Economics Group



Special Commentary

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Do Developing Economies Have a Debt "Problem"?

Executive Summary

External debt in the developing economies has risen noticeably over the past few years. It was an unsustainable buildup in external debt in the 1990s that led to a series of financial crises that swept through the developing world in 1997-98. Should we worry that the events of twenty years ago are about to reoccur?

In our view, the developing world is not yet on the cusp of a generalized financial crisis. Although the amount of external debt in the developing world has clearly increased over the past few years, so too has the ability of most of those economies to service their external debt obligations. That is not to say that individual economies, for example Ukraine and Venezuela, are not at risk. But a generalized financial crisis due to an unsustainable buildup of external debt in the developing world does not appear to be imminent. That said, a reassessment may be in order if the debt servicing ability of developing economies were to deteriorate in coming years.

Is It 1997 All Over Again?

In a report that we wrote a few years ago, we noted the rise in debt that was occurring in many developing economies at that time.¹ We concluded in that report that "we do not believe that a wave of financial crises in the developing world is just around the corner, but developments in these economies bear watching in coming years." Leverage in the developing world has increased even further in the intervening four years since we wrote that report. Therefore, we believe it is time to update our analysis to determine whether or not developing economies have a debt "problem" today.

We start our analysis in this first of two reports by looking at external debt, which is the debt owed to foreigners by a country's household, business and government sectors.² The outstanding amount of external debt in 21 large emerging market economies shot up from less than \$4 trillion in 2009 to more than \$6 trillion in 2014 (Figure 1).³ Although the outstanding debt stock has subsequently edged lower, most of that decline is attributable to China, where external debt dropped from nearly \$1 trillion in 2014 to about \$500 billion last year. Excluding China, the amount of external debt in our sample of countries remains near its 2014 peak.

Taking a longer view, the amount of outstanding external debt in developing economies clearly has trended higher over the past two decades. But many of those economies have also experienced rapid economic growth. Therefore, a more meaningful measure to analyze would be external debt

Leverage in the developing world has increased over the past few years.

Together we'll go far



 $^{^1}$ See "Are Developing Economies Heading for a Crash?" (October 28, 2013), which is available upon request.

² External debt includes liabilities owed to foreign creditors whether denominated in local currencies or foreign currencies (e.g., U.S. dollars, euros, etc.).

³ Data limitations prevent us from analyzing external debt in all developing economies. The 21 countries which comprise our sample include Argentina, Brazil, Chile, China, Colombia, the Czech Republic, Egypt, Hungary, India, Indonesia, Malaysia, Mexico, Nigeria, Poland, Russia, South Africa, South Korea, Thailand, Turkey, Ukraine, and Venezuela. These 21 countries account for roughly three-quarters of the external debt in the developing world.

as a percent of GDP. In that regard, the external debt-to-GDP ratio in our sample of 21 countries is currently near a three decade low (Figure 2). But again, China is an outlier. If we exclude China from our sample, then the ratio is actually higher today than it was in 1997 when an unsustainable build-up in debt led to a series of financial crises that swept through the developing world. At first glance, it would appear that many developing economies may be headed toward financial difficulties in the not-too-distant future.

Figure 1

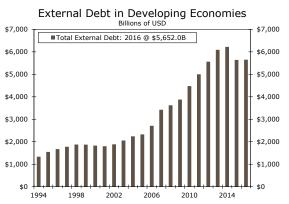
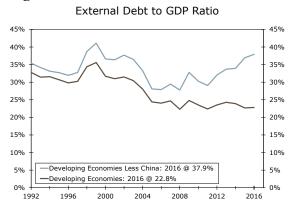


Figure 2



Source: Institute for International Finance, International Monetary Fund and Wells Fargo Securities

Ability to Service Debt Generally Stronger Today than in 1997

But there are some mitigating circumstances to keep in mind. Countries get into financial difficulties not so much because of the outstanding amount of debt *per se*, but rather because of their inability to adequately service that debt. In that regard, analysts often look at ratios of debt service as a percent of exports. Debt service is the amount of interest and amortization payments that a country needs to pay every year on its stock of external debt. A country's exports generate a stream of foreign exchange receipts that can be used to service its external debt. As a country's debt service ratio rises, its ability to adequately service its external debts declines, everything else equal.

As shown in Figure 3, the ratio of debt service payments-to-exports for the 21 economics in our sample stood at roughly 26 percent in 1997. Excluding China, the ratio was a bit higher at 30 percent. Strong growth in exports in developing economies in the decade or so following the 1997-98 financial crises caused the ratio to trend lower. The ratio has reversed course over the past few years due to the buildup in external debt and slow growth in exports. Nevertheless, the ratio today for the non-Chinese developing economies remains below its 1997 level. In other words, the ability of developing economies to service their external debt is better today than it was twenty years ago.

Furthermore, developing economies have deeper pockets today than they did in 1997. External debt obviously is a liability for developing economies. But they also have assets, namely foreign exchange (FX) reserves, which can be used to service the debt. In that regard, the FX reserves of the 21 economies in our sample mushroomed from \$500 billion in 1997 to roughly \$5.8 trillion at the end of 2016. True, much of this buildup in reserves occurred in China. But even if China is excluded, the total amount of FX reserves in the remaining economies stood at \$2.5 trillion at the end of last year. When expressed as a percent of external debt, FX reserves in the 20 non-Chinese developing economies in our sample have risen from 23 percent in 1997 to 48 percent today (Figure 4).

The ability of developing economies to service their external debt is better today than it was twenty years ago.

Figure 3 External Debt Service 45% 45% 40% 40% 35% 35% 30% 30% 25% 25% 20% 20% 15%

Developing Countries Less China: 2016 @ 23.3%

2004

-Developing Countries: 2016 @ 14.9%

2000

15%

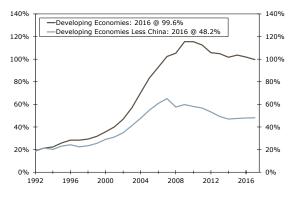
10%

5%

0%

1992

Figure 4 Reserves as a Percent of External Debt



Source: Institute for International Finance and Wells Fargo Securities

2012

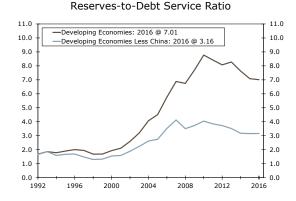
There is also a flow consideration to consider. That is, how much debt service could the stock of FX reserves support? In 1997, FX reserves in the 20 non-Chinese developing economics in our sample could finance about one year's worth of external debt service payments (Figure 5). Today, those economies have enough FX reserves to pay for 3 years of debt service payments. In short, the ability of the developing world to service its external debt is generally stronger today than it was at the onset of the so-called Asian financial crisis twenty years ago.

10%

5%

0%

Figure 5



Source: Institute for International Finance and Wells Fargo Securities

Are Some Countries Worse Off Than Others?

In sum, the developing world has taken on more external debt over the past few years. That said, developing economies are generally in a better shape to service that debt than they were twenty years ago. In short, a wave of financial crises sweeping through the developing world à la 1997-98 does not seem likely in the near term.

But are there individual economies which may be more vulnerable than others to financial difficulties stemming from excessive external debt? It is difficult to identify in an absolute sense which countries are vulnerable to a financial crisis. That is, it is difficult to assign specific probabilities of financial crises to individual economies. However, it may be still be insightful to rank economies vis-à-vis each other on their vulnerability to crisis relative to other economies.

In that regard, we rank ordered the 21 developing economies in our sample according to four variables that are associated with external debt servicing difficulties. For example, we rank order the economies by their external debt-to-GDP ratios. We give one "point" to the country with the

A wave of financial crises sweeping through the developing world à la 1997-98 does not seem likely in the near term.

highest external debt-to-GDP ratio, which would make it most vulnerable to financial crisis, everything else equal. We then assign "points" on an ascending basis to the other 20 economies based on the relative size of their external debt-to-GDP ratios. We follow the same methodology for the other three indicators (*i.e.*, the ratio of external debt service-to-exports, FX reserves as a percent of external debt, and the FX reserves-to-debt service ratio). We then add up the total "points," and declare that the economy with the fewest "points" has more vulnerability, in a relative sense, to external debt servicing difficulties than the other 20 economies in our sample. The results are shown in Table 1 in the appendix.

Ukraine and Venezuela appear to be most vulnerable to an external debt crisis. According to our methodology, Ukraine appears to be the country with the most vulnerability to an external debt crisis. At 130.5 percent, it has the highest external debt-to-GDP ratio among the 21 countries in our sample. It also has the highest ratio of external debt service-to-exports (0.87), the second lowest reserves-to-external debt ratio (14.1 percent), and the second lowest reserves-to-debt service ratio (0.6). Venezuela also appears to have high relative vulnerability. On the other hand, China appears to have the lowest vulnerability to external debt servicing difficulties among the nations we rank.

We should note that the rank ordering in Table 1 should not be interpreted too strictly. That is, our methodology is not precise enough to confidently declare that Colombia, which is ranked #10, necessarily has more vulnerability than Mexico, which is ranked #11. We believe that countries near the top of the table probably have more vulnerability to crisis than countries near the bottom. But a precise determination of vulnerability is really beyond the scope of our analysis.

Conclusion

In the years immediately following the series of financial crises in 1997-98, developing economies generally refrained, either willingly or unwillingly, to take on new external debt. In the past seven years, however, the outstanding amount of external debt in the some of the most important developing economies in the world has soared by \$1.8 trillion to reach a level of \$5.7 trillion. Should we be worried that the events of 1997-98, in which a series of financial crisis swept through the developing world, is about to happen again?

Our analysis leads us to believe that such a reoccurrence does not appear to be imminent. For starters, the ability of developing economies to service their external debt service payments from the stream of foreign exchange that their exports earn is generally better today than it was twenty years ago. Even if export growth were to weaken significantly, these economies could continue to service their external debt service payments via the war chests of FX reserves that many of them have accumulated over the past decade or so. Although we do not believe that a wave of financial crises in the developing world is imminent, we will continue to monitor debt dynamics in developing economies to determine whether a reassessment is eventually in order.

In this report, we have concentrated solely on external debt, which is the amount of obligations that a country's households, businesses and government owe to foreign creditors. However, external debt is only one facet of a country's overall debt profile. That is, the household, business and public sectors in a given country could have few obligations to foreign creditors but they could owe sizeable amounts to their country's own financial sector. In a forthcoming report, we will expand our analysis to include obligations owed to domestic creditors in developing economies.

APPENDIX

| Developing Country Vulnerability Ranking | | | | | | | | |
|--|---------------------------|---------------|--------------|---------------|-------------|----------|--|--|
| | | | External | | | | | |
| | | External | Debt | Reserves | Reserves | | | |
| | | Debt | Service to | as Percent | to Debt | | | |
| | | (Percent of | Exports | of External | Service | Total | | |
| Ranking | Country | GDP) | Ratio | Debt | Ratio | Points | | |
| Tuming | Country | 130.5% | 0.87 | 14.1% | 0.6 | 1 omto | | |
| 1 | Ukraine | (1) | (1) | (2) | (2) | 6 | | |
| _ | Venezuela | 50.2% | 0.49 | 2.1% | 0.2 | | | |
| 2 | | (7) | (3) | (1) | (1) | 12 | | |
| 3 | Turkey | 47.7% | 0.38 | 21.4% | 1.2 | 22 | | |
| 3 | | (9) | (6) | (4) | (3) | | | |
| 4 | Poland | 70.2% | 0.39 | 34.3% | 1.6 | 24 | | |
| | | (4) | (5) | (11) | (4) | -4 | | |
| 5 | Chile | 62.6% (6) | 0.24 (10) | 22.6% | 1.9 | 27 | | |
| | Argentina | 34.2% | | (6) 18.2% | (5) 2.1 | <u> </u> | | |
| 6 | | (15) | 0.33 (7) | (3) | (6) | 31 | | |
| | | 89.0% | 0.10 | 21.6% | 2.3 | 31 | | |
| 7 | Hungary | (2) | (17) | (5) | (7) | | | |
| 0 | N. 1 ' | 71.6% | 0.18 | 50.5% | 2.7 | | | |
| 8 | Malaysia | (3) | (12) | (13) | (9) | 37 | | |
| 9 | Brazil | 37.9% | 0.58 | 50.6% | 3.5 | 20 | | |
| 9 | DIALII | (12) | (2) | (14) | (11) | 39 | | |
| 10 | Colombia Mexico | 47.9% | 0.32 | 31.6% | 4.6 | 39 | | |
| | | (8) | (8) | (8) | (15) | 0, | | |
| 11 | | 45.8% (10) | 0.20 (11) | 34.9% (12) | 2.4 (8) | 41 | | |
| | Czech Republic | 65.8% | 0.16 | 63.6% | 3.3 | | | |
| 12 | | (5) | (14) | (15) | (10) | 44 | | |
| | . | 18.9% | 0.26 | 28.8% | 3.9 | | | |
| 13 | Egypt | (19) | (9) | (7) | (12) | 47 | | |
| 1.4 | Russia | 36.8% | 0.40 | 69.2% | 4.0 | 47 | | |
| 14 | | (14) | (4) | (16) | (13) | 47 | | |
| 15 | Indonesia South Africa | 37.7% | 0.17 | 32.6% | 4.3 | 49 | | |
| | | (13) | (13) | (9) | (14) | 77 | | |
| 16 | | 43.2% (11) | 0.12 (16) | 32.9% (10) | 4.8 (16) | 53 | | |
| | India | 20.9% | 0.15 | 73.0% | 10.2 | | | |
| 17 | | (18) | (15) | (18) | (18) | 69 | | |
| | Korea | 27.9% | 0.08 | 95.1% | 7.2 | | | |
| 18 | | (17) | (18) | (19) | (17) | 71 | | |
| 10 | Thailand | 34.0% | 0.07 | 142.9% | 15.8 | 7.4 | | |
| 19 | | (16) | (19) | (20) | (19) | 74 | | |
| 20 | Nigeria | 8.0% | 0.04 | 71.5% | 61.6 | 77 | | |
| 20 | 1130114 | (20) | (20) | (17) | (20) | // | | |
| 21 | China | 4.5% | 0.03 | 708.7% | 73.6 | 84 | | |
| |] | (21) | (21) | (21) | (21) | · | | |

Source: Institute for International Finance, IMF, Bank for International Settlements and Wells Fargo Securities

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