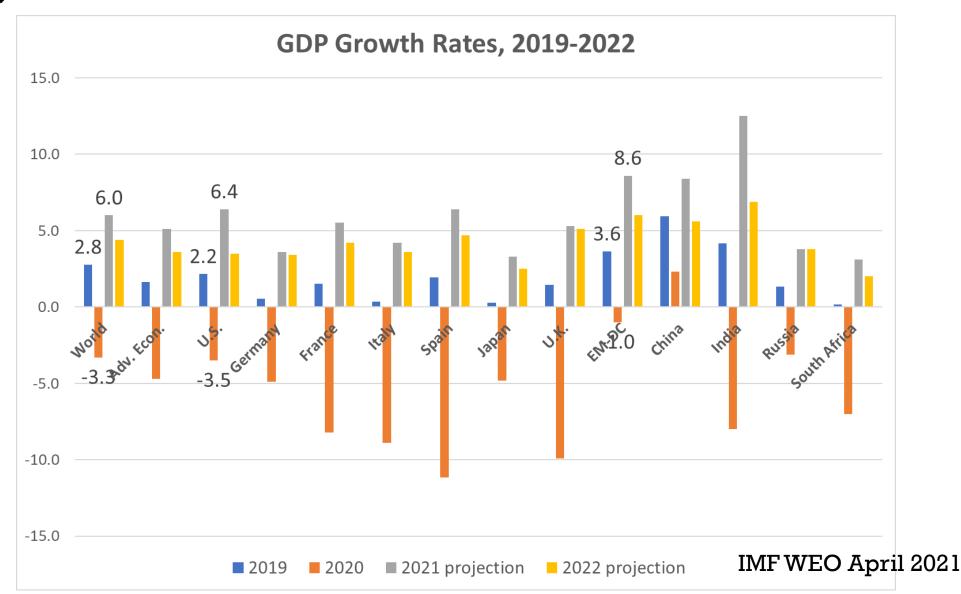


THE PANDEMIC WREAKED HAVOC OF THE GLOBAL ECONOMY IN 2020

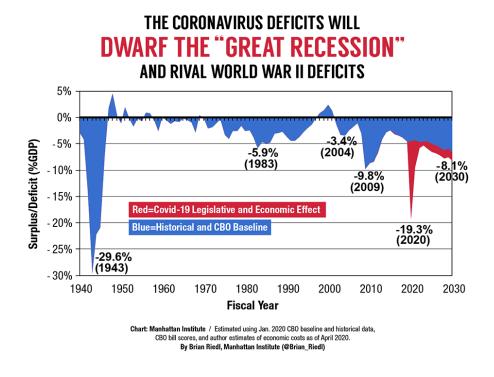




COUNTRIES MOBILIZED FISCAL RESOURCES TO STIMULATE THE ECONOMIES

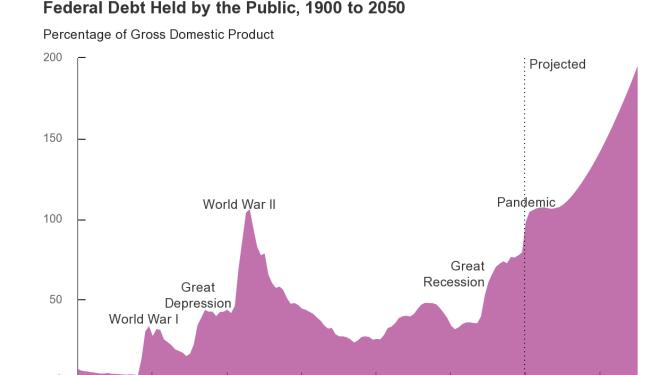
- □ The U.S. has implemented a series of stimulus packages
 - 1. \$2 trillion in March 2020; \$900 billion in Dec 2020
 - 2. \$1.9 trillion in Mar. 2021; Another \$2 trillion for infrastructure(?)

Figure 2: U.S. budget deficit



Source: Manhattan Institute

Figure 3b: U.S. national debt projection, September 2020.



Source: Congressional Budget Office report, September 2020

1960

1980

2000

2020

2040

1940

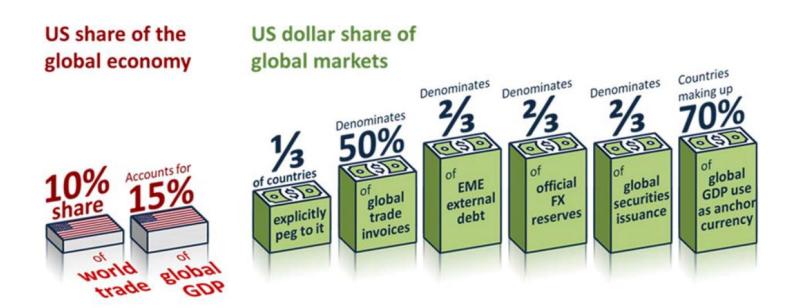
1920

1900

IS THE US DEBT SUSTAINABLE?

USD remains the anchor of the global financial system – so far no credible competitor to the USD has emerged

Figure 1: The US dollar continues to be as important today as it was during the Bretton Woods era



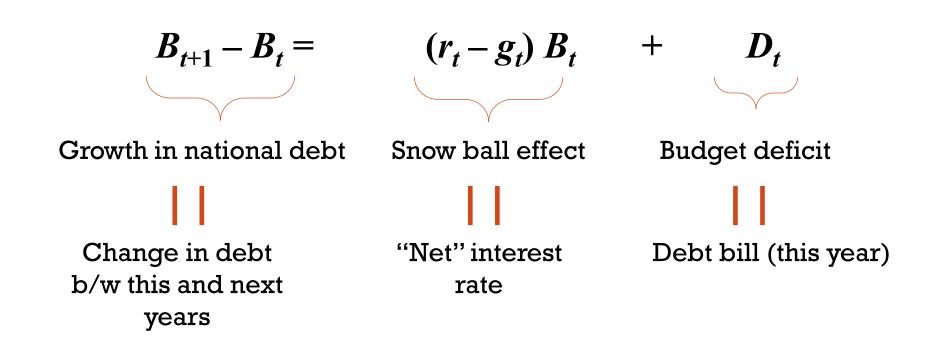


We contrast two divergent exit strategies of the U.S. from post COVID-19 debt-overhang, and analyze their implications on Emerging Markets and global stability.

- I. the U.S. aiming at returning to the 2019, pre-COVID mode of loose fiscal policy and accommodating monetary policy.
- The benefits of this strategy include faster economic growth as long as the snowball effect the difference between r g, the interest rate on public debt and the growth rate is negative. However, this strategy entail a growing tail risk of a deeper crisis triggered by a future reversal of r g, inducing a deeper future sudden stop crises and instability of Emerging Markets.
- We illustrate this scenario by evaluating Emerging Markets' lost growth during the 1980s, triggered by the large reversal of the U.S. snowball effect during 1974-1984.
- II. The second strategy entails a two-pronged approach. First, turning U.S. fiscal priorities from fighting COVID's medical and economic challenges, towards investment in social, medical and physical infrastructures. Second, with a lag, promoting a gradual fiscal adjustment aiming at reaching overtime primary-surpluses and debt resilience.
- We illustrate this by reviewing the exit strategy of the U.S. post-WWII, and its repercussions on the 'Phoenix Emergence' of W. Europe an from WWII destruction.
- The contrast between the two exit strategies suggests that the two-pronged approach is akin to an upfront investment in greater long-term global stability. We also empirically show how lowering the cost of serving public debt has been associated with higher real output growth.

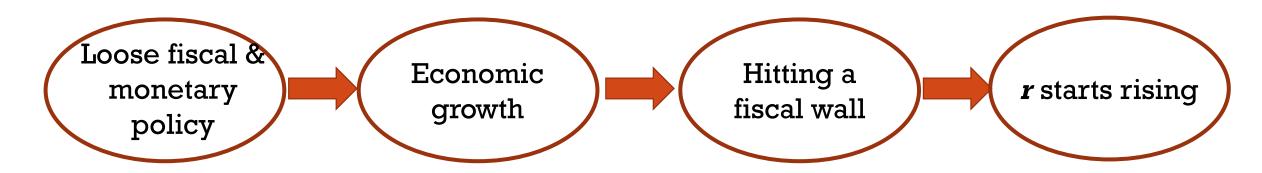
We look at how the debt sustainability of the U.S. (which essentially determines that of EMEs) depends upon the "snowball effect"

- □ "Snowball effect" = $\mathbf{r} \mathbf{g}$
 - **r** = the interest rate paid to service government debt
 - g = the potential growth rate of the economy
- \square Look at how different countries experienced different ($\mathbf{r} \mathbf{g}$)
- □ What is the impact of the cost of servicing debt on the economic growth



THE FUTURE OF THE SUSTAINABILITY CAN DEPEND UPON THE POLICY THE US TAKES IN THE POST-COVID ERA

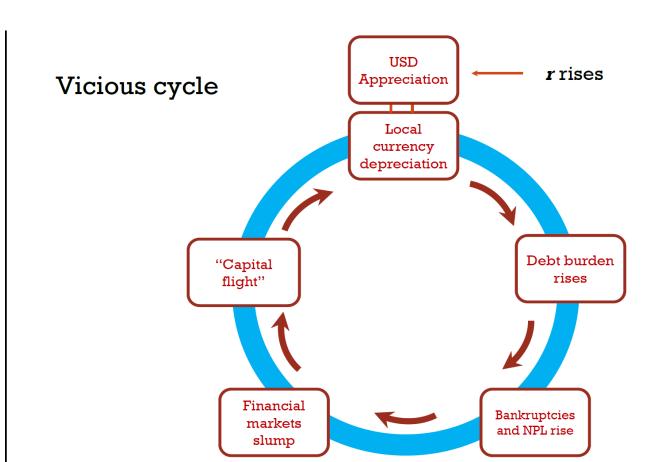
- 1. 'kick the can down the road'
- Return to 2017-19 policies: reducing COVID-19-related expenses; imposing no new taxes, accommodating monetary policy; and a much lager FED's balance sheet





A POSSIBILITY OF FREEFALL CRISIS: FRAGILITY LEADS TO MULTIPLE EQUILIBRIA WITH SELF-FULFILLING DEBT CRISES

- □ Latin American debt crisis in the 1980s; Euro debt crisis in the 2010s
- Even if the U.S. will avoid a full-blown crisis, it can impact other countries, esp. EMEs, as EMEs remains heavily indebted in USD
- USD appreciation →
- →local currency depreciation
- → debt burden rises in local currency



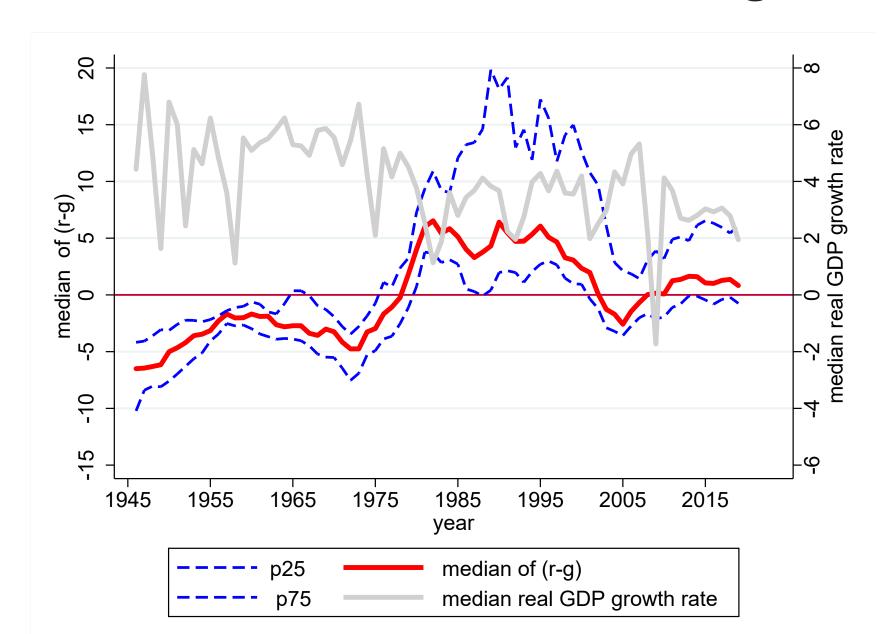
THE FUTURE OF THE SUSTAINABILITY CAN DEPEND UPON THE POLICY THE US TAKES IN THE POST-COVID ERA

- 2. Fiscal restructuring
 - ➤ Retrench from expenditures oriented towards COVID-related challenges, and move towards expenses with a high social payoff (e.g., upgrading K-12 education, investing in medical infrastructures, general infrastructure, etc.) → Raises potential output growth
 - > Increase taxes
- This may lead to primary surplus. The cost of servicing debt falls

$$- r \downarrow - g \uparrow < 0$$



Interest rate (r) – Potential economic growth (g)



DOES A RISE IN THE COST OF SERVICING DEBT HAVE A NEGATIVE IMPACT ON OUTPUT GROWTH?

Regression model

$$y_{it}^{Local} = \alpha + \beta_{1}\Delta(r_{t-1} - g_{t-1}^{USD}) \times \left(GrossDebt/Y\right)_{t-1}^{USD} +$$

$$+\beta_{2}\Delta(r_{t-2} - g_{t-2}^{USD}) \times \left(GrossDebt/Y\right)_{t-2}^{USD} +$$

$$+\beta_{3}\Delta(r_{t-3} - g_{t-3}^{USD}) \times \left(GrossDebt/Y\right)_{t-3}^{USD} +$$

$$+X'_{t}\Gamma + \varepsilon_{it}.$$

Is β_i negative? We apply this equation to 57 AEs and EMEs for the period 1961 – 2019.



FINDINGS

$$y_{it}^{Local} = \alpha + \beta_{1} \Delta (r_{t-1} - g_{t-1}^{USD}) \times (GrossDebt/_{Y})_{t-1}^{USD} +$$

$$+ \beta_{2} \Delta (r_{t-2} - g_{t-2}^{USD}) \times (GrossDebt/_{Y})_{t-2}^{USD} +$$

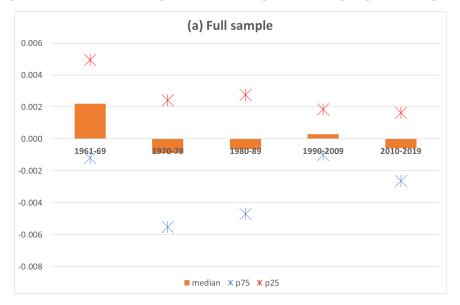
$$+ \beta_{3} \Delta (r_{t-3} - g_{t-3}^{USD}) \times (GrossDebt/_{Y})_{t-3}^{USD} +$$

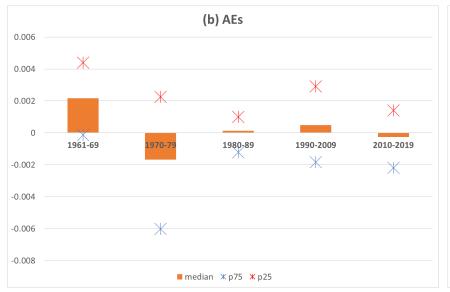
$$+ X'_{t} \Gamma + \varepsilon_{it}$$

- $\square \beta_1$, β_2 , β_3 < 0: Higher cost of servicing gross public debt dampens the per capita real output growth
- □ In 1961-69, $\Delta(r_{t-1} g_{t-1}^{USD})$ <0 led to high economic growth, esp. **Europe** and **Japan**
- □ In the 1980s, $\Delta(r_{t-1} g_{t-1}^{USD}) > 0$ dampened economic growth among EMEs and caused the "Lost Decade" in Latin America



FIGURE 9 (A) – (C): ACTUAL CONTRIBUTIONS OF THE COST OF SERVICING GROSS DEBT TO ANNUAL OUTPUT GROWTH RATES





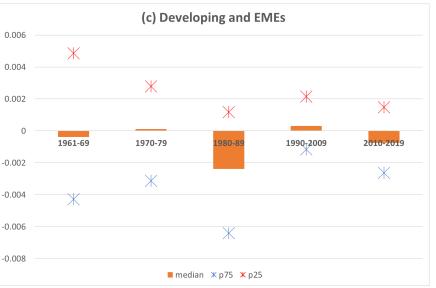
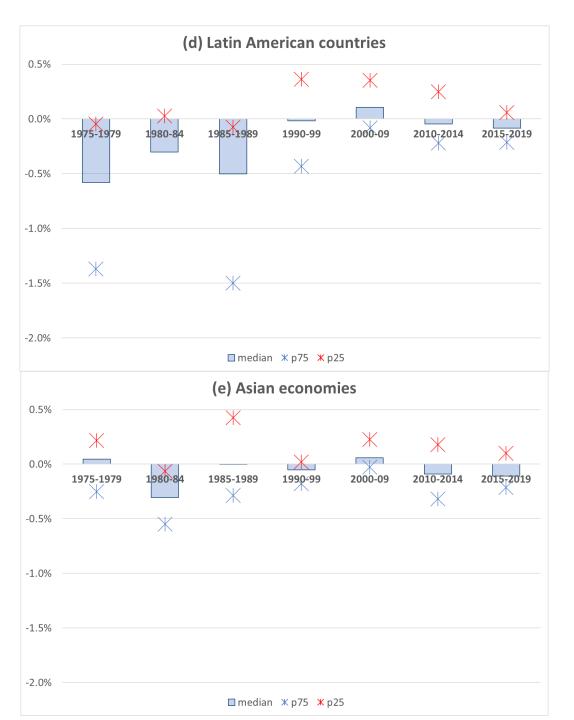




FIGURE 9 (D) – (E): ACTUAL CONTRIBUTIONS OF THE COST OF SERVICING GROSS DEBT TO ANNUAL OUTPUT GROWTH RATES FOR THE MEDIAN, 75 AND 25 PERCENTILE FOR LATAM AND ASIAN COUNTRIES





Conclusions

- Many countries experienced negative growth in 2020
- □ Countries, esp. Advanced economies, implemented large-scale stimulus packages to prevent their economies from free-falling
- Many countries have experienced large-sized budget deficit
- Among AEs, the size of national debt will soon approach that as of the end of WWII'
- EMEs had had their debt levels rising even before the COVID crisis



Conclusions

- Two possible policies the U.S. could take in the post-COVID era
- 1. Same kind of policies as in 2017-19 = lax monetary and expansionary fiscal policies. It may bring about short-term buoyancy to the U.S. economy, but entails the risk of a future global crisis.
 - e.g. Latin American debt crisis
- 2. Fiscal restructuring = It can move towards expenses with a high social payoff (e.g., upgrading K-12 education, investing in medical infrastructures, etc.) and increase taxes e.g., resurgence of European and Japanese economies in the 1950s-1960s



Conclusions

- Many EMEs still cannot borrow in their own currencies. They borrow in USD, which makes their economies vulnerable to U.S. policies
- When the U.S. has low interest rate policy in place, that would let global money flow to EMEs with high yields, making EMEs highly indebted
- When the U.S. raises its interest rate, it would make EMEs' currencies depreciate, which will make debt burden larger and cause capital flight. Financial instability may arise
- ☐ The costs of servicing debt (gross, domestic, or external) dampens per capita real output growth



THAUK YOU!

