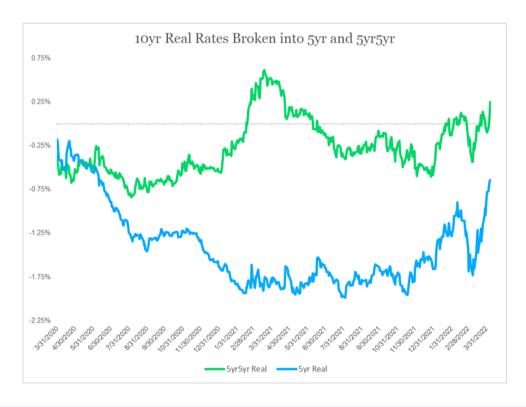
HAWKS CROWDING THE SKY

Will Q2 be the one when financial markets get the message? Central bankers are firmly embarked on tightening, and there is little they will let stand in their way.

The tragic war in Ukraine led the Federal Reserve to pull its punches in March, raising rates by 25 basis points rather than 50. The war is dragging on, but the strength in the American economy – not to mention the likelihood of another shocking number for headline inflation next week – makes 50-basis point increases most likely now. The hit to growth from the war will be worse in Europe. The inflation vs. growth dilemma is thus harder for the European Central Bank (ECB). But the ECB has just one formal goal – price stability. Its credibility will be in jeopardy if it doesn't react soon to last month's record high inflation in the eurozone.





Two events helped to upset US bond markets this week: the release of the minutes from the Federal Reserve's March meeting and a hawkish speech from Governor Lael Brainard, who was formerly viewed as a reliable dove. The message from both was clear: fighting inflation is now at the top of the Fed's agenda. That will mean a faster timetable for both interest rate increases and quantitative tightening. For many observers, including former Fed and other economic officials, the clarity of purpose was overdue and may still be too late to deliver the hoped for soft landing. More generally, investors must consider how much pain is likely before central bankers can ease up. Falling asset prices will not stop the Fed tightening, unless a systemic breakdown occurs – which seems unlikely. The only likely brake on Fed action would be a sharper than anticipated slowdown in the real economy and a rise in unemployment. Good luck – which has been in short supply – as well as good judgment will be needed for inflation to subside.

Ever since the idea of the Greenspan put gained credence, investors have wondered if the Fed steers monetary policy with markets in mind. There are two answers to that: yes and no. The "no" part is more important. The Fed's focus is on its inflation and output goals – not on the stock market or other asset markets. Confusion arises from two factors.

First, monetary policy makers look at financial market developments as one guide for how its policies may affect the real economy. Bond prices can indicate rising – or falling – inflation expectations. Rising – or falling – mortgage rates will impact real estate markets and household wealth, a key channel for monetary policy transmission. And sustained changes in equity prices also impact wealth and therefore spending.

Second, the Fed also worries about financial stability. Shocks that spread through the financial system, as during the Global Financial Crisis, carry dangers for the real economy. A breakdown in the so-called plumbing of the financial system is very risky. When such a breakdown has threatened in recent decades, the Federal Reserve has stepped in – whether in the 1987 stock market crash, when Fed Chair Alan Greenspan famously opened liquidity taps beyond the banking sector, or at the outset of the pandemic in 2020 when Treasury markets appeared to seize up. These actions have underpinned asset markets. But that has been a bug, not a feature, of central bank actions. It could well be that the tightening of financial conditions that the Fed now wants to engineer will hurt asset prices. But that will be a side-effect, not the purpose, of the tightening.

How did we get here?

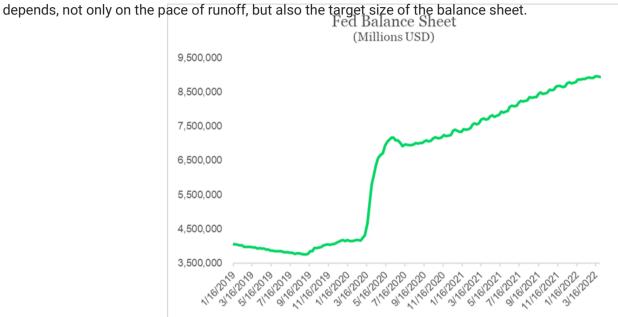
The jury is still out on whether the past year of unpleasant inflation surprises marks a regime shift – back to the 1970s – or just an interlude that will be followed by a return to low interest rates. Former IMF Chief Economist Olivier Blanchard points to a fascinating chart from Yale Economic Historian Paul Schmelzing that shows a secular decline in real interest rates over the past seven centuries, since merchants in Venice obtained credit from bankers. He argues that financial market developments make credit less risky and therefore bring down costs.

A more worrisome take comes from the head of the Bank for International Settlements (BIS) – the central bankers' central bank. BIS General Manager Agustin Carstens – former Finance Minister and Central Bank Governor in Mexico laid out reasons for concern that today's high price rises may herald a new era of less well anchored inflation. The title of his speech tells the bottom line, "The Return of Inflation".



Balance sheet blues

In 2019 the Fed's balance sheet averaged just below \$4 trillion. As of the end of March 2022, it has grown to a hefty \$8.9 trillion. FOMC meeting minutes released April 6th indicate the Fed is leaning towards a runoff of the balance sheet capped at \$95 billion per month after an initial ramp up period. The total impact of this form of quantitative tightening



No targets were given in the minutes, but two immediate possibilities come to mind: first to return the balance sheet to the size it was pre-pandemic, or about \$4 trillion. A less aggressive stance could be to bring it back to post-March 2020 levels, at least as a first step. This would leave the balance sheet at approximately \$6 trillion, which is also equivalent to one of the few tangible estimates of what the Fed considers a neutral balance sheet provided by Fed Governor Christopher Waller.

There are several studies that have attempted to equate the impact of quantitative easing to a reduction in the Fed Funds Rate (FFR). These generally point to a \$100 billion of tightening to be equivalent to a 4 to 8-basis point increase in the FFR. Now that we have a target and estimated impact, we can calculate a range of additional estimated tightening to be delivered via balance sheet run-off, which is summarized in the table below.

Tanget Balance Sheet Size	Est. Equivalent Rise in FFR (bps) per \$100 billion QT				
Target Balance Sheet Size	4bps	5bps	6bps	7bps	8bps
\$6 trn Balance Sheet	117	147	176	206	235
\$4 trn Balance Sheet	197	247	296	346	395

The overall impact varies widely depending on target size and realized impact. Assuming the Fed will not want to move too drastically all at once, a \$6 trillion target and a 6-basis point impact – right in the middle – would provide an additional ~1.75% of tightening, in addition to the actual rate hikes delivered. Assuming that runoff begins in May 2022 and takes a three-month ramp period, then the target should be reached by December 2024. The median Dot from the latest Summary of Economic Projections sits at 2.75% for December 2024, or 2.5% higher than the current rate. As such, QT plus rate hikes could deliver over 4% of total tightening.



Markets React...Sort of

The renewed focus on inflation numbers and monetary tightening was undoubtedly top of mind for investors this week, yet the equity market continues to hold up relatively well. Despite uncertainty and economic headwinds, the S&P 500 has lost just 0.7% so far in April and less than 6% year-to-date. Europe's STOXX 600 and Japan's Nikkei 225 are not far behind with each down close to 7% so far this year.

Compared to the total market, technology and other growth stocks have suffered the brunt of the pain, with the Nasdaq Composite at a 2% loss in April to date and 11% loss since the start of the year. Unprofitable growth companies with little to no solid cash flows have been the most prominent losers, but more recently homebuilders, transportation, and some other deep cyclicals have been strongly impacted by rising interest rates and recession fears.

To some extent, relative strength across the big defensive tech stalwarts has masked much larger weaknesses elsewhere across the market. In addition, capital rotation out of bonds is providing ongoing support for equities more broadly – especially with little to no significant changes in asset allocation by the largest institutional investors. An added factor has been retail support with smaller retail investors remarkably less bearish than even institutional investors. On the other hand, active equity funds have de-risked at a stronger clip and reduced duration. Goldman Sachs reported seeing selling from hedge funds for five of the past six weeks while over that same period equity mutual funds and ETFs saw \$46 billion of inflows. The strategy of "buying the dip" has been promptly well-rewarded going all the way back to the Great Financial Crisis. However, the inflationary backdrop and central banks' growing urgency to respond makes the current situation immensely different. There remains further room for capitulation should economic conditions worsen.

Earnings season begins next week and will play a large role in establishing market direction over the next quarter. Q1 earnings will likely come out ahead of Street expectations, but investors will be wary of future guidance from management and companies as they digest results. Investors will need to listen closely for indications by companies on how dynamics including wages, labor shortages, slowing demand, and rising costs affect plans for capital expenditures, reinvestment, and growth to assess how the rest of the year is expected to play out for markets.



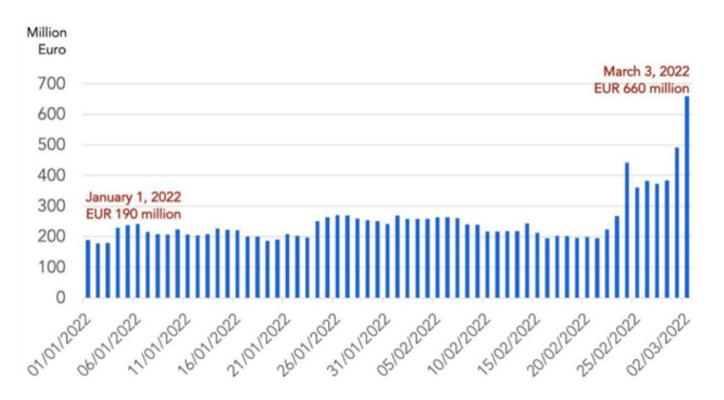
Observations and Takeaways for Investors

Sanctions: are they enough?

The brutality of Russia's assault on Ukraine became clearer this week, ironically because of the failure of President Vladimir Putin's initial military plan. Russian forces were forced to retreat from the suburbs around Ukraine's capital city, Kyiv, abandoning plans to take the city and overthrow the government of Ukrainian President Volodymyr Zelensky. The horror left behind in Bucha and other villages and suburbs briefly controlled by the Russian army was devastating. It prompted words of outrage and some additional sanctions from the US and, most likely, Europe. But these are far from enough to stop the war.

Leaving aside Putin's personal motivations and his power inside Russia – which polls show has only grown since the invasion – there is simple economics. Russia can rely on its strength as an energy producer to fund its war, as laid out here by Elina Ribakova. The bulk of that funding still comes from Europe. As long as Russia continues to export commodities to Europe, it is earning upwards of €600 million every day from EU nations, just from natural gas alone. This compares to Europe's total promised military aid to Ukraine of some €1 billion. There are large efforts by the US and Europe to bring in new technology to increase short term energy efficiency measures in homes and businesses.

Evolution of daily value of EU's gas imports from Russia since Jan 1, 2022



Source: Bruegel.org



The scenes of destruction and massacre from Bucha prompted some in Europe to call for an end to imports of Russian gas, in addition to the planned – and relatively painless – ban on imports of coal. So far, the biggest importer of Russian gas, Germany, has proved unwilling to take the economic hit this would imply. Rising prices in inflation-averse Germany and the slowdown likely to come in any event, as trade and business ties with Ukraine and Russia are shattered, will not help the popular mood. New Chancellor Olaf Scholtz took the surprising – and courageous – step early on to cancel the Nordstream 2 pipeline that his predecessor Angela Merkel had supported to pump more gas from Russia directly to Germany. But more international pressure may be needed to push him further.

Climate change: it's now or never

The UN's Intergovernmental Panel on Climate Change (IPCC) published a comprehensive report this week outlining the progress in mitigating climate change – and what must be done to curb emissions globally and achieve the long-term targets in the Paris Agreement. Authored by over 270 scientists across 65 countries, Mitigation of Climate Change can be summarized in one word: "urgency."

First, (some) good news. Over the past decade, average annual greenhouse gas (GHG) emissions were at their highest levels in recorded human history; however, the rate of growth has decelerated. The contributing factors: sustained decreases of up to 85% in the costs of wind and solar energy – alongside the accelerated deployment of renewable energy, improvements in battery technology, a broader range of policies mandating energy efficiency, and reduced rates of deforestation.

But it's not nearly enough. The report warns that without both immediate and dramatic emissions reductions across all sectors, limiting global warming to 1.5°C is beyond reach – leading to devastating consequences. UN Secretary-General António Guterres pleaded with governments and corporations to move beyond "a litany of broken climate promises" and break their dependence on fossil fuels.

According to the IPCC, there are options across all sectors to cut carbon emissions by more than half by 2030; however, financing for projects is three to six times below what is necessary – despite sufficient global capital and liquidity to close the investment gap. The IPCC argues that governments, multinational organizations, and the private sector can coordinate more closely to combat climate change.

The Great Resignation – maybe not so special?

A much-remarked upon feature of today's hot labor market has been the record number of workers quitting their jobs. This has come alongside another pandemic-related phenomenon: workers leaving the labor force, and staying on the sidelines, despite the number of jobs now available. Older workers and those – mostly women – with child and elder care responsibilities have indeed been unusually reluctant to re-enter the workforce even as demand, and wages, have picked up.

But new research from the San Francisco Fed suggests that the quits rate may not be so different from what has happened before in fast recoveries – it's just that we have not experienced many such periods in the two decades since the total quits rate has been measured. Today's strong rebound is concentrated on demand for younger and less-educated workers. The Fed researchers find that there were waves of job quits in manufacturing, where demand for these workers has been concentrated, in all fast recoveries since World War II. Today's high quits rate may suggest a healthy appetite among younger workers to seek better job opportunities in a favorable labor market, rather than a post-pandemic desire to shift the work-life balance.



Yes, wages are rising - but CEOs are doing even better

One positive result of the strength in labor markets has been a rise in wages at the lower end of the scale, as RockCreek noted last week. But no need to shed tears for those at the top – they have done even better. More than a third of US CEOs received a pay increase of at least 25%, as the median pay for US chief executives rose to \$14.2 million last year – up from \$13.4 million the year before (which was then a record). With executive pay records being shattered yet again, it's clear that the debate about how much typical workers make vs. CEO compensation won't go away anytime soon.

Hate to remind, but Covid lives on

In addition to the outbreak of infections in China, Europe is suffering an unmistakable rise in Covid cases – and more than a dozen US states are reporting case increases in the last two weeks. Some famous names are reporting infection – from ECB President Christine Lagarde to many attendees at last weekend's DC elite and, it seems, super-spreader Gridiron dinner, including Commerce Secretary Gina Raimondo, House Speaker Nancy Pelosi, Attorney General Merrick Garland and others. Georgetown University and Johns Hopkins University have reintroduced a mask mandate, and travelers to the US must still show a negative test just before arrival.

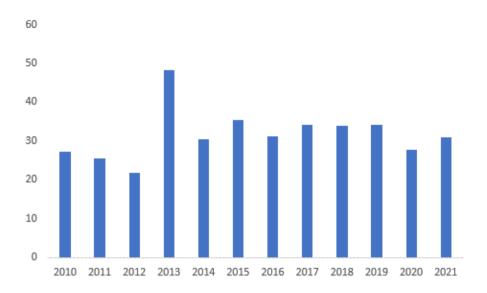
China's Covid clampdown - Mexico's moment

After bouncing back over the last month, Chinese equities gave way this week as investors digested news coming out of Shanghai on the city's shambolic handling of the latest COVID outbreak. Local social media is rife with desperate family members excoriating local authorities over their draconian, and potentially ineffective, lockdown measures. This is the type of social discontent Beijing is typically quite allergic to, so it is somewhat surprising that 1) measures to address people's concerns have yet to be taken, and 2) social media platforms have not been heavily censored. We can only speculate that what is happening in Shanghai reflects broader political tensions in the capital.

What we do know is that this threat to social harmony is happening in the context of an economy that is sputtering and a geopolitical alignment that threatens China's trade with the West. China's trade with Russia pales in comparison with the US and the EU – any overt support for Mr. Putin's plans will risk antagonizing already delicate bilateral relations. But it is the former that investors should be most worried about in the short term – the relative lack of stimulus (hampered by legacy credit problems) and growing supply chain problems could weigh on markets despite promises made by the State Council chaired by Premier Li Keqiang.

Multinational companies are not waiting to see where the chips may fall. After a pause tied to COVID lockdowns in the US and Canada, Mexico is once again seen as a promising alternative to China when it comes to securing supply chain stability. The gridlock currently affecting ports in California and the Panama Canal is also creating opportunities for the country. For instance, the \$1 billion Tehuantepec isthmus logistics corridor project, which will link the Atlantic and Pacific oceans, includes the rehabilitation of a 300 km railway line, the expansion of two ports, new highways, pipelines, and telecommunications infrastructure. After falling precipitously in 2020, FDI flows into the country have picked up, albeit slowly. This compares to China's drop in FDI flows in 2021.

Mexico's FDI Inflows - \$ Billions



Source: Banco de México



Source: China National Bureau of Statistics

Domestically in Mexico, there remain seemingly intractable issues, not least of which is drug trade related violence, political corruption, and an administration not seen as pro-business. Inflation, particularly food inflation is also steadily becoming an issue. It is perhaps telling that global businesses seem to be factoring these risks into their decision making and choosing Mexico, at least on the margin, over China.

RockCreek Update

In observance of Passover and Good Friday, there will be no RockCreek Weekly Letter next week. We wish a joyous occasion to all who are celebrating.

Team RockCreek

For updates, please follow us on <u>Twitter</u> and <u>LinkedIn</u>