



THE 800-POUND GORILLA IN THE ROOM: (HYPER?)-INFLATION

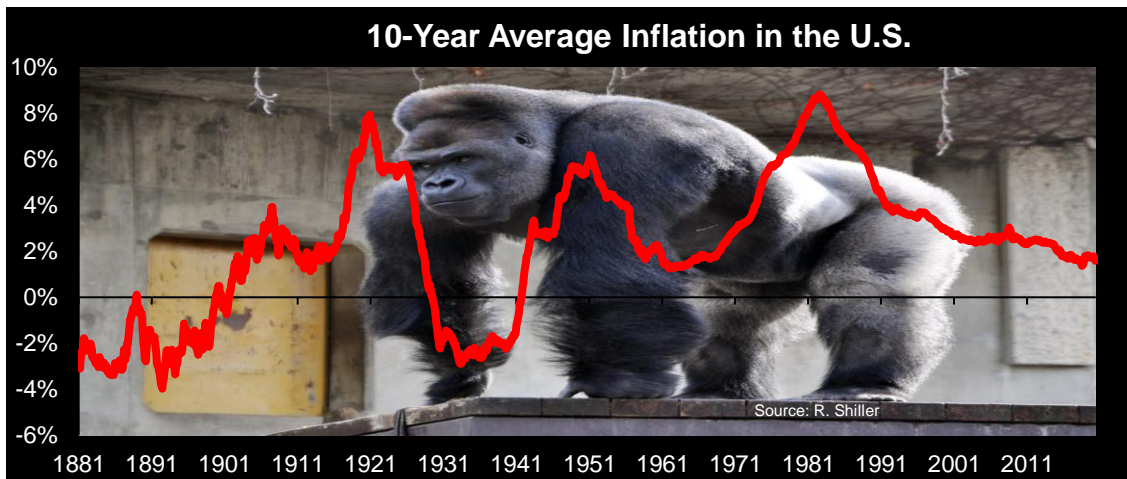
Bottom Line:

- 1 – U.S. small caps trade for 87 times forward earnings (!) - asset bubbles are an early sign of inflation
- 2 – Central banks have injected \$5.8 trillion in the past four months and \$21 trillion since 2008
- 3 – Protectionism is on the rise: the movement of goods, capital, and labor are curtailed everywhere
- 4 – Public and private debt, which was already at a record, exploded with the Covid-19 crisis
- 5 – Yield curve control and the public allocation of credit negate the deflationary virtues of free markets
- 6 – Covid-19 is creating a lost generation: sacrificed youngsters will demand profound political change in the 2020s

A broken clock is right twice a day and inflation bulls are right twice a century, on average. If the reader can keep his lusting eyes off Shabani, [the handsome gorilla of the Nagoya zoo](#), he will notice in the chart below that long-term U.S. inflation exceeded 5% only three times in the past 150 years.

The best minds of the investment profession have learned their lessons from their ridiculous [2010's open letter to Bernanke](#): only fools or gold hustlers should mention the "i word". As a result, **the investment community pretends not to see the six horsemen of the coming inflationary hell.**

- 1. Bubbles everywhere: **the Russell 2,000 index trades for a record and previously unthinkable 87 times earnings** and Apple is twice as expensive as it was at the peak of the internet bubble.
- 2. **The seven largest central banks have injected \$21 trillion in liquidity since 2008 and \$5.8 trillion in the past four months alone.** Money supply has grown by almost 20% annually in all developed markets for more than a decade.
- 3. **U.S. tariffs on Chinese exports have soared by 17 percentage points** and non-tariffs restrictions are exploding. The movements of labor and capital are also being curtailed everywhere.
- 4. Public and private debt, which was already at a record in 2019, exploded with the Covid-19 crisis.
- 5. Yield curve control and the public allocation of credit hamper the deflationary effect of free markets.
- 6. The Covid-19 crisis is creating a lost generation: **sacrificed youngsters will demand profound political change in the 2020s.**



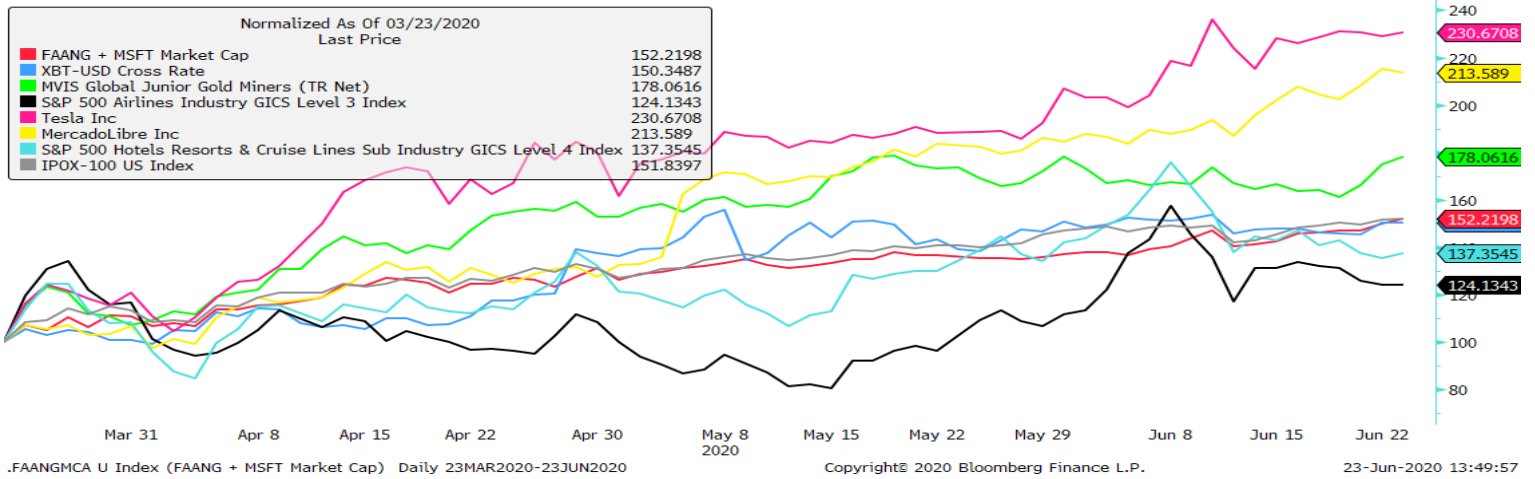
In addition to the obvious call for gold, this report will suggest that investors hedge inflation risks with dirt-cheap CPI swaps in Europe and Japan and beaten down Latin American stocks.



The Great Inflation of Asset Prices

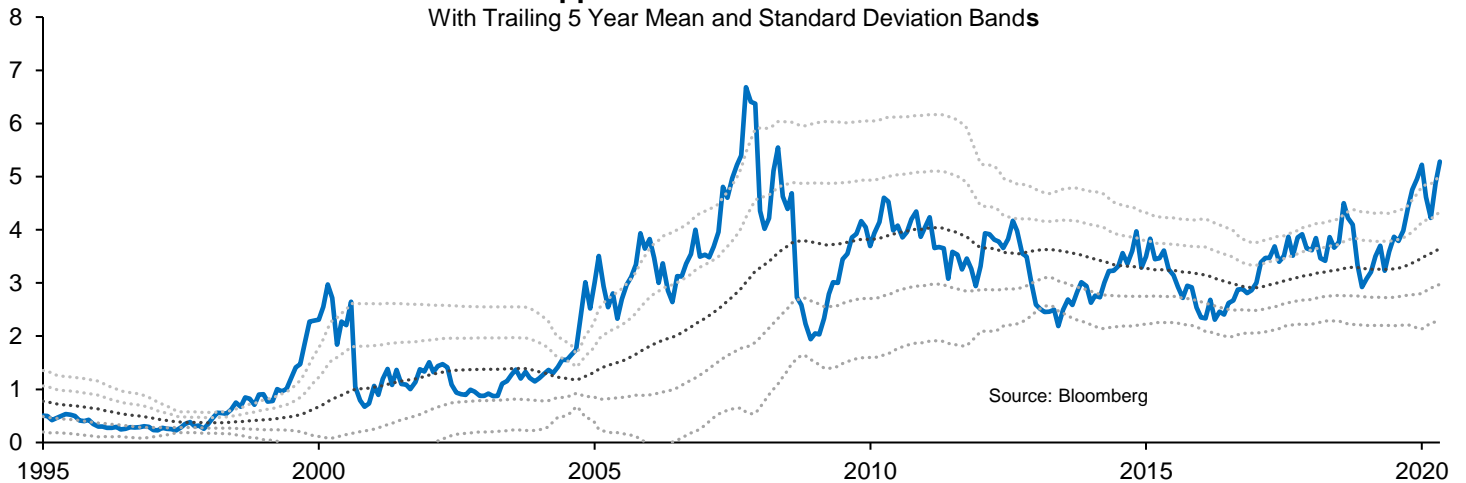
Experts can debate the existence of inflation in the consumer price index in the same way that theologians discuss the presence of the Holy Ghost in the eucharist, but there is no doubt that **asset prices have reflatd very rapidly after the brief March bear market**. The FAANG stocks and Microsoft have added almost \$2 trillion (!) to their capitalization in three months. Tesla is now worth \$183 billion, versus a March low of \$79 billion. The largest Argentine stock rallied some 113%, junior gold miners gained 78%, airlines hotels rallied by 24% and 37%, respectively, and the IPOX-100 U.S. index jumped by 51%.

Performance since March 23 Lows of Selected Stocks and Indices



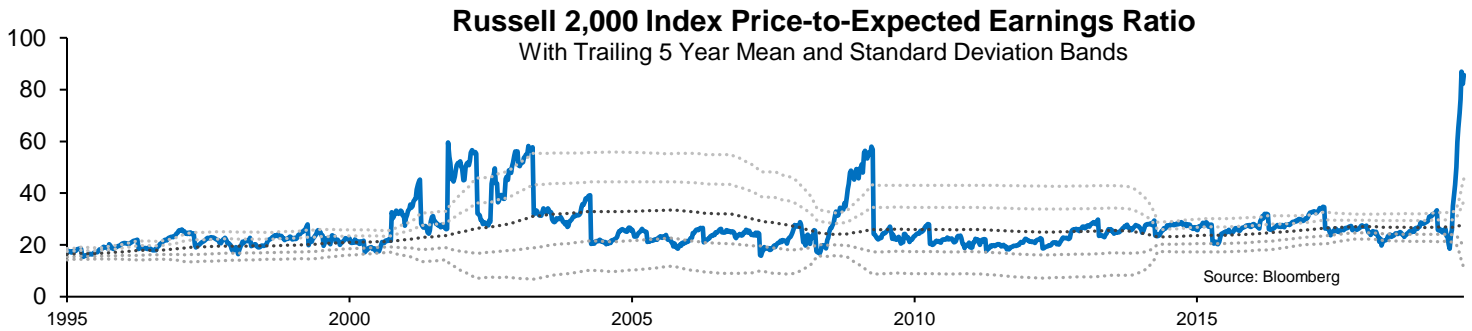
The stock market rally is not just a healthy rebound from oversold conditions: rather, **it is a bubble on top of a bubble**. For example, the largest stock in the world, Apple, trades for 5.8 times sales, versus 5.4 at the February market top. For reference, Apple never traded for more than 3 times sales during the internet bubble of the late 90s

Apple's Price-to-Sales Ratio With Trailing 5 Year Mean and Standard Deviation Bands



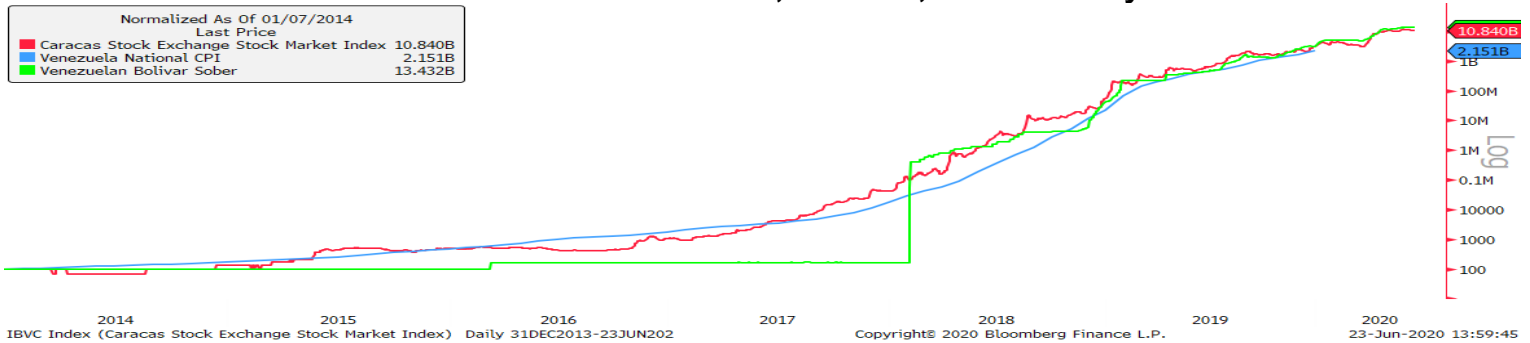


It is not unusual for trailing valuations to soar after a major market bottom because recent earnings are depressed by the crisis. Asset prices increases usually anticipate the recovery of profits. However, the post-March rally took place amidst a catastrophic plunge in EPS expectations. As a result, **the Russell 2,000 index trades for a record and previously unthinkable 87 times earnings.**



Such fantastic increases in valuations are usually only seen in markets experiencing hyperinflation: for example, the Caracas Stock Exchange Stock Market Index rallied by 1,633% annually in the past five years.

Venezuela's Stock Market, Inflation, and Currency



Of course, stock markets' exponential rises in countries experiencing hyperinflation reflect the debasement of the currency. The German stock market gained 1,000,000% in local currency between 1920 and 1924, but only 130% in USD terms. This disconnect is already visible for most equity indices: **the S&P 500 index peaked has underperformed gold since January 2015 and international stocks lost 34% in gold terms.**

Gold Price of Major Equity Indices



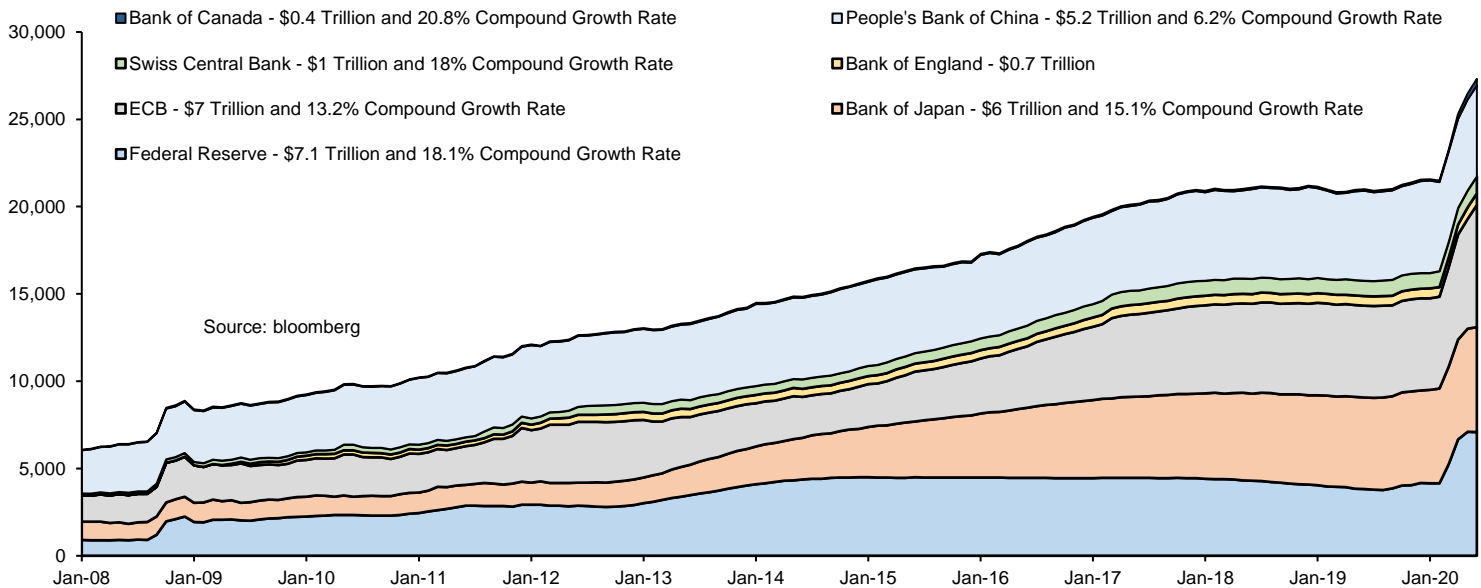


The Great Central Bank Bubble

Central banks' massive liquidity injections have been the fuel of this fantastic stock market rally. There is no shortage of angry bears posting disgruntled "money printer goes brr..." on #fintwit, so I will only share one chart: the balance sheet of the seven largest central banks. **The central banks of the U.S., China, the Eurozone, Japan, England, Switzerland, and Canada have injected \$21 trillion in liquidity since 2008 and \$5.8 trillion in the past four months alone.**

Growth rates have reached dizzying proportions: central banks' assets in Canada, the U.S., Switzerland, and Japan have compounded at annual rates of 20.8%, 18.1%, 18%, and 15%, respectively. These rates are for slow-growth economies whose nominal GDP has expanded by less 3% annually over the period.

Global Central Banks Balance Sheets
\$ billion, at latest exchange rate



Of course, these massive monetary injections have failed to generate much inflation because the velocity of money has plummeted at the same time. However, economists should remember that **there is no good model for the velocity of money**: rather, velocity is observed *ex post* as the constant which solves Fisher's equation ($V = PT / M$).

As I argued in [Goldilocks and the Three Clogs](#), the biblical flood of liquidity unleashed by the Fed in the past two months has been clogged in the cash balance of the U.S. Treasury and in money market funds assets. All that the current lack of inflation proves is that economic shutdowns prevented Americans from spending their stimulus checks and unemployment benefits. But I can safely predict that **the U.S. government will eventually spend its trillion and a half of idle cash and that the U.S. household savings rate will not remain at 33% forever.**



Massive Economic Disruptions

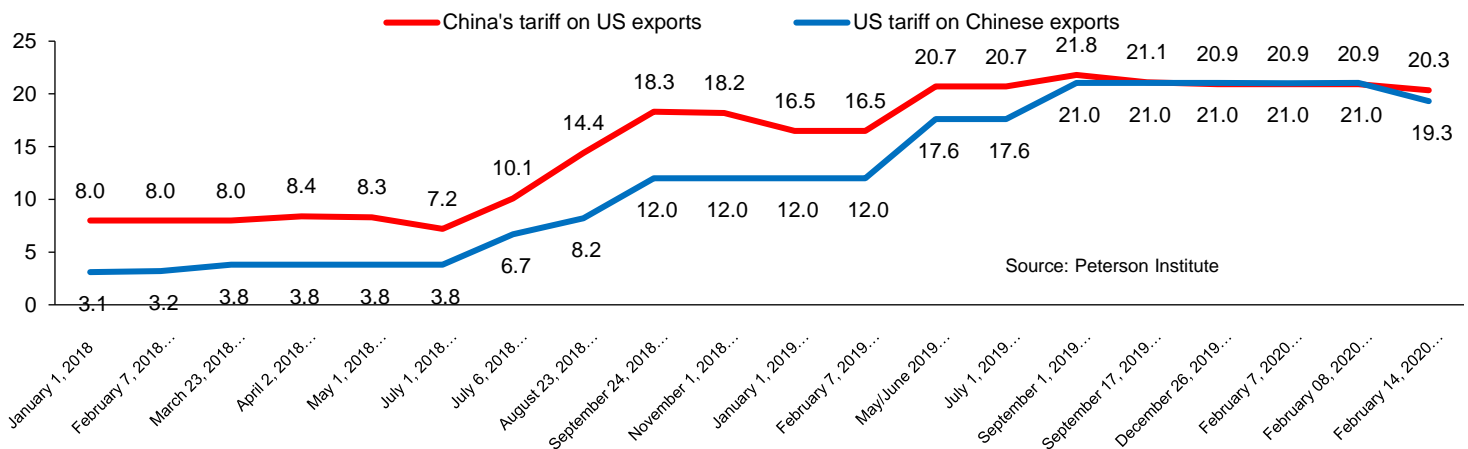
One reason why inflationists are wrong so often is that they are implicitly short human creativity. Hamlet's most profound section is not his monologue on suicide, but his humanist *credo* "What a piece of work is man! How noble in reason, how infinite in faculty! In form and moving how express and admirable! In action how like an angel, in apprehension how like a god!".

There are so few problems that the human mind cannot solve, especially if it works in collaboration with other minds. Malthusian economists have always overestimated physical constraints and underestimated human ingenuity: the industrial revolution started because England ran out of wood. Shortages of coal led to the hydrocarbon age. Likewise, rapid advances in the fields of artificial intelligence, biotechnology, quantum computing, and renewable energy will eventually clear the physical obstacles to human prosperity.

Thus, the burden of the proof must be set very high for Malthusian arguments. Human ingenuity will find a way to overcome most physical constraints, but only with the correct economic arrangements. However, **all factors of production are currently being restricted in the most dramatic way since the end of WW2:**

- **The movement of goods is hampered by an increase of tariffs of close to 20 percentage points** (the same as the 1930 Smoot-Hawley Act) on the world's largest economic relation. Furthermore, the Covid-19 crisis will surely lead to a general rise of non-tariffs trade barriers on the grounds of security, health standards, and strategic national interest.

Tariffs on U.S. - China Trade



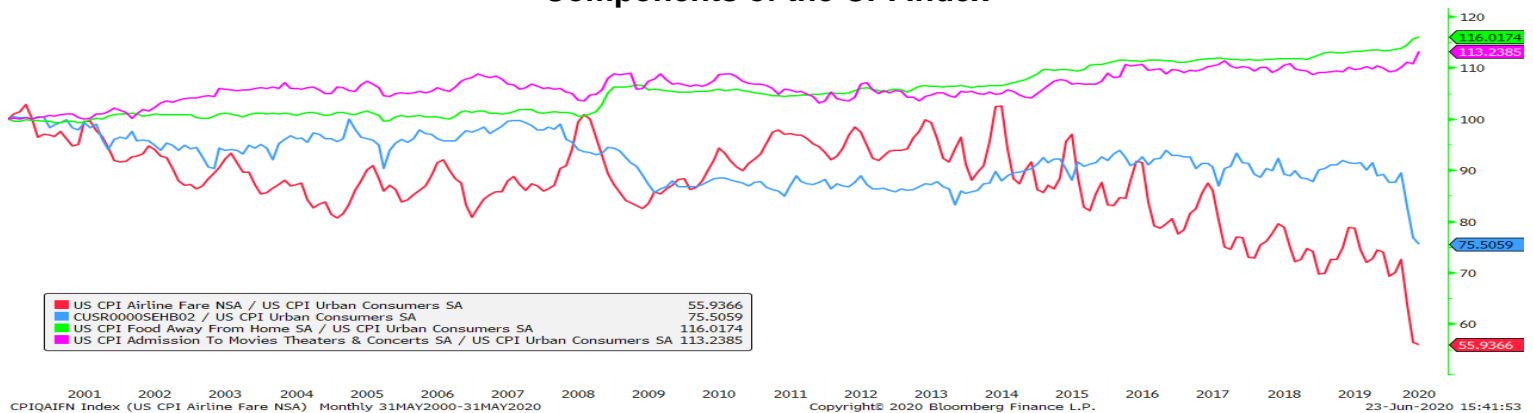
- **The movement of humans is greatly restricted by health and political concerns:** the European Union has barred U.S., Brazilian, and Russian visitors indefinitely. New Zealand, which is widely held as a model for its total elimination of the virus, bans all entry to the country. In the U.S., health concerns have been a convenient justification for political restrictions on foreign workers: [Trump's June 22 executive order](#) bans new work visas, including the H-1B, through at least the rest of 2021.



- **Foreign direct investment, the kryptonite of the globalization age, is being restricted as a threat to national security.** Last Wednesday, the European Commission issued a [White Paper on Foreign Subsidies in the Single Market](#) which could block the acquisition of European assets by U.S. and Chinese buyers. The National Committee on U.S.-China Relations found that China’s direct investment in the U.S. dropped from \$5.4 billion in 2018 to \$5 billion last year, the lowest level since the recession year of 2009. Chinese direct investment in the United States virtually vanished to \$200 million from January-March this year.

This multi-faceted protectionist surge comes on top of a massive increase in business costs for many industries. New low-cost entrants and a higher utilization of planes had led to a remarkable drop in air travel costs in the past decade: a wave of bankruptcies and burdensome social distancing requirements will surely reverse that process. Similarly, hotels, restaurants, amusement parks, movie theaters, concert venues, sport stadiums will face much higher costs to operate in the post-Covid 19 world. **These higher costs have not been captured in official U.S. inflation data:** on the contrary, a record fall in hotel prices and airline fares was responsible for the small sequential decline of the consumer price index in May. What the media saw as “deflation” was a statistical artefact: travel was banned across most of the country.

Components of the CPI Index



Soaring Deficits & Crushing Debt

The relation between debt and inflation is complex. Up until recently, the economic consensus was that **increases in debt were inflationary**. Classical economists focused on supply-side and crowding-out effects: if the economy is already running at its equilibrium capacity, more debt can only increase prices and misallocate resources. Similarly, Keynesians argued that deflation and recessions could be “cured” by increases in public debt. This traditional view is supported by the historical fact that inflationary episodes were almost always preceded by massive build-ups in debt: the need to settle the debts of the revolutionary wars led to the debasement of the Continental Dollar in the U.S. and the *assignats* in France, the punitive reparations owed to France by Germany caused the spectacular demise of the *Papiermark*, and most Latin America countries experienced cycles of debt, defaults, and inflation for three centuries.

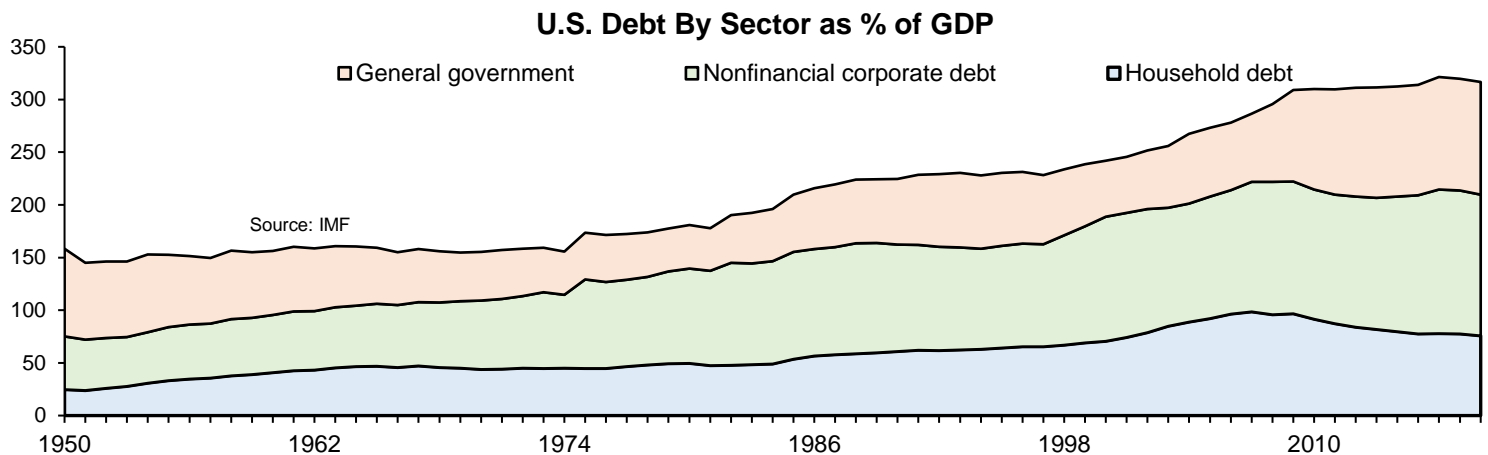


The causal link between inflation has been challenged by heterodox economists in the past two decades.

Proponents of the secular stagnation hypothesis argue that debt, especially unproductive public debt, is deflationary as it depresses future demand, saddles banks with non-performing loans, clogs private balance sheets, and slowly erodes nominal growth. Japan is the poster child for this “debt-driven balance sheet recession” model, but the theory suffers from a fatal flaw. If debt makes economies less efficient, shouldn't prices eventually rise? **Over time, prices drop because of “creative destruction” – the antithesis of “secular stagnation”.** The secular stagnation hypothesis implicitly assumes the demise of economic productivity, the greatest force against inflation.

Second, the current consensus on modern monetary theory is often summarized as “debts and deficits do not matter”. This a horrible mischaracterization of a complex and at least partially valid school of thought. **Modern Monetary Theory is very much concerned with inflation because it is the only real economic constraints for sovereign issuers of currency.** In the original modern monetary theory framework, taxes' sole economic purpose is to offset the excessive issuance of base money by governments. The only way to know the limits of money creation is to test the waters, i.e., monetize deficits until inflation ensues and mop up excessive money creation via increased taxation.

I have no idea where the limits of debt creation lay but I am sure of three things. First, we are getting there quickly: total debt accounted for 316% of GDP in 2018, versus a post-War average of 211%. According to the Economist, the public debt to GDP ratio will increase by 14 percentage points in the U.S., 15 in the U.K., 12 in Italy, and 11 in Japan in 2020.



Second, central bankers have already told us that liquidity injections will not end until inflation overshoots its *symmetrical* target, and that real rates will remain negative until economies have returned to their pre-crisis growth path (nominal GDP targeting).

Third, I am certain that governments will not raise taxes to quash inflationary pressures: as I argued in [“a Crazy but Logical Call for Inflation”](#), **inflation is the least politically painful way to address the unsustainable generational inequalities which have exploded in the past three decades.**



Administered Prices

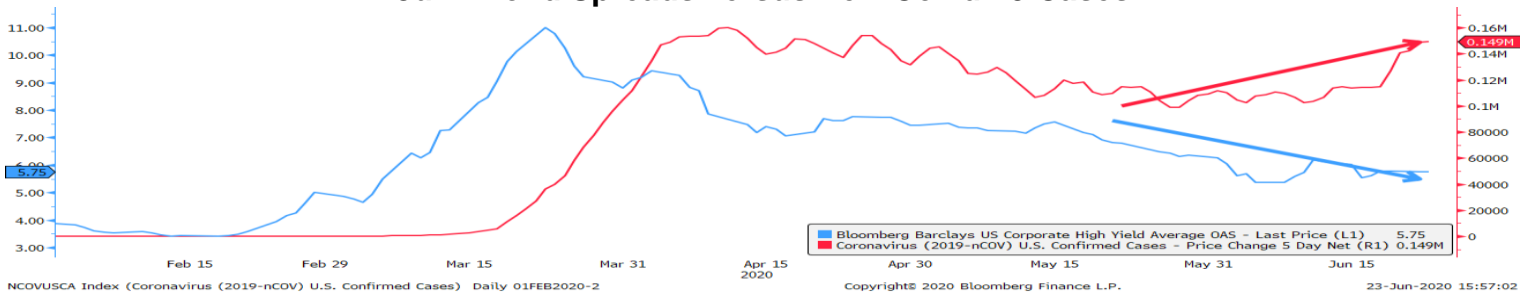
Free markets are inherently deflationary. Inflationary shocks rarely last in free market economies because price signals ensure that resources are quickly allocated where they are needed.

Conversely, **inflation is almost impossible to quash when prices are administered.** Dual currency systems, such as Venezuela’s official and black market dollar exchange rates, allow the redistribution of wealth towards party elites, who have a vested interest in continuously increasing the currency supply.

As I argued in “[How to Profit from Financial Repression](#)”, the U.S. will eventually have to implement yield curve control policies. Intertemporal arbitrage and maturity transformation, the major functions of capital markets and the banking system, will be determined by the board of the Federal Reserve, instead of the collective actions of millions of rational economic agents.

Administered prices rapidly diverge from economic realities: as shown in the chart below, the logical relation between junk bonds’ spreads and new Covid-19 cases broke after the Federal reserve started its purchases of high-yield bonds in mid-May.

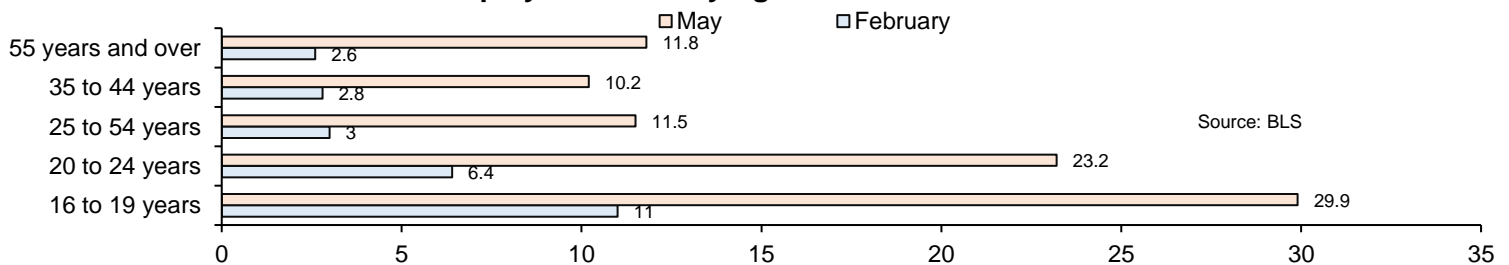
Junk Bond Spreads versus New Covid-19 Cases



A Generational Crisis

I have discussed the topic of generational inequalities at length in “[Not OK, Boomer](#)”, so I will simply mention that the Covid-19 crisis has exacerbated America’s most dangerous crisis. Job losses have affected the young disproportionately: **the unemployment rate for 20 to 24 year old increased by 17 percentage points, versus 8.9 percentage points for the overall unemployment rate.**

Unemployment Rate by Age - the COVID-19 Shock

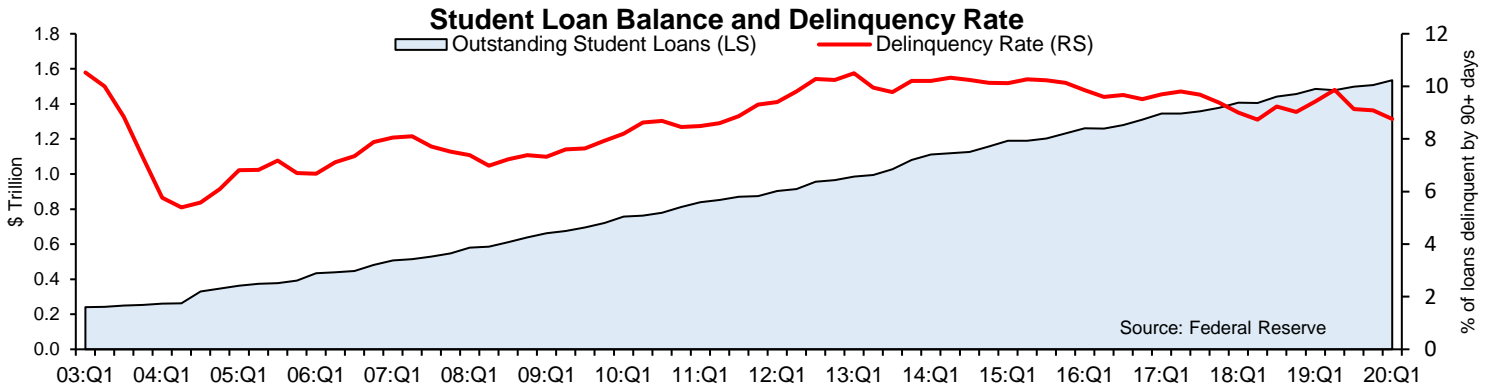


Source: BLS

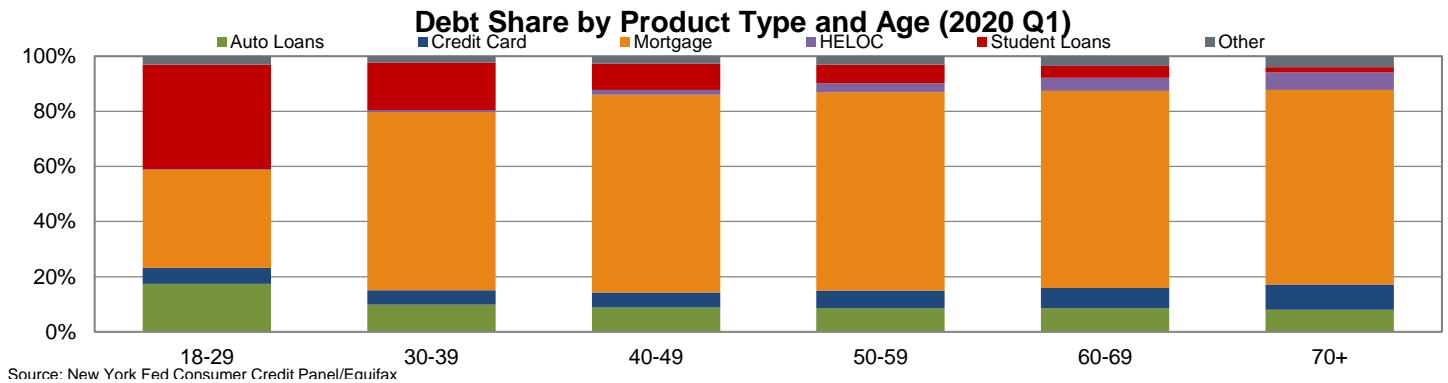


The second wave of infections will stop or even reverse the re-opening process: temporary job losses in hospitality, retail, and restaurants – positions which are overwhelmingly held by young workers – will become permanent.

The rise of youth unemployment will worsen the student loan crisis. Even before the Covid-19 crisis, the delinquency rate on student loans was already close to 9% and had barely improved despite a record low unemployment rate.



The student loan crisis will not have the same impact as the collapse of the housing market in 2008. At \$1.5 trillion, it is a fraction of housing debt \$10 trillion. But student loans are the highest source of debt for the 18-to-29 cohort and the line never goes down – by design, as student loans cannot be discharged by bankruptcy.



The student loan crisis may be relatively small, but it is explosive: **the young, which are the poorest segment of the population, are burdened with high interest rate, unforgiveable debt and face a massive (and probably permanent) unemployment crisis.** The situation for much of America’s youth is hopeless, and hopeless youth is the fuel of political unrest. The June 2020 riots were the first visible consequences of this explosive generational crisis. The political consequences will unfold in the next decade, a process which began with the string of victories by [leftist insurgents at recent Democratic primaries](#). **Just as the rise of Tea Party movement in 2009 completely reshaped the Republican Party in the 2010s, the establishment-led Democratic Party will drift towards leftism and populism in the 2020s.**



Themes and Trades for the Inflationary 2020s

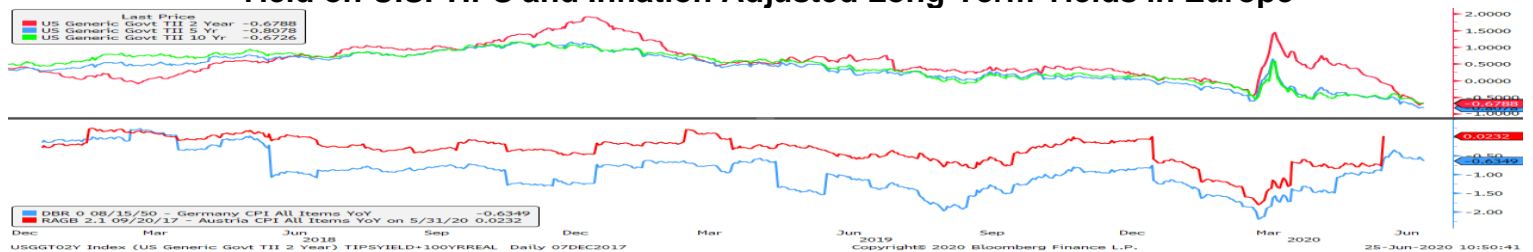
Gold is the most obvious hedge against unexpected inflation. Logically, it has been a core pillar of my “[Cockroach Portfolio](#)” for two years. Of course, gold is hardly the contrarian play it was in 2018 as many hedge fund managers have become much more vocal about their love for the 79th element of the periodic table. A pullback is always possible but it should be seen as a buying opportunity.

Secular bull markets grow on positive sentiment and increasing flows. Gold prices are at a record high in every currency but the U.S. dollar and breaking the 2011 high of \$1,900 would unleash a lot of media coverage and retail interest.

Furthermore, the traditional arguments against gold do not work in the current environment. Yes, gold has little practical use and no fundamental anchor: its value is in the eye of the beholder, but that has become true of most financial assets in an age of widespread bubbles. Yes, gold pays no income, but its yield of 0% still beats about \$13 trillion of bonds which trade at a negative yield. Contrary to most U.S. stocks, gold has no dividend to cut and no buyback program to cancel.

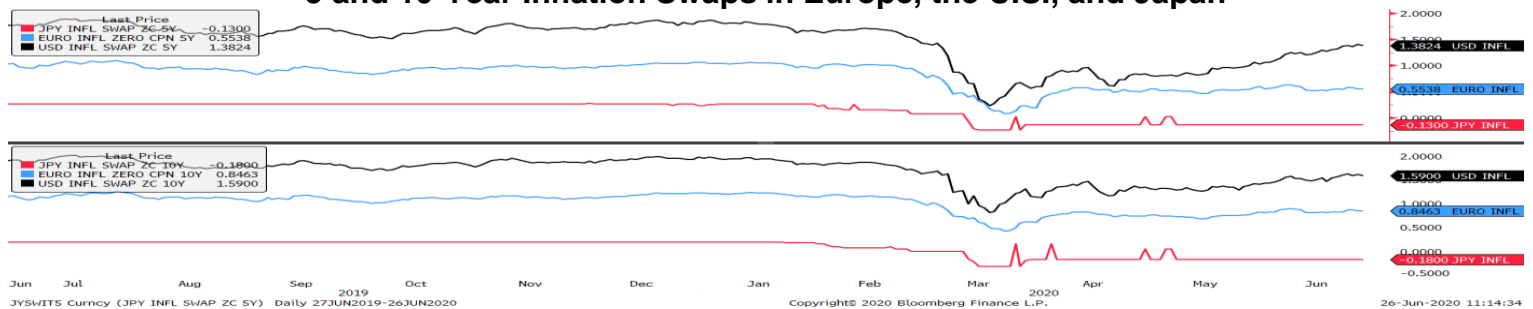
Ultimately, the chart below is the best reason to accumulate gold, regardless of its price. Real yield on U.S. 2, 5, 10-year TIPS are close to *minus* 1%. **Gold is a cheaper inflation hedge than U.S. TIPS.** Germany’s 30-year bond yields *minus* 0.63% on an inflation-adjusted basis and investors in Austria’s centennial bond are taking about 100 year in duration risk for a real yield of exactly zero.

Yield on U.S. TIPS and Inflation Adjusted Long-Term Yields in Europe



Institutional investors can bet on inflation directly using **inflation swaps**. Premia have risen in the U.S. but they remain dirt cheap in Europe and Japan. Swap buyers can actually get paid to receive Japanese CPI over the next ten years.

5 and 10-Year Inflation Swaps in Europe, the U.S., and Japan

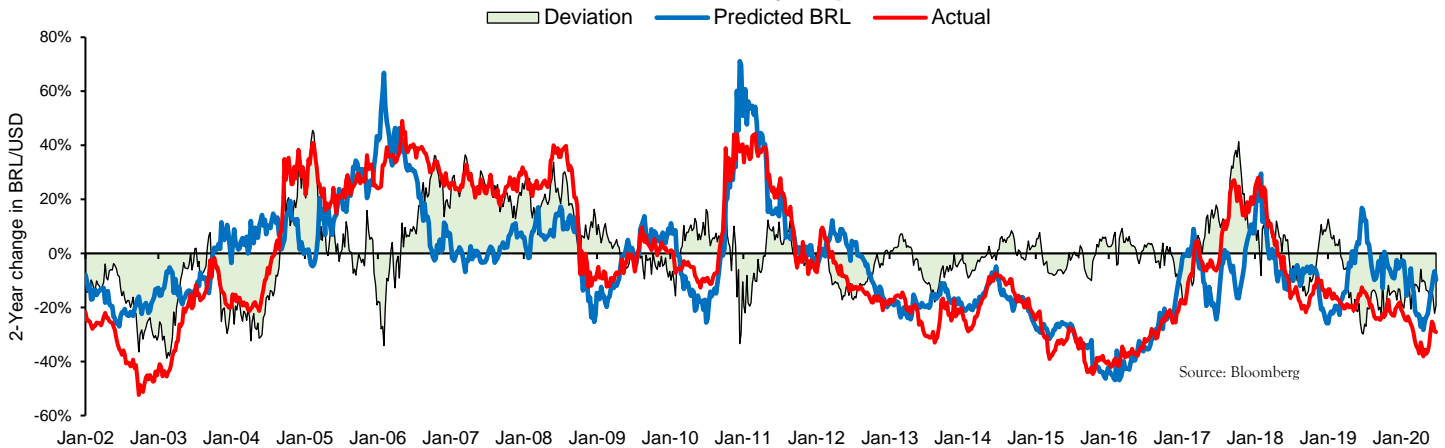




Last, as I argued in “[a Safe and Risky Adjustment to the Cockroach Portfolio](#)”, **Latin America assets are the ultimate inflation trade**. Schematically, the region must service its U.S. Dollar debt with the proceeds of its commodity exports. That is usually a curse as the real economy is effectively hostage to global forces such as U.S. monetary policy, Chinese infrastructure spending, and middle eastern politics. As a result, monetary and fiscal policy usually exacerbates exogenous shocks, rather than cushion them.

But Latin America’s curse is its blessing in periods of rapid inflation and U.S. Dollar weakness, such as the 1970s or the 2000s. Latin American assets are all the more appealing as they are denominated in dirt cheap currencies. The chart below shows a prediction of the Real’s exchange rate based on the prices of Brazil’s major commodity exports. This relatively simple model explains about two thirds of the 2-year variation in the BRL/USD exchange rate and currently suggests that **the Real is undervalued by about 20%**.

BRL/USD versus Commodity Export Price Model



Global dejection towards Latin America is also reflected in the wide discount for the continent’s stocks. A very lame pun shall illustrate the point and conclude this report: how much should investors value Amazon versus the Amazon? Right now, the Seattle company is worth about three times the capitalization of the MSCI Brazil index. Yet, **Brazilian stocks have generated ten times more in inflation-adjusted earnings in the past ten years than Amazon** – despite having experienced a lost decade.

Amazon and MSCI Brazil: Capitalization and 10-Year Real Earnings

