread of just 127 bps, well inside the sovereign spreads of AA-/A+ rated Qatar and tighter than the company's pre-acquisition 10 year spreads 2 years ago!

We highlight the Sherwin Williams story not because it is extraordinary, but rather because it is typical of the credit deterioration which has been gathering pace in corporate bond markets over the past several years. According to research from Morgan Stanley and reported by Bloomberg, aggregate Net Debt to EBITDA for investment grade rated US non-financial corporates has risen from a recent low of 1.7x in 2010 to 2.5x in 2017, the highest aggregate level since the 1980s.[1]

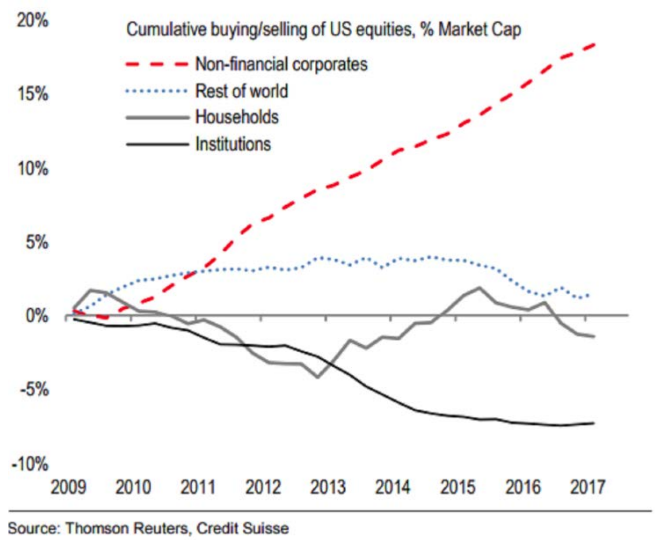
Table 1: Corporate Leverage Is Rising



Source: Morgan Stanley, Bloomberg, September 2016.[2]

These trends in corporate credit are important, in our view, because corporate credit is the fuel which feeds the weather machine making Q2's pleasant risk climate possible. Data shows that the principal buyer of equities during the post-crisis rally has been the corporate sector itself, with US households and institutions actually being net sellers of stocks over the course of the long bull market which began in 2009. In fact, according to Federal Reserve data compiled by Credit Suisse, non-financial corporations have cumulatively bought back roughly 18% of the US stock market capitalization since 2009, with households, institutions and the rest of the world being cumulative net sellers to the tune of about 7% of aggregate market capitalization on a combined basis. In other words, it is US companies themselves who have provided more than 100% of the marginal bid for equities which has driven a near 250%+ appreciation of US stock indices off the 2009 lows.

Table 2: Corporates Have Been Primary Buyer of US Equities



Source: Andrew Garthwaite, Credit Suisse, July 2017 via Bloomberg News[3]

It is not difficult to imagine how approximately $4 trillion of net corporate equity purchases since 2009 have been enabled by a roughly equivalent $4 trillion increase in non-financial corporate bonds outstanding over the same period. This debt-fueled repurchase activity has provided the primary price support for US equities over the period and has, in turn, played a key role in suppressing realized and implied volatility. In aggregate, operating profits of the US corporate sector have not risen enough to simultaneously fund the current pace of buybacks as well as desired capital investment activity. Thus corporate leverage has risen, and outside of a few cash rich technology companies, this increase in leverage is even more dramatic (as Sherwin Williams shows) as one looks at mid and smaller capitalization companies.

Debt capital markets have so far been extraordinarily accommodating of the titanic equity-for-debt swap underway in the US corporate sector. However, as always, we see reasons to worry about the sustainability of this trend. Debt issuance by US corporates has been strongly facilitated by central bank activity during the post crisis period, with at least one and usually more of the major global central banks (the Fed, ECB, BOE and Bank of Japan (BOJ)) engaging in large scale asset purchases over the entirety of the post crisis period. Since 2008, the big four central banks have collectively expanded the asset side of their balance sheets by almost $11 trillion, accommodating government budget deficits and pushing investors out of government securities into riskier fixed-income categories. 2017 represents an important tipping point in this dynamic, with the Fed contemplating reduction of its balance sheet, the BOE having ended asset purchases, and the BOJ and ECB commencing the process of tapering their purchases towards zero.

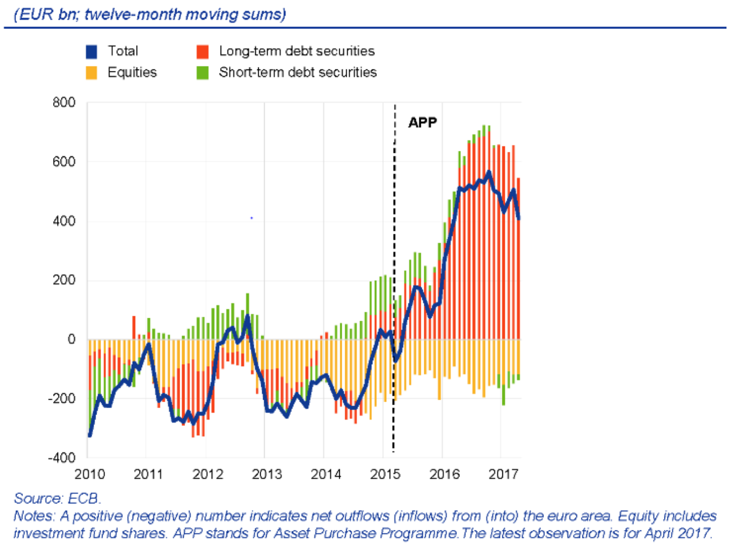
Table 3: Big 4 Central Bank QE Purchases Average $1.3 Trillion/ Year Since 2009

Source: Bloomberg, JP Morgan, October 2016, via Financial Times[4]

During Q2, the Federal Reserve outlined a balance sheet reduction plan (through reduced reinvestment activity) which, assuming it begins sometime in Q3, will result in the Fed becoming a net supplier of bonds to the market at a pace of $600 billion per year by the second half of 2018. Assuming the BOJ and ECB wind down asset purchase programs in the same time frame (as seems probable based on recent actions and market communications by both institutions), global central banks will swing from being net purchasers, on average, of $1.3 trillion of fixed-income securities per year to net sellers of -$0.6 trillion per year. We believe this is a prospective policy change of major significance whose importance has been underappreciated by fixed-income markets in general and the US corporate credit market in particular. The fortuitous timing of a simultaneous ramp up in ECB and BOJ QE programs in early 2015 cushioned the shock of the wind down of the Federal Reserve's QE program in the US. The comparative aplomb with which financial markets have absorbed Fed tightening so far has, in our view, bred dangerous complacency about the effects of further monetary policy restriction. Fed hikes are easy to stomach, after all, when the BOJ, ECB and BOE conveniently replace the Fed's QE program with another program twice as large (see chart above). With global central banks now moving in the same direction, we believe the real global policy tightening is only just starting, at a time when risk assets are less psychologically prepared for the shock.

We think the end of QE in Europe could have a particularly large impact on US bond markets, as US Treasuries and corporate bonds have been among the primary beneficiaries of capital outflows from European government bond markets. We expect even a small rise in relative Eurozone interest rates to catalyze a large reverse flow of fixed-income investment out of the US markets back into European government bonds and corporates. Since bond flows are far less likely to be FX-hedged than equity flows, such a capital repatriation is likely to be accompanied by a substantial nominal appreciation of the euro versus the US dollar. The chart below, from the European Central Bank, shows aggregated composite flows out of the Eurozone since the launch of the ECB's asset purchase program in early 2015. [5]

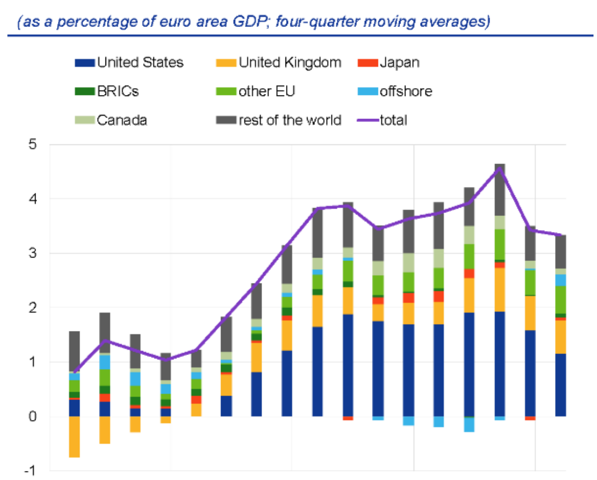
Table 4: Massive QE Induced Fixed Income Outflows out of Europe



Source: European Central Bank-July 2017 "International dimensions of the ECB asset purchase programme"[6]

Since 2014, more than $1 trillion of fixed-income composite investment has flowed out of Europe, almost entirely into long-term debt securities. These flows accelerated at the commencement of the ECB's most recent asset purchase program, and are at risk of an equally sharp reversal as the ECB gropes towards an end to QE amidst advancing growth and rising inflationary pressures in Europe. Another table from the same ECB report, reproduced below, shows that outbound fixed-income investment from Europe has flowed mainly into US securities, followed by UK bonds and other European bond markets outside the Eurozone. Notably, only a small portion of these flows have found their way into EM bonds (shown by "BRICs" and "Rest of World"), with almost all of the incremental foreign bond buying over pre-2015 levels flowing into the US.

Table 5: Eurozone net purchases of foreign bonds by destination country



Source: European Central Bank-July 2017 "International dimensions of the ECB asset purchase programme"[7]

As such, we anticipate the end of European QE (and the associated repatriation of some or all of the outbound capital flight of the past few years) will primarily affect the US bond market. It is perhaps bad luck that this “Eurotaper” effect will coincide with the Federal Reserve’s balance sheet reduction plan. Lucky or not, the combination of the two phenomena will result in the withdrawal of over $1 trillion per year in marginal fixed-income demand from the US market over the next 12-18 months. This will represent, in our view, a far greater monetary shock to the US economy than the 100 bps in cumulative increases in the overnight rate that the Fed has delivered since late 2015.

What are the investment consequences of this policy shift? Against our monetary and flow related concerns is the fact the economic data in the US remains mostly strong, with sustained moderate growth and steadily rising employment. Globally, forward looking indicators of activity look even better, with regional PMIs in Europe, Latin America and Asia near three-year highs and numerous industrial commodities (such as copper and iron ore) trading well off recent lows. Indeed, the apparent robustness of the global economy informs our view of central bank policy, as we expect not only the Federal Reserve but the ECB, BOJ and other major central banks to continue delivering hawkish surprises relative to expectations in the coming months. This view—decent economic growth combined with less dovish central banks—is generally consistent with a maturing but still expansionary global business cycle that we have articulated in recent months. As we observed in our January commentary this year, we expect a conventional end to the current business cycle, ultimately catalyzed by central bank tightening, that is in process but will likely take at least another 1-2 years to reach completion. The events of the past few months leave us more convinced that the Fed is, at long last, intellectually and emotionally committed to attempting an exit from the extraordinary policy accommodation of the past decade. Global growth is strong enough, for now, that other central banks will join them.

In the early to middle stages of bona fide tightening cycles, the well-established historical tendency is for credit spreads to narrow and the yield curve to flatten amid an overall rise in interest rates. This scenario remains our core expectation. With credit spreads still slightly above all-time tights, we think there is room for them to tighten further in the near term, perhaps to 70-80 bps for IG corporates (from quarter end levels of 109 bps) and to 250-275 bps for high-yield corporates (from quarter end levels of 364 bps according to Bloomberg Barclays Index data). However, for the reasons discussed above, we think the bulk of any further spread tightening will be driven by higher Treasury rates, as absolute yields on credit products, if not credit spreads, are currently very near all-time lows. As such, we think the prospects for fixed-income price gains are poor looking into the second half, and generally expect a coupon return at best as fixed-income markets process the important changes in central bank policy hypothesized above.

We have grown more confident that the strong dollar cycle of the past several years has peaked, and that it is safer to take foreign currency risk. For reasons discussed above, we believe there is a good case for substantial appreciation of the euro against the US dollar over the coming year, driven both by large repatriation flows and the persistent weight of the largest Eurozone current account surplus in more than two decades. Our judgment is that dollar strength is greatest on the front edge of tightening cycles, and at this point, the dollar has more than discounted the relative hawkishness of US monetary policy versus other central banks. As expectations for foreign central banks change to catch up with the Fed over the next year, we think the dollar can weaken much more, mainly against the Euro but also against other major currencies including the Japanese yen and British pound. After a nine year bull market, the dollar is fundamentally overvalued according to the IMF, purchasing power parity and numerous real exchange rate models; while such theoretical over- or undervaluations can persist for years, the technical position of the market (real money investors heavily long the dollar) and potential event risk (hawkish surprises from the ECB and BOJ) appear to us to be aligning in favor of a significant and sustained sell off in the dollar. We expect that EM currencies will generally benefit from a broader dollar sell off and that it is therefore attractive to hold a number of the high carry (high nominal interest rate) EM currencies at this time, including the Mexican peso, South African rand, Brazilian real and Turkish lira.

At this stage in the cycle, our view is that it is better to take active risk in foreign currency exposure rather than to press either credit or duration bets. The relative tightness of credit spreads, combined with upside risk to Treasury rates and deteriorating IG corporate credit fundamentals, leaves an uncomfortably small margin for error. While EM sovereign credit characteristics remain strong, and are in many ways improving relative to similarly rated corporates, we are alert to the disruption that will occur in EM credit in sympathy with any sell off in US corporate bonds. In such a tightly coupled market, correlation risks increasingly outweigh credit judgments. Our bias continues to be to slowly reduce credit risk in the composite, targeting a flat or even underweight spread position relative to our benchmarks. Similarly, we have grown less enthusiastic on duration risk as Treasuries have rallied following the election sell-off. With commodity prices rising again and the Fed tightening, we favor a return to a neutral or underweight duration posture, albeit with a long end tilt that may benefit from a flattening trend in the yield curve. To the degree we continue to hold long duration or high spread credits, we favor credits with steep spread curves or idiosyncratic event risks (Argentina and Qatar being recent examples of each). As quasi-sovereign spreads, have also compressed relative to sovereign credit spreads, we also believe current conditions favor EM sovereigns over quasi-sovereign and corporate risks.

GIPS® Compliant Presentation

Year	Gross Return (%)	Net Return (%)	Benchmark Return (%)	3-Year Standard Deviation (%)		Dispersion (%)	Assets (USD millions)		Number of Portfolios
				Composite	Benchmark		Composite	Firm	
2016	8.61	8.15	6.07	NA	NA	NA	576	834	<5
2015	-1.12	-1.53	-1.42	NA	NA	NA	530	737	<5
2014*	8.97	8.56	6.69	NA	NA	NA	536	536	<5

*Composite and benchmark performance is for the period February 1, 2014 through December 31, 2014.

1. Northwest Passage Capital Advisors LLC ("NWP") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. NWP has been independently verified for the periods February 1, 2014 through December 31, 2016. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

2. NWP is an SEC registered investment adviser, which began managing assets on January 6, 2014. The firm is defined as all portfolios managed by NWP.

3. NWP Blended Emerging Markets Debt Composite, created January 6, 2014, includes all institutional portfolios benchmarked against the Bloomberg Barclays Emerging Markets USD Sovereign + Quasi-Sovereign Bond Index. The strategy consists of unleveraged long only emerging market fixed-income securities issued by sovereign states or entities in which the government is the majority owner or has control that are USD or foreign exchange denominated and may include non-investment grade emerging market fixed-income securities not included in the benchmark. The objective is to deliver a total return primarily through income but with some capital growth. Emerging market bonds may carry increased levels of risk and are less liquid than government and investment grade bonds in developed countries. Investment in less regulated markets may carry increased political, economic and issuer risk. A list of composite descriptions is available upon request.

4. The Bloomberg Barclays Emerging Markets USD Sovereign + Quasi-Sovereign Bond Index tracks fixed and floating-rate US dollar-denominated debt issued by sovereign and quasi-sovereign emerging markets issuers. Corporate issues are not eligible. Country eligibility and classification as Emerging Markets is rules-based and reviewed annually using World Bank income group and International Monetary Fund country classifications. The Emerging Markets USD Sovereign + Quasi-Sovereign Bond Index is a subset of the flagship Emerging Markets USD Aggregate Index. Country capped versions of this index are also available. Historical index returns are available from January 1, 2003.

5. Performance is expressed in U.S. dollars. Returns are presented gross and net of management fees and include the reinvestment of all income. Net of fee performance was calculated by reducing the highest fee from the monthly gross return and geometrically linking the monthly net returns to calculate the annual net return. NWP charges an investment management fee of 0.42% per annum on the value of the client's assets under management. Please refer to our disclosure brochure for more information regarding our management fees. Policies for valuing portfolios, calculating performance and preparing compliant presentations are available upon request.

6. Dispersion presented is an asset-weighted standard deviation calculated for the portfolios in the composite for the entire year. For years where there are five or fewer portfolios in the composite for the entire year, dispersion is not presented as it is not a meaningful statistical calculation. The three-year standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period. The three-year standard deviation is not presented for 2014 through 2016 due to less than 36 months of composite and benchmark data. The notation "NA" (not available) will appear for periods, if any, where data is not available for the composites and/or benchmark.

7. Actual performance results may differ from composite returns, depending on the size of the account, investment guidelines and/or restrictions, inception date and other factors. Past performance is not indicative of future results. As with any investment vehicle, there is always the potential for gains as well as the possibility of losses.

Indices:
The **Bloomberg Barclays Emerging Markets USD Aggregate Index** is a flagship hard currency Emergency Markets debt benchmark that includes fixed and floating-rate US dollar-denominated debt issued from sovereign, quasi-sovereign, and corporate EM issuers. Country eligibility and classification as Emerging Markets is rules-based and reviewed annually using World Bank income group and International Monetary Fund (IMF) country classification. The index was previously called Barclays US EM Index, and history is available back to 1993. The **Bloomberg Barclays Emerging Markets Investment Grade Index** and **Bloomberg Barclays Emerging Markets High Yield Index** are subindices of this index.

The **Bloomberg Barclays Emerging Markets USD Sovereign + Quasi-Sovereign Bond Index** tracks fixed and floating-rate US dollar-denominated debt issued by sovereign and quasi-sovereign EM issuers. Corporate issues are not eligible. Country eligibility and classification as Emerging Markets is rules-based and reviewed annually using World Bank income group and International Monetary Fund (IMF) country classifications. The EM USD Sovereign + Quasi-Sovereign Index is a subset of the flagship **EM USD Aggregate Index**. Country capped versions of this index are also available. Historical index returns are available from January 1, 2003.

The **Bloomberg Barclays US Aggregate Bond Index** is a broad-based flagship benchmark that measures the investment grade, USD- denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-through), ABS and CMBS (agency and non-agency). Provided the necessary inclusion rules are met, US Aggregate eligible securities also contribute to the multi-currency Global Aggregate Index and the US Universal Index, which includes high yield and emerging markets debt. The US Aggregate Index was created in 1986 with history backfilled to January 1, 1976. The **Bloomberg Barclays US Aggregate Corporate Bond Index**, the **Bloomberg Barclays US Aggregate Long Treasury Index** and the **Bloomberg Barclays US Aggregate Long Corporate Index** are subindices of this index.

The **Bloomberg Barclays US Corporate Bond Index** measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by US and non-US industrial, utility and financial issuers. The Corporate Index is a component of the US Credit and US Aggregate Indices, and provided the necessary inclusions rules are met, US Corporate Index securities also contribute to the multi-currency Global Aggregate Index. The index was launched in July 1973, with index history backfilled to January 1, 1973.

The **Bloomberg Barclays US Corporate High Yield Bond Index** tracks USD-denominated, high-yield, fixed-rate corporate bonds. Included securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/ BB+ of below. Bonds from issuers with an emerging markets country of risk, based on indices' EM country definition, are excluded. The **US Corporate High Yield Index** is a component of the US Universal and Global High Yield Indices. The index was created in 1986, with history backfilled to July, 1, 1983.

The **CBOE Volatility Index® (VIX® Index®)** is a key measure of market expectations of near-term volatility conveyed by S&P 500 stock index option prices. Since its introduction in 1993, the VIX Index has been considered by many to be the world's premier barometer of investor sentiment and market volatility. Several investors expressed interest in trading instruments related to the market's expectation of future volatility, and so VX futures were introduced in 2004, and VIX options were introduced in 2006.

The **J.P. Morgan Emerging Market Bond Index (EMBI)** tracks the total return for the US dollar-denominated emerging markets debt, including Brady bonds, Eurobonds and loans. It does not include fees or expenses. **The J.P. Morgan Global Bond Index – Emerging Markets ("GBI-EM")** tracks the total return for local currency government bonds issued by emerging market sovereigns in their own currency. The **J.P. Morgan Global Aggregate Bond Index (JPM GABI)** consists of the JPM GABI US, a USD- denominated, investment-grade index spanning asset classes from developed to emerging markets, and the JPM GABI extends the U.S. index to also include multi-currency, investment-grade instruments. The index represents nine distinct asset classes: Developed Market Treasuries, Emerging Market Local Treasuries, Emerging Markets External Debt, Emerging Markets Credit, US Credit, Euro Credit, US Agencies, US MBS, Pfandbriefe – represented by well-established J.P. Morgan indices. It was launched in November 2008.

The **J.P. Morgan Emerging Market Currency Index (EMCI) Live Spot Index** is a tradable benchmark comprised of then currencies: BRL, CLP, CNH, HUF, INR, MXN, RUB, SGD, TRY and ZAR.

The **Merrill Lynch Option Volatility Estimate (MOVE) Index** is a yield curve weighted index of the normalized implied volatility on 1-month Treasury options which are weighted on the 2,5,10 and 30 year contacts.

The **S&P 500** is an index of large-cap US equities tracking 500 companies and captures approximately 80% coverage of available market capitalization. The index uses a market cap methodology, giving a higher weighting to larger companies. Included companies are updated periodically as decided by committee.

Indices are unmanaged and cannot be invested in directly.

[1] https://www.bloomberg.com/news/articles/2016-09-09/leverage-soars-to-new-heights-as-corporate-bond-deluge-rolls-on
[2] https://www.bloomberg.com/news/articles/2016-09-09/leverage-soars-to-new-heights-as-corporate-bond-deluge-rolls-on
[3] https://www.bloombergquint.com/markets/2017/07/25/stock-surge-prolongs-bond-bull-market-jpmorgan-tells-clients
[4] https://www.ft.com/content/060c691c-8a0f-11e6-8aa5-f79f5696c731
[5] https://www.ecb.europa.eu/press/key/date/2017/html/ecb.sp170711.en.html
[6] https://www.ecb.europa.eu/press/key/date/2017/html/ecb.sp170711.en.html
[7] https://www.ecb.europa.eu/press/key/date/2017/html/ecb.sp170711.en.html