Making Sense of Inflation, Fed Tightening, and Geopolitics

October 2022 – Explorations

Market Summary

The Fed is attempting to knock down inflation – and there are signs that it is beginning to work – but the market is anxious about (1) the Fed's ability to beat inflation while (2) not creating a hard landing recession and (3) while not knocking the rest of the globe into recession as well, especially given the strong dollar. It is very important to note that the market is pricing in that anxiety. That means if the market is baseline correct on its views, then it is priced in. But if the market is too bearish, meaning inflation begins to fall and not too much damage has been done locally or globally through tightening, then there will be a market rebound.

Short term, the market will be volatile and potentially a bit scary. However, the market is a leading indicator, and it is very hard to attempt to time it one way or another. For example, this summer, the S&P 500 increased 20% and the 10-year treasury yields dropped from 3.5% to 2.5% (a positive event) as investors expected inflation to recede. Hindsight allows us to know that it was a false rally.

Will the next rally be real or just another head fake? How and when would we know for certain?

Events transpiring over the last couple of weeks in Europe, including moves in the UK which were a material contributor to the recent global decline, illustrate the impossible position Europe is in given much higher energy costs relative to the US, coupled with an older demographic that does not lend as readily to growth. It is the reason we believe America is well positioned versus the rest of the world.

Ultimately, inflation is driving the market right now. There are many signs of softening, but headline numbers continue to be resilient. If inflation starts dropping without too much damage inflicted on the economy, the market should react well. Given that, let's tackle the topic of inflation.

Inflation ingredients:
Massive government spending + supply chain disruption + consumer and worker behavioral shifts (thanks Covid) + energy crisis (thanks Russia)

Inflation combating ingredients:
Fed tightening policies (increase interest rates + balance sheet runoff + (indirectly) strong dollar) + receding Covid ripples (supply chain, consumer trends)

A piping hot, locally made baguette filled with roast chicken and topped with a single sliced tomato (will let the readers add preferred condiments) is estimated to take over a cup of fuel to produce. The tomato, which tends to be grown in a greenhouse and covers the most miles to consumption, is by far the most expensive ingredient in our sandwich. Energy is a primary cost input when comparison shopping in your supermarket aisles:[1]

- Baguette: 2 tablespoons (tbsp) of fuel
- ½ chicken (1 lb.): 11 tbsp
- Medium tomato: 5 tbsp

These measurements, from Vaclav Smil's *How the World Really Works: A Scientist's Guide to our Past, Present, and Future*., aim to define the science behind how we got here and where we're going. Directly and indirectly, energy has been a material input in inflation.

Inflation is affecting food prices (and the market – we will get to that). I love food. This is no good. We live in houses surrounded by devices that allow us to get boxes containing anything the heart desires delivered to

[1] Government subsidies are, as well, but that's a conversation for another time…

our doorstep, frequently the same or next day. Americans have as much light, heat, and air conditioning as we want – always. ***It is easy to forget that everything in this world needs energy because it is so incredibly abundant and used so efficiently.***

While inflation is identified as the driver of recent market movements, the real question is: what is driving inflation and what may reasonably happen next, both short term and long term?

Inflation

The inflation back story is known but important to summarize for context. Covid was a massively deflationary event. Governments around the world flushed the system with cash. Consumers used this cash to stay home out of fear of catching Covid as well as to purchase goods to entertain and comfort themselves. Services were out of the question! So, we all needed Amazon to ship everything to our house. Immediately.

The problem was and continues to be, that it is hard to turn off and then on production, project future demand in a disrupted world, and deal with an inconsistent workforce due to Covid, government mandates (e.g.., China's rolling shutdowns), and government bailouts.

Now there is a lot more to this story but let's pause for a moment and understand the waves and ripples still coming our way due to the events highlighted above:

As of early August, there are still over 4 million people not working in the US due to Covid related reasons – either sick, caring for someone sick, or scared of getting or spreading Covid.[2] The employment participation rate has still not caught up to its pre-pandemic levels, which were historically low to begin with.[3] This is one large cohort sitting on the sidelines that could change the math and close the gap on unfilled employee demand. While many of us view or act like Covid is over, it is not for some small segment of the population. We believe this is a ripple and will normalize over the coming months.

Another ripple is the way companies had to navigate unchartered territory in meeting uncertain consumer demands. US companies had become quite adept in projecting near term product demands and maintaining ultra-low levels of inventory given the fluidity of the global supply chain. As an example, Nike just announced a 44% surge in inventory, plunging the stock.[4] Management blamed this primarily on havoc from the supply chain – earlier in the year many products were delayed and more recently items are actually coming in earlier than planned.

The story continues with the uneven response by the world to Covid. For all the criticisms one may place on the US, we developed the gold standard in Covid vaccines, increased our medical procedures to provide expanded Covid care, and now have medicines to boot. It has allowed the US to confidently reopen for business. China is a different story. It does not seem like they have confidence in their vaccine or capability to deal with a large sick population. So "Zero Covid" policies continue. Think of it as that "two week" period in the beginning of Covid where we were stuck at home, over and over – materially affecting productivity, and the issues affecting the global supply chain.

To further complicate matters, there are some longer-term macro concerns with China. China is politically going the wrong direction from an American viewpoint.[5] China also has terrible demographics and potentially real sensitivities to climate change

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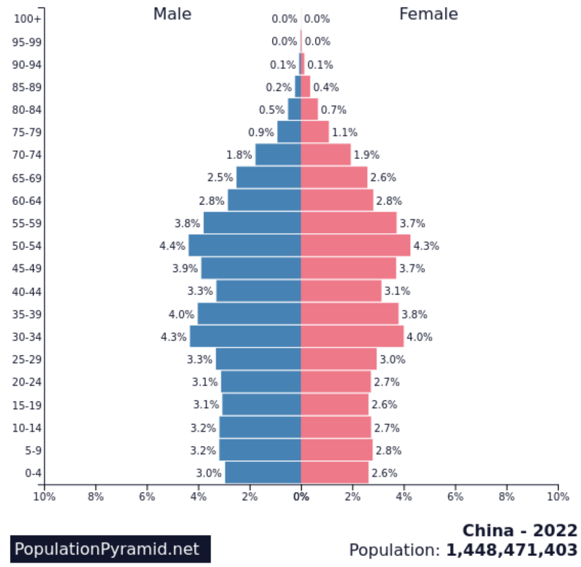
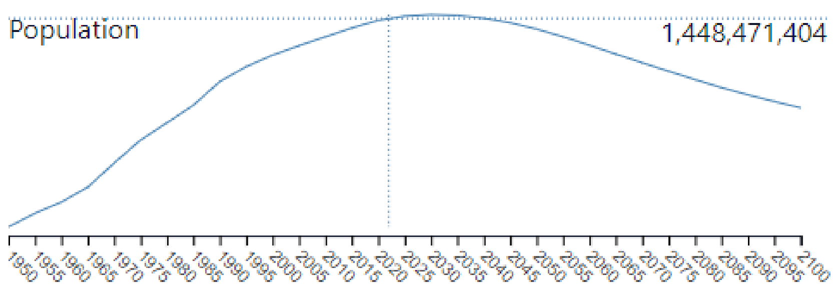
[2] US Census Bureau Household Pulse Survey delivered via Natixis' excellent macro updates.
[3] As of August, we are 1% below levels seen immediately prior to Covid affecting the workplace.
[4] Nike Shares Tumble After It Reports 44% Surge in Inventories - WSJ - https://www.wsj.com/articles/nike-first-quarter-2023-earnings-11664469418
[5] Or perhaps we are just deciding not to overlook issues that always existed with China in return for cheap, efficient labor.

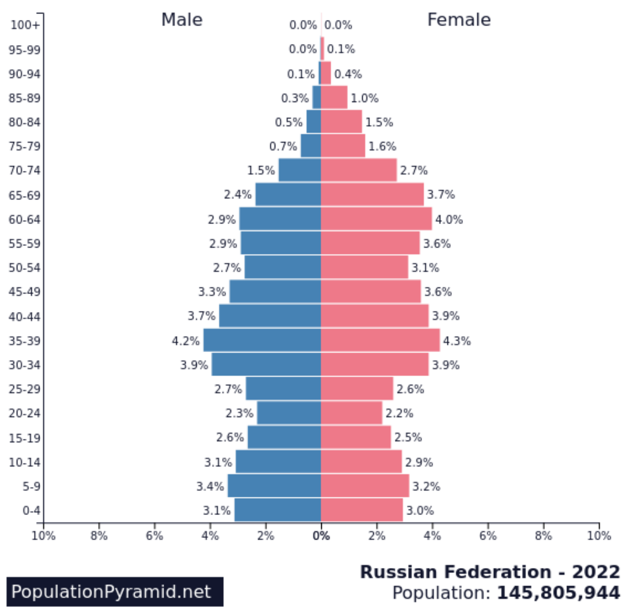
which has changed many economists' views of their ability to ever surpass the US in GDP,[6] despite their vastly larger population and size and claimed GDP growth rate over the last few decades.

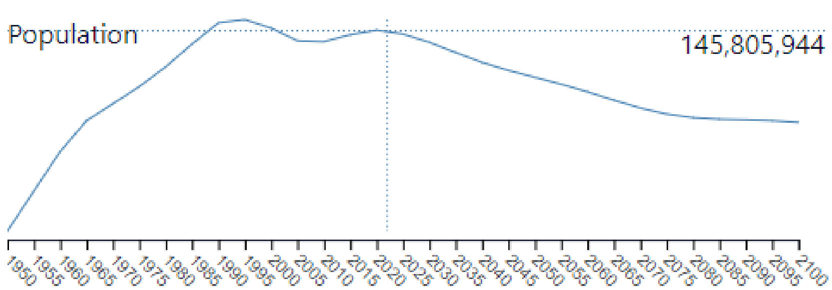
The population of China is both aging and declining as seen below. [7]





The population of Russia looks even more concerning. [8]





[6] Yet another example of something presented as a certainty years ago that may simply not come to pass. No one has a crystal ball.
[7] China population charts https://www.populationpyramid.net/china/2022/
[8] Russia population charts https://www.populationpyramid.net/russian-federation/2022/

Companies that have historically relied on China for manufacturing are finding alternative solutions. A good indicator from a supply chain thought leader would be Apple, which is run by a supply chain guy, Tim Cook.[9] Apple indirectly employs way more people in China[10] than in America. Apple also seems to be moving as fast as they can from China. As noted in a recent Market Commentary, the Airpod is now being manufactured in Vietnam. The iPhone 14 is now being manufactured in India.[11] This is going to be a wave.

This wave is occurring due to the cracks China has shown in its ability to produce due to rolling Covid quarantines and the increasingly negative view of China from the Western world. Some really long-term operators may even be concerned about their demographics.

For the last 80 years the geopolitical landscape was, relative to history, incredibly calm. Efficiency trumped risk. So what if every widget[12] used by the world is created in one single town in China? If most of the emerging world's wheat is grown in Ukraine? If the majority of the world's semiconductors are made in Taiwan, an island the size of Maryland, that is 100 miles away from China, a country slightly larger than the entire US?

The current world order where there are no potential perceived risks in concentrating all manufacturing in one small geographic area will change. It will benefit other countries to the detriment of China. The US will benefit as more manufacturing comes onto our shores. Automation and robotics will most likely occur more quickly. Our belief is that long term, the consumer will benefit from increased country competition and fewer country-specific risks.

We already have quite the story. Once in a century pandemic, an uneven global response, resulting supply chain issues, and quick changing consumer preferences. That is quite enough. And then Russia attacks Ukraine. And this is where energy (and food) comes into the picture.

Energy disruption is a wave. A bellicose Russia is a wave.[13] This past week two significant events took place in Europe[14] – one negative and one positive. It seems like Russia may have sabotaged Nord Stream, an underwater pipeline between Russia and Germany. There are two pipes, the second never yet used. The other pipe had not been in use lately and Europe claims it will not be used in the near future. A new pipe, the Baltic Pipe, a natural gas pipeline from Norway to Poland, just opened this very weekend. Initially envisioned in the 90s and started in 2018, it will bring energy to Central Europe. Genius! Many speculate that the sabotaged Nord Stream timing was not coincidental. The Russian's made it clear that underwater piping are easy targets – a bluff? A negotiation point in future Russia-Europe conversations?

So, the West will buy no energy from Russia, but Russia is making more money on energy then prior to the war.[15] That means energy from Russia is being used, but there is a massive disruption in delivery location and general markets efficiency spiking the price. Countries like India and China are purchasing more energy at most likely nicely discounted prices while Europe is scrambling to buy elsewhere at premiums. Natural gas in particular is really hard to deliver. It is one of the reasons there is a global crude price yet local natural gas prices.

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9 Tim Cook: Supply chain guru behind Apple growth | Supply Chain Digital

10 We could not remember where we first learned this, but Apple probably employs over 1 million people in China – interestingly, we believe Foxconn is running India supply chain operations.

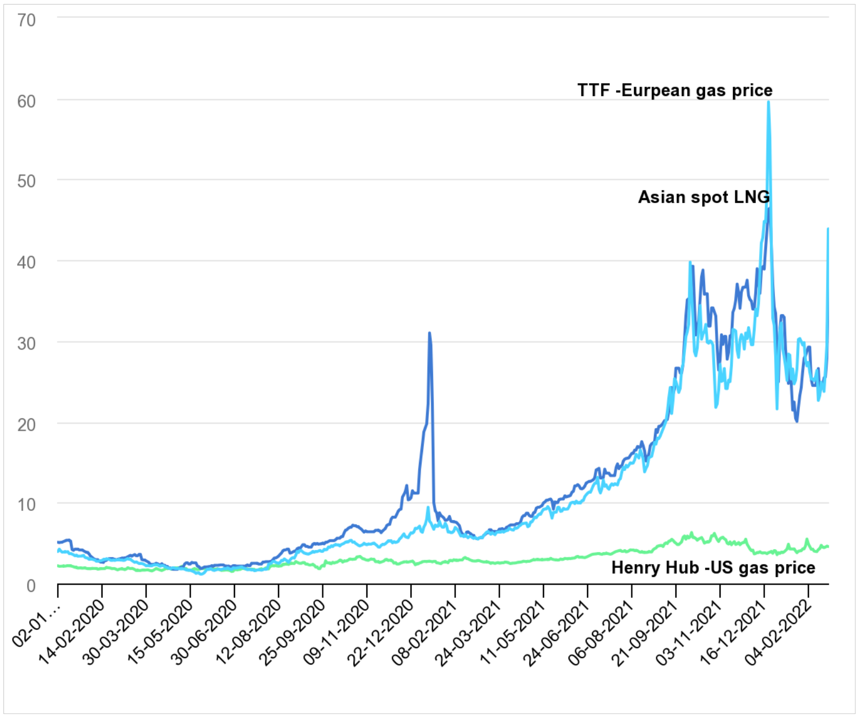
11 Apple begins manufacturing the iPhone 14 in India - The Verge

12 Pick your product…

13 Though they arguably have always been bellicose, the Ukraine gambit was just a bet that seems to be going very wrong for a dictator that has gotten away with smaller aggressive moves for the last 20 years.

14 https://www.nytimes.com/2022/10/01/business/baltic-pipe-nord-stream.html?smid=nytcore-ios-share&referringSource=articleShare

15 https://www.reuters.com/business/energy/exclusive-russia-forecasts-export-gas-price-will-more-than-double-2022-2022-08-17/



[16]

Both India and China purchase energy and arms from Russia. Russia is a neighbor and there are tensions between the two countries (China and India). Given the lackluster military performance of Russia and the shifting of manufacturing to India, might they become closer to the West?

The Inflation Response

The Federal reserve is responsible for maintaining full employment and for keeping us in a tight range of company growth – which means controlling inflation. After spending over a decade fighting *deflation*, they are now increasing interest rates at the fastest pace in decades to combat *inflation*.

Every time there was cause to believe that inflation would right itself, another world event occurred. China continued rolling lockdowns. Then Russia attacked. So the Fed took action. And nothing happens in a day, but it is important to appreciate the general inputs in inflationary measurements and the direct effect of the Fed's tightening policy that should be placing a significant dent in inflation:

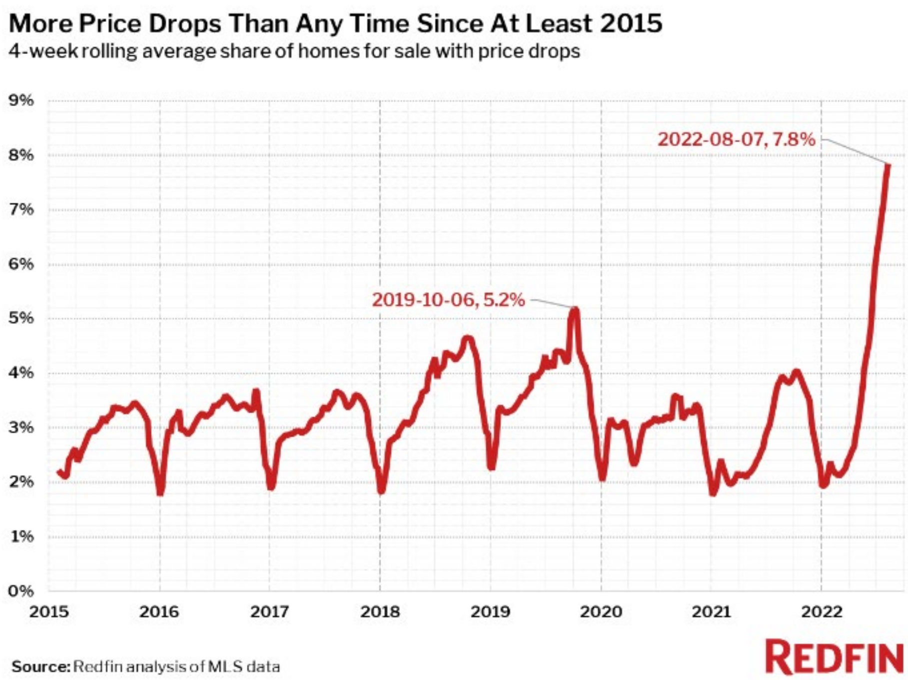
Real Estate

Real Estate makes up a significant component of inflation measures. The math on the effects of higher interest rates is straight forward, but the effect on the measurement of inflation is way more complex. Over the last year, 30-year fixed mortgage rates have increased from 3% to 7.5%. For a purchaser placing 20% down on a $1 million house, that person is paying over $2K extra a month in mortgage payments. Ignoring other inputs (e.g., taxes and other costs which are typically based on house price), a house that cost $1 million a year ago should be closer to $700K today.[17]

[16] https://www.iea.org/data-and-statistics/charts/natural-gas-prices-in-europe-asia-and-the-united-states-jan-2020-february-2022
[17] Again, due to other costs involved that would decline with a lower overall price tag, the equivalency is probably closer to $750K or even higher – but the point is that there is undeniable pressure on house prices.

A significant portion of the measurement, though, is rent equivalency. In the same way that the cost for a homebuyer has increased significantly in the last year, so has the cost for a landlord in terms of variable rate loans, energy, and general building products.

Owner's equivalent rent is a significant contributor to inflationary measures and will lag in dropping with a number of signs in the housing market of softening.



[18]

Goods

There continues to be evidence of the supply chain normalizing between costs of shipping dropping materially as of late, less disruption at our ports, and the aforementioned Nike earnings report pointing to quicker shipping and more discounted products. Furthermore, as the world opens up, goods versus service spending is normalizing, further alleviating upward price pressure on goods.

Energy may continue to put pressure on pricing, especially on food product, but the strong dollar will help to blunt this affect.

Employment and Wage Increases

There are also signs of businesses shifting gears as potential recession looms and costs increase.[19] While a bit longer term in nature, automation, as discussed in this Market Commentary on Tyson's ensuing plans, creates a bit of a natural lid on long term general wage inflation – though there will always be pockets in certain industries.

[18] https://www.redfin.com/news/housing-market-update-new-listings-fall-12pct/
[19] https://www.protocol.com/workplace/tech-company-layoffs-2022

So here we are. Covid, resultant supply chain issues, consumer preference and then the Russian invasion have created havoc first in product availability and then in energy which, as previously noted, affects everything – transportation, food, materials, you name it. It is worth noting that there are three specific events that the market needed to overcome:

- Covid disruption
- China continued rolling shutdowns (extending supply chain disruptions)
- Russian aggression

And that is what has made this market one of the more difficult markets to navigate.