International Commentary — March 5, 2021

How Sensitive Are Emerging Markets to Rising Yields?

Summary

In recent weeks, the theme of reflation has dominated global financial markets. With inflation expectations firming, U.S. Treasury yields have spiked. While the rise in Treasury yields should be interpreted as market participants becoming more confident in the recovery prospects of the global economy, higher yields have also resulted in elevated financial market volatility over the past few weeks, particularly within the emerging markets. The rise in yields has drawn comparisons to the 2013 Taper Tantrum, an episode where emerging market assets sold off significantly amid a sudden push higher in U.S. Treasury yields. There are some key differences between the recent rise in yields and the Taper Tantrum episode, however, and while Fed monetary tightening is likely still far off, current developments raise the question of which emerging market countries could experience funding pressure and sharp currency deprecations if yields continue to rise and financial market volatility stays elevated.

While we do not believe we are entering a new Taper Tantrum scenario just yet, we see value in providing early guidance on where sovereign yields could rise the most, and which emerging market currencies could be vulnerable. In that context, we offer a sensitivity framework and incorporate key variables we believe help determine sensitivity to the current reflation theme. Countries in emerging Asia and emerging Europe, Middle East and Africa (EMEA) have become less sensitive relative to the Taper Tantrum episode, while Latin America remains stable, leading us to believe the emerging markets in general are less sensitive to the current period of rising yields. However, there are some countries that could be vulnerable from both a yield and currency perspective, most notably South Africa and Mexico. In addition, sovereign debt has become more sensitive in Peru and Russia compared to the 2013 Taper Tantrum, while Hungarian yields could rise less significantly today relative to a decade ago. As for currency vulnerability, the Indian rupee has become a less sensitive currency in 2021 relative to 2013 as underlying economic fundamentals and politics in India have improved significantly. In the event of another interest rate shock and large selloff in the emerging markets, we would expect rupee depreciation to be much more contained.

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Reflation Prospects Weighing on Emerging Markets

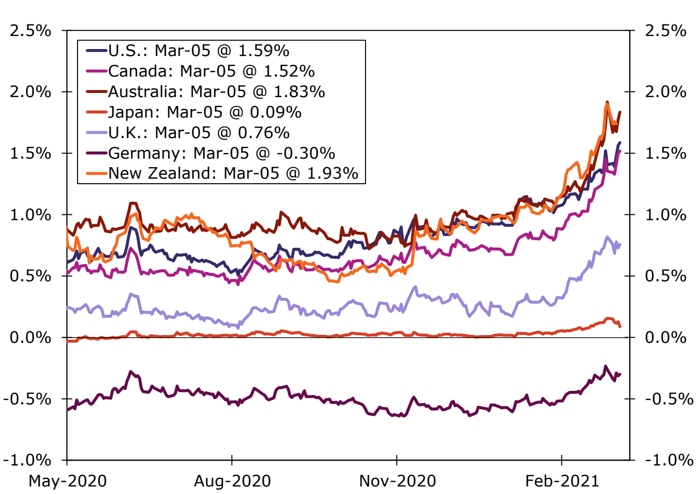
In recent weeks, the theme of reflation has dominated global financial markets. Persistent monetary and fiscal policy support has started to filter down to real economies around the world, supporting consumer spending, economic activity and price acceleration. Low interest rates and asset purchase programs are also likely to remain in place for the foreseeable future, both of which have boosted inflation prospects for the global economy. With the disinflationary impulse of the pandemic diminishing, financial market participants are beginning to assess the possibility of a sharp upturn in inflation, especially within the United States. To that point, CPI inflation in the U.S. is already above its pre-COVID trend, despite output in the United States still being below pre-pandemic levels. These dynamics suggest the backdrop for inflation may be starting to shift toward an environment of faster price growth.

Recent U.S. data provide further evidence that the inflation outlook for the U.S. economy could be firming going forward. January retail sales beat consensus forecasts by a wide margin, while February ISM data broadly beat expectations. In addition, we believe another $1.5 trillion fiscal support package is in the pipeline and expect a further round of direct checks to be delivered to households in the near future. Given the better-than-expected data and additional fiscal support, we now believe the U.S. economy can expand 6.2% this year, up from a previous forecast of 5.3%. Faster growth could also result in quicker inflation.

An improving U.S. economic growth and firming inflation outlook has resulted in a sharp selloff in U.S. Treasury bonds. In March, U.S. Treasury yields rose above 1.60%, up from 1.07% at the beginning of March, reflecting increased optimism around reflation in the United States. These dynamics are prevalent internationally as well, as government bond yields across the G10 have also risen materially over the course of this year (Figure 1). Typically, a rising interest rate environment places pressure on emerging market asset prices. When yields in the United States begin to rise, market participants may not feel as compelled to "search for yield" in riskier places like the emerging markets. Capital outflows from emerging markets tend to follow rising U.S. Treasury yields as investors shift capital back into the United States and other major economies. As a result, the U.S. dollar tends to outperform and emerging market currencies broadly come under pressure. These dynamics have played out over the past few weeks as the rise in U.S. rates resulted in renewed volatility across EM financial markets as equities and currencies sold off significantly and the U.S. dollar outperformed. In addition, sovereign yields across Latin America, emerging Europe Middle East and Africa (EMEA) and Asia broadly increased.

Figure 1

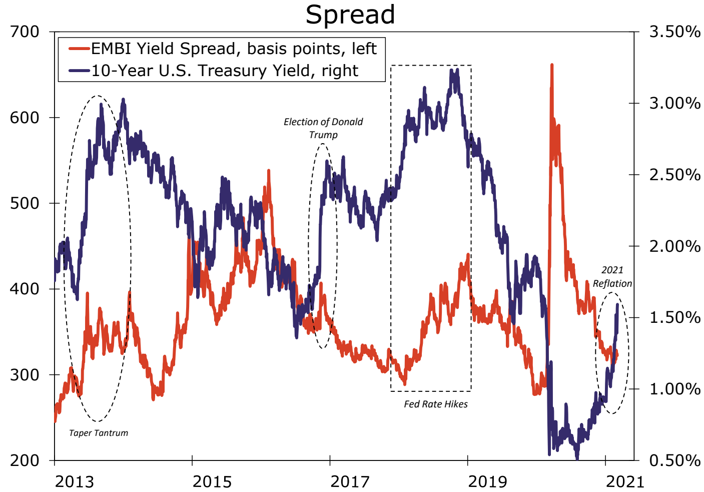
Global 10-Year Government Bond Yields



Source: Bloomberg LP and Wells Fargo Securities

Figure 2

10-Year U.S. Treasury Yield vs. EMBI Yield Spread



Source: Bloomberg LP and Wells Fargo Securities

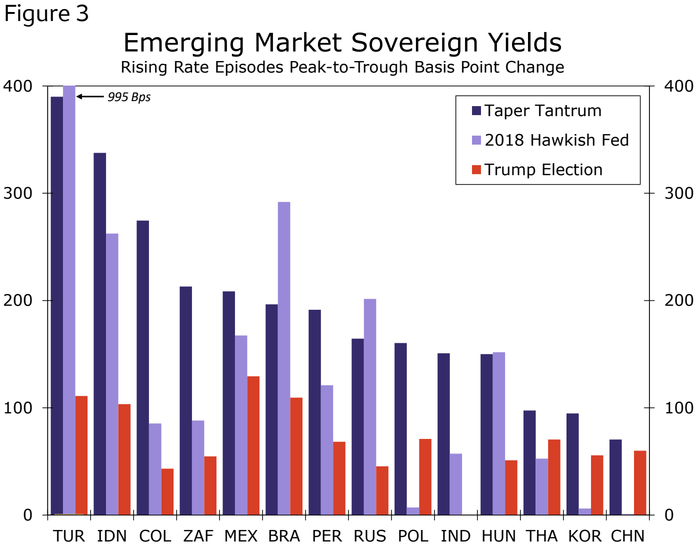
Rising Treasury Yield Scenarios Historically Bad for Emerging Markets

The sharp rise in U.S. Treasury yields has brought back memories of similar periods of rising rates and subsequent pressure on emerging market assets. Following the election of President Trump in 2016, Treasury yields rose on expectations of eventual reflation, while throughout 2018, a hawkish Fed also led Treasury yields higher. However, the most notable episode to compare the current rise in yields to is the 2013 Taper Tantrum. As a reminder, the Taper Tantrum took place in 2013 and occurred as the Fed gave its first indication after the Global Financial Crisis that it might start to normalize monetary policy (i.e., raise rates and taper asset purchases). The Fed's suggestion of "tapering" easy monetary policy resulted in 10-year Treasury yields spiking to 2% from 1.63% in about two weeks, and eventually reaching 3% a few months later.

In each of these prior rising U.S. Treasury yields episodes, the JPMorgan EMBI yield spread, an aggregate measure of the sovereign yield gap above U.S. Treasuries across the emerging markets, rose sharply (Figure 2). In 2018, the EMBI yield spread rose 153 basis points over a ten-month period, while after the election of President Trump, the EMBI yield spread rose 53 basis points in less than one week. However, emerging market assets came under the most stress during the 2013 Taper Tantrum. In the first two weeks following the Fed's tapering message, the EMBI spread rose 75 basis points, and within a month, rose 120 basis points. While the widening in the EMBI yield spread may have been greater in 2018, the speed at which the index rose during the Taper Tantrum was sharper and signaled just how much stress emerging markets came under.

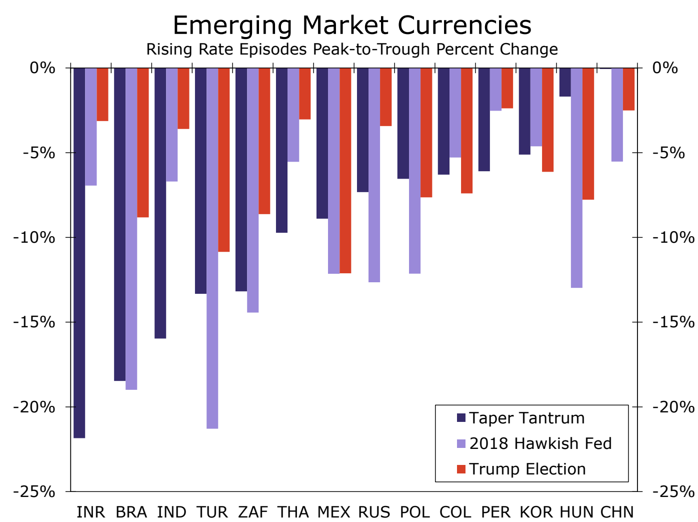
At the individual country level, the selloff during the 2013 Taper Tantrum also stands out as the episode where emerging market assets came under the most pressure. Broadly speaking, sovereign yields rose significantly across the emerging markets during the Taper Tantrum. Countries such as Turkey and Indonesia experienced a peak-to-trough rise of over 300 bps in their 10-year local currency denominated bonds, and except for Thailand, Korea and China, all countries in our analysis experienced a peak-to-trough rise in yields of at least 150 bps. The move in yields during 2018 was significant; however, despite a few idiosyncratic exceptions, EM sovereign debt did not come under as much pressure. We can make the same statement as it relates to the election of President Trump in 2016 as yields moved higher, although the selloff was much more contained (Figure 3). For the most part, emerging currencies also reacted strongly. Emerging market currencies came under pressure in each episode, and despite a few country specific developments in 2018 (Turkey, Brazil and South Africa) and 2016 (Mexico), broadly speaking, currency moves during the Taper Tantrum were the most severe (Figure 4).

Figure 3



Source: Bloomberg LP and Wells Fargo Securities

Figure 4



Source: Bloomberg LP and Wells Fargo Securities

But, Let's Taper the Tantrum Talk...for Now

While it is certainly helpful to examine past scenarios in order to assess future market reactions, we do not believe we are entering a new Taper Tantrum scenario at this time. To that point, there are some key differences between today and the Taper Tantrum that lead us to believe a prolonged selloff in emerging markets will not materialize as a result of rising U.S. Treasury yields. Most importantly, the Fed maintained a hawkish stance on monetary policy during the Taper Tantrum, which is a significant difference separating the current period from that prior episode. As mentioned, during the Taper Tantrum the Fed was actively signaling to markets that monetary policy would become less accommodative in the near future. Today, the Fed, and indeed other influential central banks, continue to suggest policy rates will be effectively at 0% for the foreseeable future. Asset purchase programs are also likely to remain in place for an extended period and arguably have some potential to be expanded rather than reduced as policymakers continue to indicate commitment to quantitative easing.

In that context, over the past few weeks Fed policymakers have consistently reinforced that they are not in a position to pare back accommodative monetary policy. As of now, we think central banks are still several quarters away from starting the process of moving away from easy monetary policy. To that point, the Fed first tapered asset purchases in 2013, more than four years after the Global Financial Crisis, and did not lift interest rates until 2015. Given the current slowdown in the global economy is a result of a health crisis rather than an economic imbalance, we believe central banks will remain cautious about tightening monetary policy until they are confident the virus is under control and respective economic recoveries will be uninterrupted by a renewed spread of COVID.

Eventually a Tapering Will Occur...Then What?

We are fairly confident the global economy will eventually recover from the COVID shock over time. Whether the recovery occurs earlier than we forecast, when we expect or even later, we believe a robust recovery will take place. Once the global economic recovery becomes more engrained, at some point, central banks will look to normalize monetary policy. As mentioned, we do not believe interest rate hikes or reduced asset purchases are likely from any major central bank in the near future; however, whenever accommodative monetary policy does get scaled back, it is likely a Taper Tantrum-like scenario could materialize. Whenever this scenario unfolds, we would expect emerging market asset prices, in particular sovereign debt and currencies, to come under stress. As of now, we do not think this scenario is imminent, and we remain optimistic on the prospects for emerging market assets at the current juncture.

Of course, there is a possibility we are in fact entering a new phase for the global economy—one where optimistic growth and inflation expectations are realized and central banks do look to remove accommodative monetary policy earlier than we expect. In this scenario, the eventual Taper Tantrum scenario would be brought forward, and as a result, emerging market bonds and currencies are likely to come under pressure sooner. While not our base case, should an "early" Taper Tantrum episode occur it raises the question: *How sensitive are emerging market sovereign bonds and currencies?* In an effort to provide guidance, we developed a sensitivity model to identify which countries could see sovereign bond yields rise the most and which countries could be somewhat isolated from market stress. We also use our model to compare today's yield sensitivities to the 2013 Taper Tantrum in an effort to identify countries that are more or less sensitive today than in 2013. In addition, we updated, and included our FX vulnerability indicator as a variable in our sovereign yield sensitivity model to identify which emerging market currencies could come under the most pressure, or could be somewhat insulated, in another Taper Tantrum scenario.

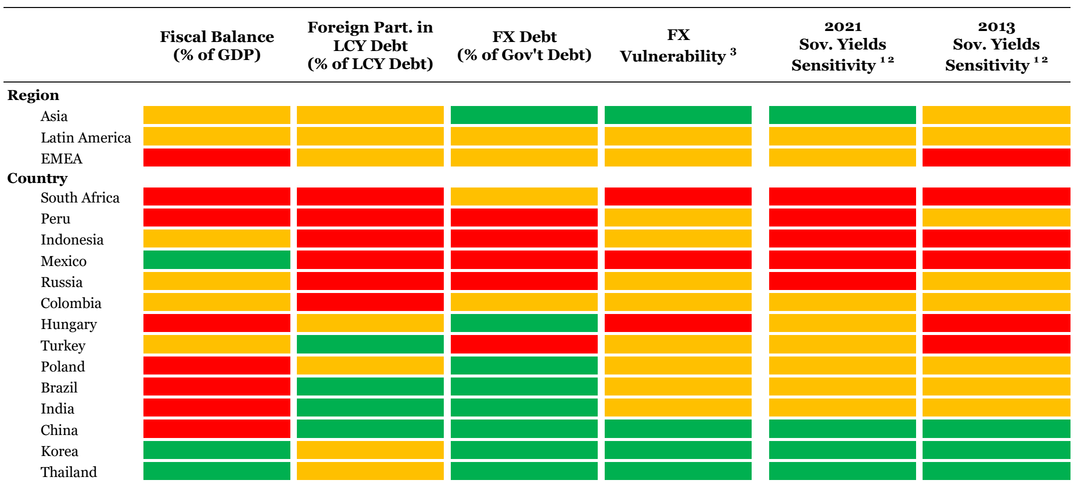
Before outlining the results of our model, it is worthwhile discussing the variables we included, why they are important, and our methodology for determining sensitivity. As far as variables, the first indicator we used is a government's budget balance as a percentage of GDP. In our view, the more in deficit a government's budget is, the more sensitive sovereign yields will be to a Taper Tantrum scenario. On the other hand, a budget surplus or merely a modest fiscal deficit represents less of a vulnerability.

Our second variable is the percentage of a sovereign's local currency denominated debt that is being held by foreign investors. In our view, foreign investors holding a significant amount of a country's local currency denominated debt is a vulnerability. In times of calm markets, foreign investor participation in debt markets can actually push sovereign yields lower; however, when volatility rises, as we would expect in another Taper Tantrum, foreign investors typically look to exit riskier positions. Holding debt of emerging market governments is relatively risky and the incentive to hold emerging market sovereign debt may dissipate, especially when yields swing back in favor of U.S. Treasuries. In addition, exposure to local currency adds an additional layer of risk that foreign investors may look to eliminate as emerging market currencies tend to underperform when volatility increases. The possibility of foreign investors selling out of local currency denominated debt is a vulnerability, and governments that rely on foreign investors could be most exposed.

Another important indicator we included is the share of government debt denominated in U.S. dollars as opposed to local currency. We believe a large percentage of sovereign debt denominated in hard currency represents another potential vulnerability. In times of elevated volatility, the U.S. dollar tends to strengthen and emerging market currencies typically depreciate. Given the likely selloff in local emerging market currencies, debt denominated in U.S. dollars becomes more expensive and more difficult to service. In the event of a Taper Tantrum-like scenario, financial markets would likely place pressure on countries with high levels of U.S. dollar denominated debt as ability to repay debt obligations would likely deteriorate.

The last variable we use in our model is our FX vulnerability indicator, which uses underlying economic fundamentals and political developments to gauge how sensitive a currency may be to a shock scenario. Currencies associated with weak fundamentals and relatively unstable politics tend to be the most sensitive and susceptible to larger deprecations, while currencies associated with more sound fundamentals and stable politics can be less vulnerable. Currency weakness can contribute to a spike in sovereign bond yields as market participants tend to reduce exposure to more vulnerable currencies in times of market stress. Our FX vulnerability indicator is not only useful to identify which sovereign bonds can come under significant stress in a Taper Tantrum scenario, but is also helpful in gauging how much a currency can depreciate in a risk-off scenario.

Where Do the Sensitivities Lie?



[1] Red suggests "High Sensitivity"; Orange suggests "Moderate Sensitivity"; Green suggests "Low Sensitivity"
[2] High sensitivity suggests sovereign yields could move >200 bps; Moderate sensitivity 100 - 200 bps; Low sensitivity 0 - 100 bps
[3] High sensitivity suggests currency depreciation of >20%; Moderate sensitivity 10% - 20%; Low sensitivity 0% - 10%

Source: IMF, IIF, Bloomberg LP and Wells Fargo Securities

For each variable mentioned, we established thresholds that we believe are significant in determining different levels of sensitivity. These thresholds help us identify which regions and countries have High, Moderate or Low sensitivity as it relates to each of the four indicators mentioned above. In addition, we use a scorecard approach to aggregate these variables into a 2021 overall level of sovereign yield sensitivity. We did the same exercise for each variable leading up to the 2013 Taper Tantrum episode and developed an overall 2013 sovereign yield sensitivity score as well. The scoring system is a bit complex, but in an effort to simplify, we adopted a color scheme to highlight High, Medium and Low sensitivities for each variable. Green represents "Low Sensitivity," Orange suggests "Moderate Sensitivity," while Red suggests "High Sensitivity." In addition, our overall sovereign yields sensitivity scores for 2021 and 2013 use the same color coding system to highlight sensitivities; however, we provide a numeric range associated with each color. As far as the overall sovereign yield sensitivity score, Green suggests government bond yields could move between 0–100 basis points, Orange 100–200 basis points and Red suggests the most pronounced move in yields, which we estimate as over 200 basis points.

Using our methodology, it appears as if the emerging markets as a whole are less sensitive to another Taper Tantrum in 2021 than they were in 2013. We determined this by assessing sensitivities at the regional level first. In 2021, Asia and EMEA are regions less sensitive than they were during the 2013 Taper Tantrum. Asia has moved to Green, the color associated with "Low Sensitivity," in the 2021 sovereign yields sensitivity column, an improvement from 2013 when Asia was Orange and classified as having "Moderate Sensitivity." In EMEA's case, the region moved to a "Moderate Sensitivity" classification (Orange) from the "High Sensitivity" (Red) category in 2013. Latin America maintained the same "Moderate Sensitivity" classification in 2021 as the region had in 2013. Given our methodology reveals two regions are better positioned in 2021 than they were in 2013, we believe emerging market debt as an asset class may not come under as much pressure today as they did during the 2013 Taper Tantrum.

At the country level, the results are noteworthy. Starting with countries labeled as Green in the "2021 Sovereign Yields Sensitivity" column, sovereign bond yields in Thailand, Korea and China would likely see the most muted reaction according to our model. Each of these countries score quite well in each of our variables, and despite an elevated fiscal deficit in China, each country maintains a fair degree of "Low Sensitivity." Our framework also identifies these countries as having a low degree of yields sensitivity in 2013 as well. To that point, yields in each of these countries experienced the most subdued move during the 2013 Taper Tantrum, rising less than 100 basis points each. Given our framework identifies these countries as still having limited yields sensitivity to another Taper Tantrum-like scenario, we expect a similar reaction in yields this time around and a rise of under 100 basis points in each country.

As far as countries our model identifies as highly sensitive in 2021, South Africa, Indonesia and Mexico maintain their status as having bond yields that could see a very sharp rise in a Taper Tantrum-type scenario. In 2013, yields spiked over 200 basis points in these countries, and we believe yields could experience a similar rise again. There are also a few countries where bond yields became more sensitive over time and have moved into the "High Sensitivity" bucket. Sovereign debt in Peru and Russia is now more sensitive than in 2013. In Peru's case, the fiscal balance has moved into a significant deficit, while the Peruvian sol has also become a more vulnerable currency. As for Russia, the government is now more dependent on foreign investors to invest in its local currency denominated debt. This added vulnerability makes Russian bond yields more sensitive going forward. During the 2013 Taper Tantrum, Peruvian bond yields rose 190 basis points, while Russian yields increased 165 basis points, in line with our estimates for "Moderate Sensitivity." Given each country's vulnerabilities have increased, we now believe yields in each country could spike over 200 basis points if a new Taper Tantrum scenario were to materialize.

Also in the 2021 sovereign yields sensitivity column, Hungary and Turkey flipped from "High Sensitivity" to "Moderate Sensitivity," a signal that yield increases could be more subdued in each country. In Hungary's case, the government has become less reliant on foreign investors in local bond markets and has also trimmed the percent of its debt denominated in U.S. dollars. As a result, yields could be less sensitive; however, Hungary's 10-year yield moved 150 basis points in 2013 despite being labeled as "High Sensitivity." This tells us yields could rise toward the lower end of our "Moderate Sensitivity" range, rising around only 100 basis points. Turkey has also flipped to "Moderate Sensitivity;" however, we are not fully convinced Turkish bond yields would be less sensitive in another Taper Tantrum-like scenario. Indicators have improved and suggest less vulnerability; however, those variables have improved for the wrong reasons. Following the 2018 Turkish lira currency crisis, foreign investors exited local currency debt positions significantly and have just started to re-enter the market. In addition, the lira has become a less vulnerable currency as a result of significant policy rate hikes to stem lira depreciation. In our view, markets are still very cautious toward Turkey, and sovereign debt would still likely come under pressure despite improved indicators. In 2013, Turkish yields rose almost 400 basis points. In our view, Turkish assets are still very vulnerable to a large selloff, and we believe yields would rise more than 200 basis points in another interest rate shock episode.

Finally, as it relates to potential currency depreciation, the same scoring system applies within the FX vulnerability column. As mentioned, we updated our FX vulnerability indicator and also provide a potential range of depreciation associated with each color in order to provide guidance on which currencies could come under the most or the least pressure. Green represents a potential currency selloff between 0%-10%, Orange a depreciation between 10%–20%, while Red suggests a devaluation of over 20%. What's interesting is the same countries where yields could rise the least (Thailand, Korea and China), could see their respective currencies come under the least amount of pressure as underlying economic fundamentals and politics are relatively sound. As far as highly vulnerable currencies, our model suggests the South African rand and Mexican peso could be in the cross hairs, two countries where sovereign yields could also rise significantly. In addition, the Hungarian forint could come under pressure and see a depreciation of over 20%. Our framework suggests most currencies fall into the "Moderately Sensitive" classification, indicating a potential currency selloff between 10% and 20%.

Similar to how yield sensitivities have changed over time, currency vulnerability has evolved as well. There are a few currencies worth highlighting where the evolution of FX vulnerability has been noteworthy since the 2013 Taper Tantrum. The Indian rupee is the currency where vulnerability conditions have changed the most. For 2013, our FX vulnerability model identified the rupee as the most vulnerable emerging market currency leading up to the Taper Tantrum. In fact, the rupee was the most vulnerable currency as it sold off 22% in 2013, the most of any currency in our analysis. Fast forward to 2021, however, and the rupee has shifted to a "Moderately Vulnerable" currency as underlying economic fundamentals have improved dramatically over the last decade or so. In that context, we would expect a much less significant selloff in the rupee today relative to the depreciation in 2013. On the other hand, the Mexican peso has become a more vulnerable currency, shifting from "Moderately Vulnerable" to "Highly Vulnerable" as underlying economic fundamentals in Mexico have deteriorated over time, while local politics have also worsened. During the 2013 Taper Tantrum episode, the peso depreciated 9%, a rather contained selloff. Given the deterioration in underlying fundamentals, we would expect a much larger selloff, possibly over 20%, should another Taper Tantrum-like scenario unfold.

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