Post-Mortem Research Notes For the First Half of the Year 2020

Author: Eliézer Ndinga, Research Associate at 21Shares.

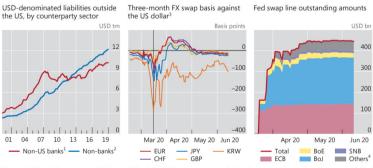
INTRODUCTION

The COVID19 pandemic has led authorities around the globe to take unprecedented measures to contain the spread of the virus to save lives while attempting to maintain a functional economy. Although containment measures have differed across the world, on a global scale, the shut down of activities in early March 2020 involving large crowds or human contacts have resulted in the largest swing in economic activity in living memory. Many economies have contracted by 25-40% in a single quarter and have experienced double-digit levels of unemployment two months in the crisis.

Amid <u>surging</u> coronavirus caseloads as economies have started to re-open, mostly in early May, various countries and US states have begun imposing a rollback of their reopening plans. In the future, historians might consider the health crisis as a defining moment of the 21st century. This report provides a post-mortem analysis of the macroeconomic patterns that unfolded in the first half of 2020 and gives a forward-looking deep dive for the rest of the year.

A GLOBAL PANIC STARTED AS THE VIRUS SPREAD IN EUROPE Given their forward-looking nature, traditional financial markets reacted faster than the real economy. The beginnings of lockdowns in late January in China received scant attention in the world press and as such, markets barely moved. When the virus was christened COVID-19 by the WHO and surprisingly started to hit the wires in Europe in February 2020, a flight to safety turned into a scramble for cash as investors fulfilled margin calls following the early signs of a market downturn. Equity markets buckled, volatilities and correlations spiked while bond yields bottomed akin to the 1929 stock market crash. For example, the S&P 500 plummeted 34% from February 19 to March 23. Additionally, panic drove global investors to withdraw more than \$80 billion in emerging market economies.

THIS CRISIS IS STRENGTHENING THE US DOLLAR HEGEMONY The Federal Reserve has had to act in its time-honored role of lender of last resort by supplying needed liquidity in offshore US-dollar borrowing, notably via FX swaps, to ease dollar funding shortages. Many non-US financial institutions and firms outside the United States cannot raise USD-denominated funds directly in US money markets, as such, they rely on FX swaps. According to the Bank for International Settlements (BIS), US dollar liabilities of non-US financial institutions experienced a 194% growth in almost 20 years from about \$3.5 trillion in 2000 to around \$10.3 trillion by the end of 2019.



The vertical line in the centre panel indicates 15 March 2020 (the announcement of the enhancement of swap lines between the Federal

¹ Non-US banks' US dollar-denominated liabilities excluding those booked by offices located in the United States. Excludes inter-office positions but includes liabilities to other (unaffiliated) banks. Positions reported by banks located in China and Russia start to be included as of Q4 2015. ² Sum across US dollar-denominated international debt securities, cross-border bank loans and bank loans to non-banks located outside the US; this residency-based classification may include US non-banks outside the US. For details, see BIS, BIS global liquidity indicators: methodology, April 2019, Section 3.1. ³ Defined as the spread between three-month US dollar Libor and three-month FX swap-implied US dollar facts. ⁴ Please refer to the table in Box IIB for a list of central banks with swap lines at the Fed.

Sources: Federal Reserve Bank of New York; Bloomberg; BIS global liquidity indicators; BIS locational banking statistics (by nationality); BIS calculations.

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research@21shares.com 21shares.com/research THIS CRISIS IS STRENGTHENING THE US DOLLAR HEGEMONY Additionally, the Fed reactivated many currency <u>swap lines</u> that had expired since the Great Financial Crisis, specifically for 14 central banks from both advanced and emerging economies and particularly utilized by the Bank of Japan and the European Central Bank. This allowed central banks to borrow US dollars directly from the Fed using their holdings of US Treasuries as collateral. It is safe to say, so far, this health crisis has amplified the US dollar hegemony as the world's dominant currency.

While inflation has always been a concern when it comes to quantitative easing measures implemented by central banks, it is important to recognize the reliance of USD-denominated assets by financial institutions outside of the United States. As such the FX swaps metric is a quintessential indicator for USD demand from non-US banks.

A WIDER REALITY GAP BETWEEN FINANCIAL MARKETS AND REAL ECONOMIES Central banks such as the Federal Reserve have 4 main tools at their disposal:

- 1. Short-term interest rates
- 2. Lending to financial institutions
- 3. Outright asset purchases and sales
- 4. Regulatory adjustments affecting financial markets

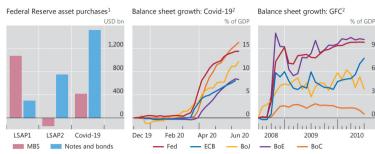
First, given the unprecedented consequences triggered by the current crisis, central banks deployed their full arsenal of tools especially as firms and households bore the brunt of the fallout. The Federal Reserve has cut interest rates in an attempt to reduce the cost of borrowing for the entire financial system. Other countries such as the UK, Switzerland, and Sweden set up new lending facilities targeted at SMEs.

Secondly, as previously mentioned, the Fed alleviated USD-specific pressures through foreign exchange swaps to non-US banks. In addition, the Fed launched in early April 2020 the Paycheck Protection Program Lending Facility (PPPLF) to lend money to commercial banks, which they, in turn, loan money to small and medium-sized enterprises through the \$659 billion Paycheck Protection Program (PPP). Other examples in Switzerland and Germany, governments have fully guaranteed SME loans to counter financing difficulties faced by small businesses due to their relative lack of external financing options when compared to large firms.

Thirdly, the Federal Reserve alongside other central banks such as the Bank of Japan and the European Central bank (ECB) have engaged in purchases of <u>individual corporate bonds</u> alongside <u>corporate bonds ETF</u>. For example, the Fed added \$1.59B in individual corporate bonds such as Apple and AT&T as well as snapped up \$7.87 billion in 16 corporate bonds ETFs in partnership with the world's largest asset manager, <u>BlackRock</u>.

And lastly, central banks around the world softened capital and short-term liquidity regulations and encouraged banks to make full use of existing buffers beyond regulatory minima. As an example, the Fed's reserve requirements were <u>eliminated</u> (ie, cut to zero percent) for all depository institutions in late March 2020.

A WIDER REALITY GAP BETWEEN FINANCIAL MARKETS AND REAL ECONOMIES



¹ Difference in weekly holdings between the start and the end of the selected periods: LSAP1 = November 2008–March 2010; LSAP2 = November 2010-June 2011; Covid-19 = January 2020-latest available data. MBS = mortgage-backed securities. ² Cumulative changes in total balance sheet size since December 2019 (centre panel, weekly) and since June 2008 (right-hand panel, monthly). As a percentage of four-quarter moving sum of quarterly GDP, for April 2020 onwards, sum of Q2 2019–Q1 2020 GDP.

Sources: Bank of Canada: Bank of England: Board of Governors of the Federal Reserve System: Datastream: national data: BIS calculations.

By early June, market conditions, especially US equities, had improved to the point questions were raised about whether they had become entirely disconnected from what was happening in the real economy. The market rally was driven by some genuine news about monetary and fiscal policies reminiscent of the actions taken to counter the Great Financial Crisis (GFC). In addition, the narrative around regrets of not buying the bottom in 2009 or in late 2018 drove opportunistic buyers to go back in, starting with hedge fund traders and mutual fund managers. FOMO (fear of missing out) alongside government actions have eventually helped market participants in traditional financial markets gain confidence, leading to all-time record highs for the NASDAQ 100 index, which rose by 51% since the market crash in March 2020.

The decoupling of traditional financial markets from the alarming consequences of the COVID19 pandemic in real economies has significantly widened especially in the US. This health crisis is causing activity to collapse exceptionally and unemployment to soar, triggering one of the worst job crises since the Great Depression. In fact, massive layoffs and wage cuts have reached levels unseen before with over 40 million workers claiming unemployment benefits between March and June. The International Labour Organization (ILO) estimated that, in the absence of income support measures, the earnings of informal workers in the first month of the crisis declined by up to 60% globally. 69% in Europe and Central Asia, and dropped more than 80% in Latin America and Africa — resulting in a pushing back of poverty alleviation efforts. This revenue fallout is concurrent with the projected decline in remittances to fall by about 20% in 2020 according to BIS.

Americans who've permanently lost their job rose in June despite overall unemployment falling



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A WIDER REALITY GAP BETWEEN FINANCIAL MARKETS AND REAL ECONOMIES As of July 13, with an average of 8,000 new daily cases, the state of California announced a statewide closing of indoor operations. Similarly, to stem a new outbreak originating from nursing homes and taxi rides, Hong Kong has banned gatherings of more than four people. This pattern is important to note as consequences of containment measures such as reductions in consumer demand will likely make the path to inflation unlikely in the near term. Nonetheless, asset price inflation is undeniably reflected in financial markets with the current market rally amid surging new coronavirus cases, especially in some US states.

COVID-19 Cases as of July 14,2020

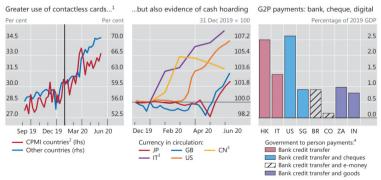


Source: New York Times

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In times of crisis, the need for a sense of urgency has historically led to a fundamental change in people's behavior. Job losses and uncertainty have put a strain on consumer spending and have led to a record amount in households' saving rates. For example, in the UK, deposits increased by a record of £25.6 billion.

As public concerns about viral transmission fro cash have risen, this health crisis has <u>accelerated</u> the trend towards digital payments such as contactless payments. The companies in the private sector such as <u>CashApp</u> played an important role to facilitate direct transfers to households and firms as part of the \$2 trillion Coronavirus Aid, Relief, and Economic Security (<u>CARES</u>) Act.



The black vertical line in the left-hand panel indicates 30 January 2020, when the World Health Organisation (WHO) declared the Covid-19 outbreak a "public health emergency of international concern".

¹ Share of contactless in all card-present transactions by a global card network. In many countries, transaction limits for contactless payments were raised in Q2 2020. ² Excludes MX and TR due to data availability. ³ Monthly series. ⁴ For IN, IT and US, government-to-person (G2P) payments include expanded unemployment benefits. For IN, this includes distribution of grain and cooking gas.

 $Sources: Federal \,Reserve \,Bank \,of \,St \,Louis, \,FRED; \,IMF, \,\textit{World Economic Outlook}; \,\underline{IMF}; \,Datastream; \,\underline{KPMG}; \,a \,global \,card \,network; \,BIS \,calculations. \,Alternative \,Alt$

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In a similar vein, a quite different picture starts to emerge as investors have begun to seek a digital version of gold, especially in light of the biggest gold-counterfeiting <u>scandal</u> in modern history where roughly 4% of China's gold reserve turned out to be gold-plated copper. According to a <u>recent</u> survey conducted by Fidelity, 6 out of 10 investors believe digital assets such as Bitcoin have a place in portfolios, while 91% of the surveyed institutional investors plan to make allocations to Bitcoin within five years.

FORWARD-LOOKING VIEW FOR THE REST OF THE YEAR 2020 With new coronavirus clusters emerging around the world raising uncertainty over the pandemic evolution, disinflationary pressures are likely to prevail for some time especially in some of the hardest-hit sectors sensitive to social-distancing rules. A <u>V-shaped</u> recovery seems out of reach as higher precautionary savings to build buffers and repay debt could continue to dampen expenditures on the consumer demand side partly due to lingering <u>worries</u> of infection. This would put further pressure on both monetary and fiscal policy buffers especially in scenarios where insolvencies and capital misallocation prevail. Additionally, heightened uncertainty could lead to a somewhat difficult exercise for governments to distinguish insolvent but viable firms as pre-existing business models might no longer be defensible over the long run. Early discoveries of capital misallocation by governments have started to emerge with PPP <u>fraud</u> charges in the US or <u>fraudulent</u> filings by companies to benefit from the furlough scheme in France.

In preparation against worst-case scenarios, central banks such as the Federal Reserve and the ECB are already in discussion of new coronavirus relief packages accounting for additional amounts worth trillions of dollars. It is safe to say that this could lead to debts overhang in various economies, especially when insolvencies will start to kick in. The question remains whether central banks and financial institutions will make capital allocation adjustments and shift resources towards the more promising sectors and firms. Only time will tell whether the Federal Reserve's and other central banks' intervention will prove successful and at 21Shares, we will closely follow what the future holds on all fronts.