

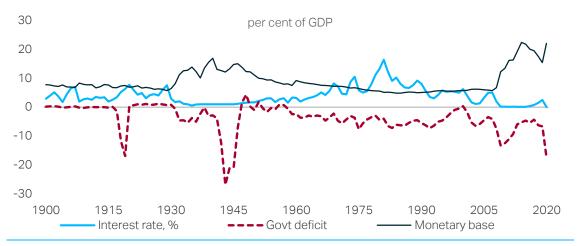
#### **Macro Picture**

# **NEW MACRO REGIME?**

**Dario Perkins** 

It will not be easy to break out of secular stagnation, but we use other historic episodes to draw out "good" (1920s, 1950s) and "bad" (1970s) scenarios for the post-COVID economy. While the debate about the medium-term outlook will not be settled soon, the near-term investment implications are similar across these different regimes - short bonds and rotation in equities.

Chart 1: Monetary and fiscal policy are working together – is it enough?



Source: MacroHistory database, TS Lombard

#### READING THE STARS

Everyone is talking about a "new regime" for the global economy in the 2020s. Optimists see a world of "YOLO" consumer attitudes, booming investment and activist government stimulus. Pessimists warn of rampant inflation and financial repression. Both views are wildly exaggerated - especially if it takes time to fully recover from COVID (which has amplified secular stagnation).

#### **GREAT ACCELERATION**

We look at previous episodes where an international crisis caused a "structural break" in the macroeconomic regime. The 1920s (at least for the US/parts of Europe) and the 1950s provide the most bullish scenario. But since both periods involved large demographic shifts, massive infrastructure spending, rapid productivity and booming credit, they will not be easy to repeat.

#### "MISGUIDED REVOLUTION"

The bears' warnings about 1970s-style stagflation seem equally far-fetched. Even if this is a conceivable endgame, it will not happen quickly. Fortunately, investors do not need clarity about the medium-term outlook to position for possible "regime change". In the short term, all these themes point in the same direction as the reopening trade - higher yields and equity "rotation".



# NEW MACRO REGIMES

There is widespread talk of a "regime change" for the global economy, with COVID-19 providing the "structural break" that would see the world emerge from the secular disinflation of the last decade. As always, there is a range of views about what this new regime will look like and what it means for financial markets. Optimists see a world of You-Only-Live-Once (YOLO) attitudes, an investment boom ("build back stronger") and policymakers - fiscal and monetary - determined to avoid the mistakes they made during the 2010s. The bears, in contrast, think the current reflation narrative will quickly mutate into something more sinister, an inflationary inferno that will end in widespread financial repression and the destruction of a range of asset prices (except gold and Bitcoin!). Analytically, we can frame this debate in the context of the equilibrium interest rates (r\*) - the level of rates consistent with stable inflation. Things get interesting if we have reached at inflexion point in r\*, with secular stagnation giving way to secular reflation. Central banks must either accommodate this move, allowing real rates to drift higher, or suppress it (which would generate inflation). We explore both scenarios but it is important to remember they are based on an underlying premise - the world recovers fully from the current economic crisis. This might not happen quickly, especially if the pandemic leaves persistent macro scars.

The optimistic view for the post-COVID era rests on what happened to macroeconomic performance after previous international crises, especially the First and Second World Wars. Sellside economists point to the US experience of the "Roaring 20s", though we can make similar comparisons with the global economic boom of the 1950/60s. Of course, nobody knows how this latest crisis will reshape international politics, or whether it will transform the behavior of consumers and businesses. It is possible that overcoming COVID-19 and "getting our lives back" will produce a powerful shift in sentiment, prompting an economic revival that carries over into 2022 and beyond, especially if it is combined with e.g. multi-year public infrastructure programmes. But we should be under no illusions - it will not be easy to recreate the macroeconomic conditions of the 1920s and 1950s. In addition to pent-up demand and excess savings, these were also periods of booming demographics, immense post-war rebuilding (especially in Europe), surging productivity from new wartime technologies (electricity in the 1920s, automation in 50s), mass domestic/international migration, the birth of consumerism and an associated boom in private credit. While COVID-19 has caused significant disruption, it has not destroyed the capital stock or reshaped the global demographic outlook. We should also note what happened during past pandemics, which - unlike wars - were generally deflationary.

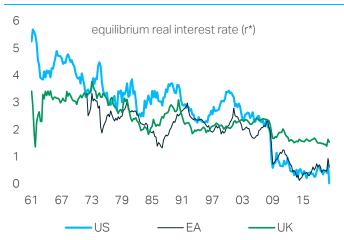
Though secular stagnation has been a favorable environment for asset values, a secular macroeconomic revival isn't necessarily bad news for investors. Yields would increase further but a rotation in stock markets - from growth to value - should support overall equity valuations. Inflation is the bigger threat to financial markets, especially if it comes from a combination of negative supply shocks (de-globalization, climate change etc.) and "fiscal dominance". The macroeconomic regime of the 1970s was difficult for most asset classes (except gold) because it flipped the fundamental relationship between bonds and equities. As an eventual endgame, this is not something we would rule out - but it requires big political shifts (e.g. full conversion to MMT) and serious monetary-policy errors. Even if a regime shift of this nature is conceivable, it is not going to happen quickly. This is important for markets because it means - at least for the next 12 months - investors do not need to resolve the uncertainty about the medium-term outlook. As long as inflation doesn't break above central banks' pain threshold, the "roaring 20s" trade is basically the same as the "reopening trade" – short bonds, constructive equities and a rotation from growth to value. While we are skeptical COVID-19 has put the world on a new secular trajectory, this might not matter for financial markets until 2022 (at the earliest).



# 1. READING THE STARS

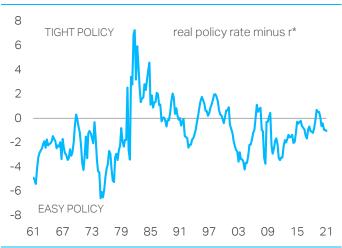
Recently there has been a lot of talk about a "regime change" in the global macroeconomic environment, with secular stagnation giving way to a new era of rising inflation and higher interest rates. Given the magnitude of the crisis we have experienced over the past 12 months, this is understandable - it is tempting to think everything will be different once the world has emerged from the COVID-19 pandemic. And since no two economic cycles are ever exactly the same, it is reasonable to think the 2020s might not be a simple extrapolation of the 2010s. (Though, as we have examined elsewhere, it is not exactly clear if the old cycle ever really ended or whether COVID-19 merely interrupted it – especially given the radical policy response.) Analytically, we can frame this discussion as a debate about whether 2020-21 will mark an inflection point in the equilibrium interest rate, with "r-star" (r\*) set to trend higher in the post-COVID era. This would produce a totally different macro backdrop for investors in the 2020s. Conversely, if the equilibrium interest stays at pre-COVID levels, nothing is going to change.

**Chart 2: Finding the neutral interest rate** 



Source: Holston-Laubach-Williams (New York Fed)

# **Chart 3: The US monetary-policy stance**



Source: Holston-Laubach-Williams (New York Fed), TS Lombard

# Star gazing

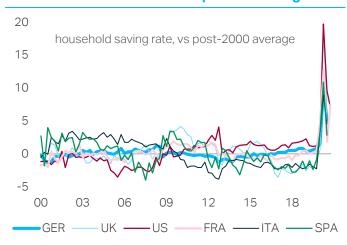
While we cannot observe r\* directly, it is reasonable to think there is some underlying interest rate (determined by macro fundamentals), that is consistent with stable inflation<sup>1</sup>. Secular stagnation is based on the idea this equilibrium or "neutral\* rate has fallen to extremely low levels, which makes it impossible for central banks to hit their inflation targets even when they cut their policy rates to zero. Chart 2 shows the most popular estimates for the US and Europe, designed by staff at the Federal Reserve. The main implication of these models is that we should judge the stance of monetary policy, not by the level of interest rates per se, but by the gap between the policy rate and r\* (Chart 3). Inflation can only become a problem if the authorities allow their policy rates to drop below neutral. In the present circumstance - where r\* is close to zero in real terms - this is only going to happen in the equilibrium rate trends higher. The authorities can either allow real interest rates to rise, or they can suppress it, causing inflation.

 $<sup>^{</sup>m 1}$  In reality, it naïve to think there is a single equilibrium rate. Different parts of the economy have different rate sensitivities and the real borrowing cost that is appropriate for the real economy might not be right for financial markets. Even with the equity market, we might see different r\*s across different sectors e.g. the equilibrium rate for "value" stocks is likely to be higher than for "growth" stocks - which is why rising r\* requires "rotation" between sectors.



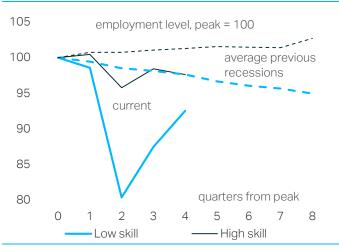
In principle, the equilibrium interest rate should depend on slow-moving structural forces such as demographics, technology, politics, worker power and globalization, which alter the balance between desired savings and investment. If the world is trying to save too much relative to investment, the interest rate consistent with stable inflation will decline. And an excessive desire to save has certainly been a characteristic of the last decade (if not longer). We examined the secular history of inflation in a recent Daily Note, showing how the combination of powerful structural shifts - and the policy response to those changes - had driven highly persistent trends in the CPI. We also traced a long-term "supercycle" in equilibrium interest rates, which began with the deflation and polarization of the late 1800s, ascended to a peak in real rates with the worker militancy and Great Inflation of the 1970s, before descending back into disinflation and inequality during the post-Volcker period of neoliberalism. Chart 8, based on recent work by Lukasz Rachel and Larry Summers shows what caused the post-70s decline in r\* - the slide into secular stagnation - blaming a combination of demographics, inequality and weak productivity.

Chart 4: COVID-19 added to private savings



Source: National sources, TS Lombard estimates

Chart 5: The pandemic also widened inequality



Source: TS Lombard estimates, Datastream

## The immediate impact of COVID-19

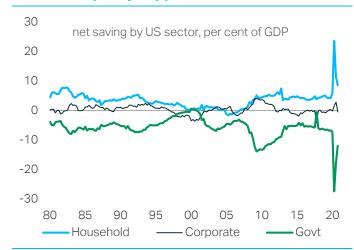
Before thinking about how the post-COVID era might see a transformation in the macro environment, it is important to remember that the immediate impact of this crisis has probably made secular stagnation worse - by lowering the equilibrium interest rate further below zero. The global economy has contracted, which has reduced overall spending/investment, inequality has widened at an unprecedented pace and private-sector savings have increased. Government "dissaving" via a massive widening in fiscal deficits has not fully offset these effects, which is why global GDP is significantly below where everyone thought it would be 12 months ago. Yet the estimates of r\* in Chart 2 do not capture these effects because the statisticians have basically assumed them away. As Fed staff explained in a recent update, their latest r\* estimates model COVID-19 as a temporary supply shock, which totally disappears as the world "reopens".

While it is reasonable to think the immediate effects of COVID-19 will fade, the Fed's analysis raises an important point - before we can worry about a new "secular reflation" paradigm, we need to be sure the global economy can fully recover from the current crisis. The odds of this happening have improved thanks to mass vaccine deployment and continued fiscal support, but it's not certain that the world can quickly return to where it was before COVID. This is something policymakers are keen to stress at every opportunity. If there is any sort of economic scarring <u>from COVID</u> – perhaps because unemployment remains high or participation doesn't recover



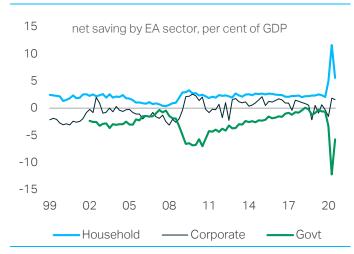
quickly - disinflationary pressures could actually intensify in the 2020s. Scarring seems particularly problematic for the euro area, which is now entering a third wave of the pandemic.

Chart 6: US policy support was essential



Source: Federal Reserve, TS Lombard

**Chart 7: Similar picture for the euro area** 



Source: Eurostat, ECB, TS Lombard

## How things could be different in the post-COVID era

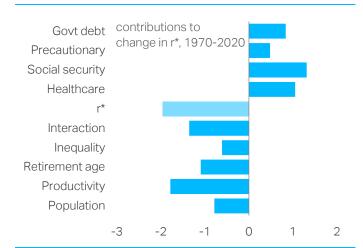
We are more pessimistic than many sellside economists about how quickly the developed economies will recover from COVID-19, especially in terms of labour-market performance. But in this Macro Picture we want to focus on the medium-term outlook. Here the crucial issue is about how the secular drivers of interest rates/inflation might change once the current recovery is fully complete. Will secular stagnation continue, or will r-star begin to move higher? How will central banks respond and what could this mean for financial markets (now accustomed to the prospect of perma-zero interest rates)? There are many commentators who think we are at a secular inflection point in the macro backdrop, pointing to some combination of the following:

- New world of radical fiscal expansions: There is a consensus emerging that "MMT has (i) won", with the austerity of the last decade set to give way to continued government attempts to stimulate demand and "run the economy hot". In some ways, this is a simple extrapolation of the COVID-19 response, which saw governments all over the world spend freely in an effort to prevent widespread bankruptcies and support household incomes. Nobody was asking the "can we afford it?" question and past worries about "the bond vigilantes", "crowding out" and "turning into Greece" seemed to evaporate. If this new fiscal philosophy continues post-COVID, there are plenty of other problems governments might address. Obvious examples include climate change, reducing inequality, investing in health/education and rebuilding public infrastructure. But it would take a sustained multi-year government spending programme to lift real interest rates, not another temporary stimulus (the COVID-19 response isn't enough, even in the US);
- (ii) The You-Only-Live-Once spending boom: The experience of the last 12 months might cause a radical shift in business and consumer sentiment, delivering a powerful spending boom that lasts beyond the immediate "reopening" bounce. As we have pointed out before, the private sector has accumulated a large stock of excess savings, which - if spent - could provide the catalyst for a wider economic revival, boosting overall employment, investment and employment, setting off a positive feedback loop through the wider economy. While we are sceptical about this narrative, the optimists can point to the experience of previous international crises – such as the World Wars and past



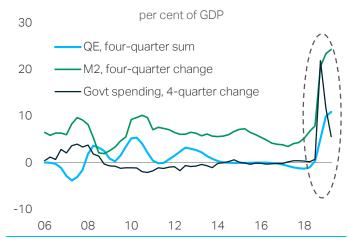
- pandemics which produced a "structural break" in the macro regime. We look at these comparisons in greater detail in Section 2. There is even talk of a Great Acceleration, with COVID-19 set to unleash new technologies and rapid innovation in areas such as transport, energy, medicine, science and even digital currencies;
- (iii) Deglobalization: By exposing the vulnerability of complex international supply chains, COVID-19 could intensify the pace of de-globalization, a trend that started before the pandemic. This could involve not just "reshoring" and the shrinkage of global supply chains, but also the replacement of "just-in-time" inventory management with a new "justin-case" regime, a system designed to allow greater flexibility and shock absorption. For many investors (who have a claim on existing assets) this is bad news - it would make parts of the pre-COVID capital stock redundant. But it would also require new investment in new supply chains and operating systems, which could raise the return on capital. Over time, de-globalization might also shift the balance of power between workers and the business sector, steepening the Phillips curve and raising the wage share. (But, there are also powerful counterforces - especially the digitalization of the labour market. COVID-19 has taught many businesses they don't need to rely on a strictly local workforce.)
- (i∨) Green revolution: As with de-globalization, climate change could also render parts of the existing capital stock obsolete, requiring massive new investment programmes. This would boost the demand for various commodities, especially those required for "green energies" (copper and other metals, semiconductors etc.). Many investors believe this is going to trigger a new <u>"super-cycle"</u> upswing in global commodity prices.
- $(\vee)$ Demographic shifts: Some economists think shifting demographics will raise the equilibrium interest rate over the 2020s. The basic idea is that we have passed a demographic inflection point, with the share of people in middle age - those with the higher propensity to save (Chart 10) - set to trend lower. In the past, this ratio has tracked nominal bond yields remarkably well (Chart 11). Yet economic impact of these demographic shifts isn't exactly clear because there are various forces pushing in different directions. Aging demographics will reduce both savings (older people spend more vs their income) and investment (overall GDP growth would be slower), with the impact on r\* dependent on the relative magnitude of these effects. The degree to which retirement age keeps pace with life expectancy will also be important, because more time spent in retirement would force the middle-aged to further increase their saving.

**Chart 8: Drivers of the equilibrium interest rate** 



Source: Rachel and Summers (2019)

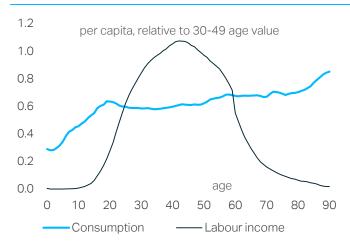
**Chart 9: A more expansionary policy mix** 



Source: FRED database, TS Lombard estimates

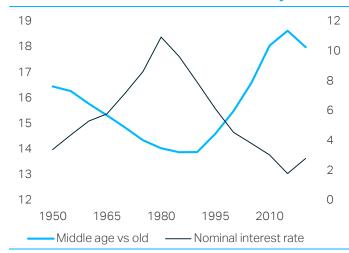


Chart 10: Older people have lower saving rate



Source: National Transfer Accounts, TS Lombard

**Chart 11: This ratio correlated to bond yields** 

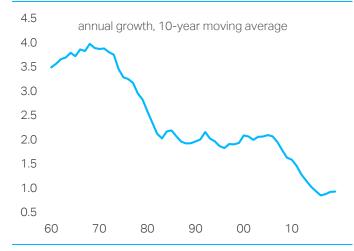


Source: United Nations, TS Lombard

(∨i) Central banks now have an inflation bias: Finally, while there is some debate about whether a "paradigm shift" is taking place in fiscal policy, there is no doubt monetary policy has changed in radical ways during the COVID-19 crisis. Central banks - especially the Federal Reserve – are now even more determined to lift inflation above their previous objectives and have promised to avoid premature policy tightening, even if this means "falling behind the curve". Many investors think this inflation bias is sufficient to create a new regime, especially if it leads to serious/sustained policy errors (see Section 3).

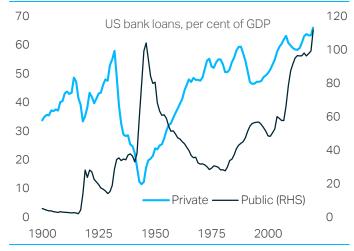
While there is a consensus that COVID-19 marks a secular inflection point for the macro economy, there is massive disagreement about whether this shift will be "good" or "bad" for markets. Optimists see booming GDP growth, buoyant consumers, rising incomes, strong investment, reduced inequality and rapid innovation. Pessimists see an era of massive government intervention (the "end of neoliberalism") that will lead to 1970s-style stagflation and financial repression. We suspect the reality of the post-COVID environment will be more prosaic - a short term boom that will have shades of the YOLO economy while also producing the occasional inflation scare. Ultimately, however, both GDP and inflation will settle back into their uninspiring pre-pandemic trajectories. Yet, given the uncertainty about the medium-term outlook, it is worth looking at alternative scenarios - starting with hopes for a "Roaring 20s".

Chart 12: OECD productivity slump vs post-WW2



Source: Conference Board, TS Lombard average of DM countries

**Chart 13: US credit boom in 1920s/1950s** 



Source: MacroHistory database



# **GREAT ACCELERATION**

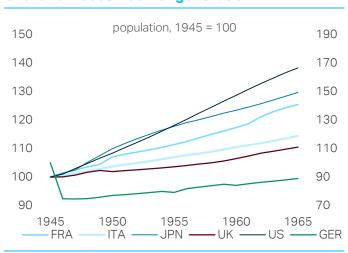
It is tempting to look at history for a guide for what we might expect from the post-COVID economy, particularly the 1920s and the 1950s. Those were both periods in which a profound international crisis caused a "structural break" in the macro regime, producing powerful reflationary booms. In recent months, the most popular sellside comparison has been with the 1920s, in part because it makes a neat "Roaring 20s" marketing narrative, a convenient way to signal a bullish view on the macro/market outlook. In addition to the First World War, the 1920s followed the 1918-20 Spanish Flu Pandemic, which is arguably the last time the world suffered an international health crisis on a comparable scale to COVID-19. For many progressive economists, however, the post-WW2 period is the more compelling template. The 1940s included a "regime shift" in macro policy, with an era of "fiscal dominance" emerging from a long period of monetary supremacy. MMT enthusiasts are keen to repeat this policy pivot, pointing out that it took a massive fiscal expansion to finally end the Great Depression in the US, the previous era of "secular stagnation". History never repeats exactly, but occasionally it rhymes.

Chart 14: The 1920s population boom



Source: MacroHistory database

**Chart 15: 1950s Boomer generation** 



Source: MacroHistory database

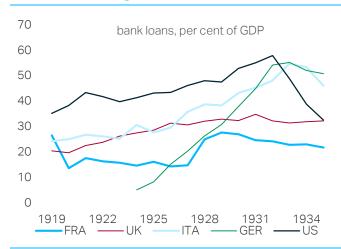
# Secular catalysts in the 1920s/1950s

Macro regime-change is hard to identify in real time and has highly persistent effects, often lasting a decade or more<sup>2</sup>. Given the magnitude of the COVID-19 shock, there are obvious parallels with past crises. People have lived in fear for an extended period, under stringent restrictions. Governments have been forced to spend a huge sums, with deficits hitting historic levels. When the pandemic ends, there is bound to be a radical shift in sentiment. This could unleash massive pent-up demand, especially among households and businesses that have accumulated savings (this also happened during WW2, when the US saving rate hit 25%). But we shouldn't push the wartime comparisons too far. The First and Second World Wars devastated the global economy, which has not been the case with COVID-19. By destroying vast parts of the capital stock and killing millions of working-age citizens, the conflicts triggered long and essential periods of "rebuilding" (especially in Europe). Populations recovered rapidly, especially after WW2 with the emergence of the Baby Boomers. This is all radically different to the situation we face today, where there is nothing to "rebuild" and populations are in decline.

<sup>&</sup>lt;sup>2</sup> In fact, the St Louis Fed –under the leadership of James Bullard – has recently tried to make these "regime shifts" central to its approach to analysing the US economy.

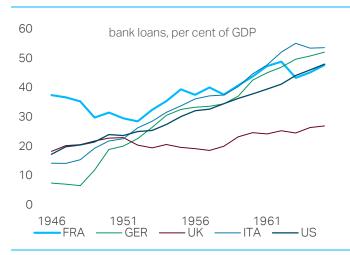


Chart 16: 1920s global credit boom



Source: MacroHistory database, TS Lombard estimates

#### Chart 17: The 1950s credit boom

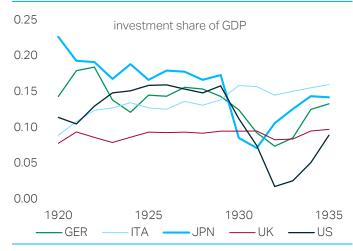


Source: MacroHistory database, TS Lombard estimates

# **Productivity and construction booms**

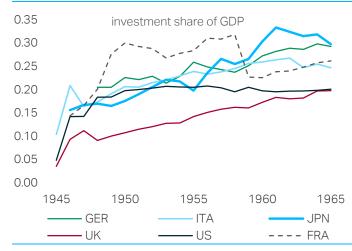
In addition to a booming demographics, both the 1920s and 1950s produced rapid productivity growth, in part because new wartime technologies were redeployed for civilian uses. The post-WW1 period saw the widespread electrification of homes and factories, which transformed the industrial sector (producers could now use large numbers of complex machines simultaneously) and created new markets for mass-produced consumer products such as vacuum cleaners and refrigerators. 70 per cent of US homes were electrified in 1929, double the share a decade earlier. The economic boom in the United States in the 1920s was also synonymous with the auto industry, a new "General Purpose Technology" that radically altered many aspects of everyday life, improving transport links, encouraging the rapid expansion of towns (and their extension to the suburbs), creating new forms of entertainment, and giving consumers a sense of freedom, which further bolstered post-war confidence. Business pioneers such a Henry Ford are widely credited with causing an Industrial Revolution in the US, by introducing new assembly lines, automatic switchboards, conveyor belts and standardized manufacturing components. The United States also experienced substantial domestic migration and rapid urbanization. In Europe, the picture was a little more mixed, with some countries adopting painful austerity.

**Chart 18: OECD investment during the 1920s** 



Source: MacroHistory database, TS Lombard estimates

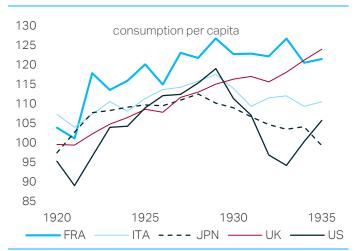
Chart 19: Post-WW2 "rebuilding"



Source: MacroHistory database, TS Lombard estimates

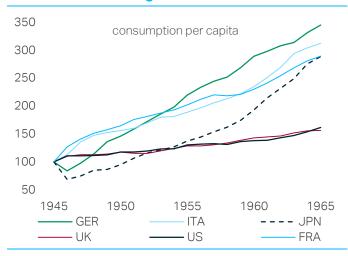


Chart 20: The birth of "consumerism" in the 20s



Source: MacroHistory database, TS Lombard estimates

Chart 21: Became a global trend in the 50s



Source: MacroHistory database, TS Lombard estimates

The auto industry again played an important role in the 1950s, with governments creating vast new motorway networks, which triggered a boom in construction, wholesale, retail and distribution. People with young families moved into the suburbs (something the authorities were keen to encourage given wartime bombing) and they furnished their homes with new appliances and technologies. As in the 1920s, wartime manufacturing techniques were redeployed to fulfill these needs, creating a culture of mass consumerism. The adults of the '50s had grown up in poverty during the Great Depression and then rationing during World War II. When consumer goods became readily available people were desperate to spend. By the 1950s, Americans made up 6% of the world's population, but consumed 30% of all goods and services. The US shifted from a production society, which focused on meeting basic needs, to a consumption society, which emphasized customers' wants. This was also a trend that reached Europe, once it had recovered from the immediate destruction of WW2. Meanwhile, there were further rapid improvements in manufacturing productivity and huge advancements in other areas such as international trade (containerization) and agriculture (fertilizers, pesticides, new machinery).

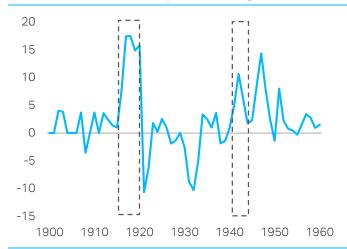
#### Rapid post-war credit growth

The post-war booms were fueled, at least in part, by huge credit expansions<sup>3</sup>. Chart 10 shows the US private credit ratio increased rapidly during the 1920s, plunged during the Great Depression, before surging again through the 1950s. We see a similar pattern of "financialization" in Europe, especially in the 1950s. The 1920s was actually the first time in history regular people were able to buy things on credit and pay back the loans in monthly installments, with the emergence of "hire purchase" agreements and an explosion in "mail order" retail and new chain stores. The appetite for "buy now, pay later" became even more widespread after WW2. Employment and wages boomed, while governments held borrowing costs below inflation to support the public finances. For the first time, people borrowed to buy houses, car, appliances and even swimming pools. In the US, the Federal Housing Administration and the Veteran's Administration offered low-interest loans to allow families to buy new homes. And the 1950s saw the introduction of the first credit cards.

 $<sup>^{3}</sup>$  It seems odd credit expanded rapidly during periods when the world was on a Gold Standard. In theory, a boom in one country should have caused offsetting gold flows, dampening the expansion. Some economists (e.g. KIndleberger) have blamed the accumulation of large US gold reserves during WW1. Others blame the interwar hybrid Gold Exchange Standard, which allowed countries to expand foreign FX reserves, increasing the elasticity of global credit. There was also pressure on the US not to tighten monetary policy in the late-20s to support the struggling British pound.

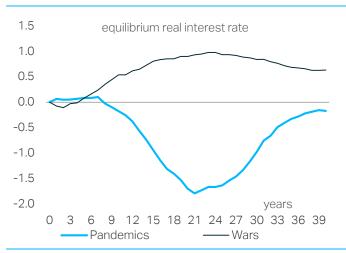


Chart 22: US inflation spiked during World Wars



Source: Bank of England historical database (US data)

#### **Chart 23: Inflation vs wars**



Source: Jorda, Singh, Taylor (2020)

# Roaring 2020s?

It is unlikely the post-COVID economy can recreate the secular boom of the 1920s or 1950s. With populations in decline, our main hope is that the pandemic will accelerate the adoption of new digital technologies, boosting long-term productivity. Remember, the sluggish 2010s expansion was associated with a marked deterioration in technological diffusion, which created growing disparities between the tech "superstars" and a fat-tail of productivity laggards, overly dependent on cheap labour and low borrowing costs rather than capital investment in cloud computing, robotics, VR etc. There is no doubt COVID-19 has accelerated the adoption of working-from-home etc. but it is difficult to predict how it will influence business practices going forward. And the adjustment might be tricky with stagnant population growth, because it could come at the expense of previous areas of strength, such as the service sector in city centres, commercial real estate and suburban retail. Compared to the 1920s/1950s, the authorities certainly have less scope to engineer another credit boom, since real interest rates have been close to zero for a decade and private-sector debt ratios are much higher than in the past. If there is any room to boost borrowing, it is on the household side - many businesses already look severely overleveraged. But leveraging up household balance sheets (again) is risky.

#### **Evidence from past pandemics**

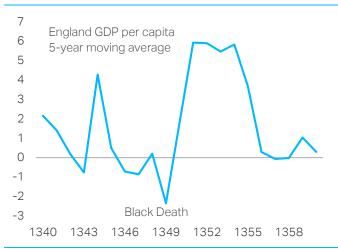
What about YOLO consumer attitudes, could these spark a sustained boom? Here we are dealing with psychology, which is difficult to forecast. Our guess is that spending will boom through the rest of 2021-2022, but without sustained improvements in productivity and wages, activity will settle back towards its sluggish pre-pandemic trends. Some economists have tried to address this question by looking further back in history to previous global pandemics, such the Black Death in England in 1349 and various Plague outbreaks in Medieval Europe. But it is not clear whether we can draw any useful lessons from those episodes. The most compelling study, from the San Francisco Fed, showed that previous pandemics were generally deflationary and associated with a degree of psychological scarring. Savings remained high and investment was lower, which reduced the equilibrium interest rate<sup>4</sup>. Yet it is important to remember that we

<sup>&</sup>lt;sup>4</sup> In makes sense that r\* should decline after a pandemic because the capital-labour ratio will rise, reducing the return on capital (assuming diminishing returns). This shouldn't happen during wars, which kill millions of people AND destroy the capital stock. Yet the Black Death experience isn't clear. Real interest rates increased (one of the BoE's great "Rate reversals", though this was due to deflation (nominal interest rates didn't move). The return on land - the main form of capital" – declined. Money velocity also plunged, which is deflationary signal – as COVID-19 reminds us.



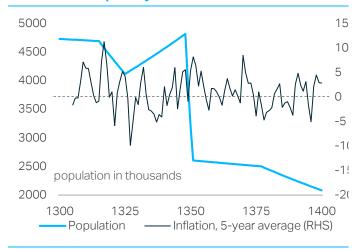
are analyzing a very different type of pandemic. The Black Death, for example, killed half of England's labour force and – by creating a shortage of workers – effectively broke the prevailing feudal system. GDP and the total population took hundreds of years to recover. Worse, the plague never really went away, with reoccurring outbreaks for hundreds of years. This meant more "scarring". And even in the case of the Black Death, we can find historical anecdotes about "conspicuous consumption", with a mini-boom in GDP per capita a few years after the outbreak.

Chart 24: Conspicuous consumption in 1350s?



Source: Bank of England historic database, TS Lombard

**Chart 25: Temporary reflation after Black Death** 



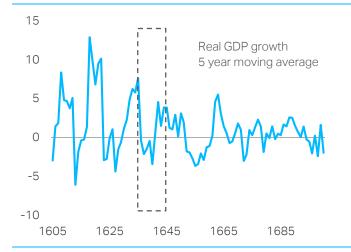
Source: Bank of England historic database, TS Lombard

# No perfect historical template

The contrast between wars and pandemics – pandemics tend to be deflationary whereas wars are reflationary – is interesting because it reminds us there is no perfect historical template for analyzing the aftereffects of COVID-19. The current pandemic has left the global capital stock intact - thanks to radical government support measures - which means there is no need for a 1920s/1950s "rebuilding" effort. Governments might choose to spend more on things like public infrastructure and tackling climate change, but this is a political choice rather than a natural consequence of the COVID-19 experience. And while the current pandemic has killed millions of people, it is not comparable to the total devastation of previous plagues. It has barely touched the global working-age population and there is no real prospect of a post-crisis demographic boom – quite the opposite, since fertility rates have plunged. So we are left hoping for a 2020s productivity boom, which ultimately depends on the unknowable scale and widespread adoption of digital technologies. Perhaps this will even help us to service the record debts we have accumulated - but there is no real basis for forecasting this scenario based on current info.

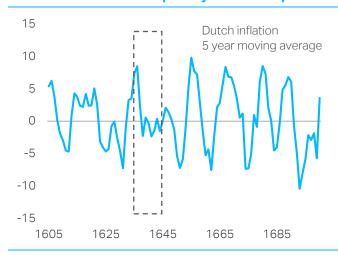


**Chart 26: Medieval Plague in Amsterdam** 



Source: Centre for Global Economic History, TS Lombard

**Chart 27: Another temporary inflation spike** 



Source: Centre for Global Economic History, TS Lombard

# 3. "MISGUIDED REVOLUTION"

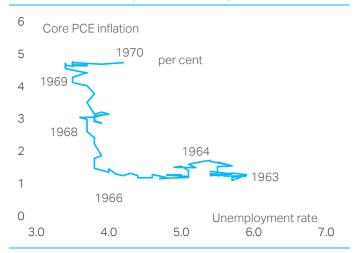
While we are skeptical about the Roaring 20s/50s narrative, we can see why it appeals to many sellside analysts. A new secular revival would be good news for everyone – both Main Street and Wall Street. Real interest rates would rise (r\* would be higher), but in a way that shouldn't be harmful for asset prices. Stock markets were buoyant though the 1920s and 1950s (though we wouldn't want to repeat the 1920s experience!). Postwar history also provide a fascinating insight into the great "rotation" story currently dominating equity markets. Chart 35, based on the Fama and French database shows the "secular stagnation" period has been extremely unusual for equities, with the returns from "growth" stocks (such as US tech) continually beating "value" stocks, breaking a 70-year trend of spectacular "value" outperformance. It is conceivable that a period of secular reflation would ultimately reinstate the historical norm, giving us both higher bond yields and a powerful rotation within stock markets. Yet there are minority of investors who see a much grimmer outlook for all asset classes - particularly if there is no secular growth revival and governments try to overcompensate for this with further stimulus.

#### From "ice" to "fire"

While we can debate the impact of COVID-19 on trend growth and productivity, there is much clearer evidence for a "regime shift in policy". This worries some commentators who believe the authorities - both fiscal and monetary - are going to repeat the mistakes they made during the late-1960s and 1970s, errors that would eventually lead to "stagflation". This could happen either because overly aggressive fiscal stimulus causes r-star to rise and central banks keep their policy rates too low for too long, or because the authorities fail to respond to a series of nasty supply shocks (e.g. de-globalization, persistent supply-chain disruption, rising commodity prices). Inflation expectations could rise, which would could reduce real interest rates below neutral even if there is no secular improvement in the equilibrium rate. It is notable that many of the "permabears" in financial punditry have recently jumped into the "inflationista" camp having spent much of the last 20 years worrying about a deflationary slump. All of a sudden, the most pessimistic views in markets are based on a fiery "inferno" scenario rather than a persistent "ice age". This make sense - for the first time in decades, macro policy now has a clear inflation bias.

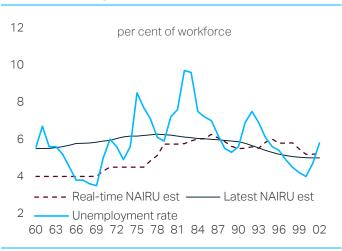


## Chart 28: US Phillips curve steepened in late-60s



Source: BLS, TS Lombard

**Chart 29: Policymakers made mistakes** 

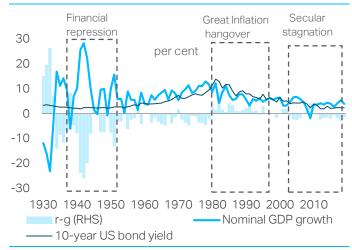


Source: Orphanides and Williams (2011)

#### Sounds of the 70s

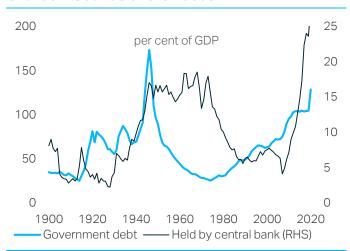
The economic historian Christina Romer published an influential paper in 2007, looking back at the US experience of the late-1960s/early 1970s to identify want went wrong in macro policy. She highlighted a "misguided revolution" in thinking, which contributed to a series of errors. The big issue, according to Romer, was that the authorities abandoned their faith in balanced budgets and the natural rate of unemployment (the 1950s framework) and instead believed they could achieve permanently higher output by accepting moderately higher inflation. Then, as inflation started to rise to uncomfortable levels, they made no serious attempt to reduce it. For long periods, the authorities also over-estimated the supply-potential of the economy, believing they had significantly more "slack" than was the reality (Chart 29). For today's bears, there are obvious similarities with the policy "regime change" that has taken place since the start of COVID-19. The Fed has abandoned the NAIRU concept and is keen to have inflation overshoot its old 2% target. Meanwhile, the Biden administration is engaging in radical fiscal stimulus. Could this latest attempt to "run the economy" ultimately backfire, recreating 70s-style stagflation?

**Chart 30: Shifting policy regimes** 



Source: MacroHistory database, TS Lombard estimates

Chart 31: Sounds of the 1950s



Source: IMF, TS Lombard

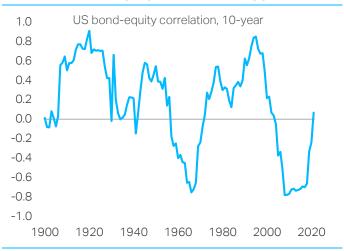


## Chart 32: Inflation was countercyclical in 1970s



Source: BEA, BLS, TS Lombard

## **Chart 33: Bond-equity correlation flipped**



Source: MacroHistory database, TS Lombard

# Why the 1970s is scary

If the Roaring 20s is the Goldilocks scenario for financial markets, a rerun of the 1970s would be its inverse - a potential disaster for most asset classes. The authorities might lose control of inflation expectations, which would make consumer prices countercyclical (rather than procyclical). As we explained in a previous Macro Picture, it is the cyclicality of inflation that determines the correlation between bonds and equities. If the CPI became countercyclical, as it did in the 1970s, the correlation between bonds and equities would flip from negative to positive. This, in turn, would make fixed income a source of risk for portfolios, with both bonds and equities losing value at the same time. Interestingly, investors could get a degree of protection from holding "value", which performed better than "growth", but only gold offered genuine protection from stagflation. In fact, with the gold-equity correlation flipping from positive to negative, precious metals were the best way for investors to diversify their portfolios. Some are hoping cryptocurrencies can serve a similar purpose in modern finance, but given the persistent positive correlation between Bitcoin and equities, this seems rather doubtful.

## 70s endgame is possible - but a long way off

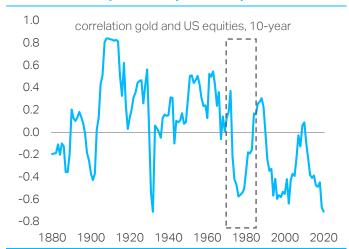
Just as the Roaring 20s narrative is too bullish about the 2020s, it is wildly premature to worry about 1970s-stagflation (despite Larry Summers' latest warnings<sup>5</sup>). First, we are not convinced fiscal policy will become radically expansionary during the 2020s. The current US stimulus is large, but it will fade automatically as the economy reopens. Meanwhile, the authorities in Europe do not seem to be doing enough to shield private-sector balance sheets ("scarring" is more likely), while China has already moved into a different phase of the recovery, tightening policy. Second, even if monetary policy resembles the "misguided revolution" of the late-1960s, there are critical differences today. We still have independent central banks who are contemplating at most - a mild inflation overshoot. They also have plenty of ammunition to deal with any inflation outbreak, assuming they are prepared to respond. Finally, there are big institutional and labour-market differences compared to the 1970s, which was an era of powerful trade unions

<sup>&</sup>lt;sup>5</sup> Larry Summers sees three scenarios for the macro outlook, each with equal (one third) probability: (i) Goldilocks; (ii) Recession because the Fed hikes rates; and (iii) stagflation. Scenarios (i) and (iii) are roughly our Roaring 20s and 1970s scenarios. We haven't considered scenario (ii) because this is something central banks have largely ruled out. Our guess is that a mild Goldilocks scenario is likely over the next few years, without breaking out into a full secular revival. Stagflation is only likely if fiscal policy becomes ever more radical – we disagree that Biden stimulus is sufficient.



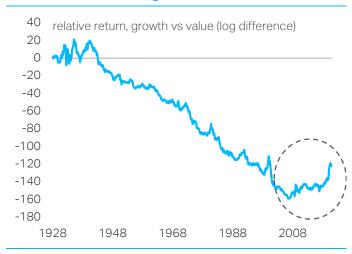
and widespread wage indexation - creating automatic "second-round" effects. Even with commodity hikes and pipeline inflation pressures, wages could stay relatively subdued.

**Chart 34: Gold provided portfolio protection** 



Source: MacroHistory database, TS Lombard

#### Chart 35: Secular stagnation was unusual

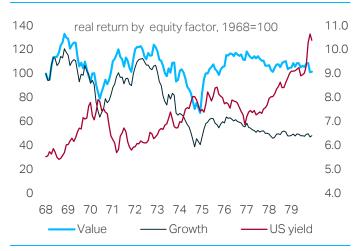


Source: Fama-French database, TS Lombard

# What if we are wrong?

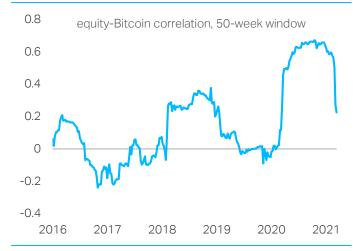
From a market perspective, there is obviously a huge difference between a mild reflationary scenario and a more serious inflation outbreak. So where is the boundary between the two? Chart 39 gives a simply scatter plot for Robert Shiller's cyclically-adjusted PE (CAPE) vs US inflation. When inflation is below 2%, the relationship becomes very flat - low inflation can be associated with a wide dispersion of market valuations. Yet, the correlation begins to steepen at inflation rates above 2.5%, suggesting this would be incompatible with the sort of CAPE valuations we see currently. In fact, once inflation rises above 3%, the entire distribution of the CAPE sits below 20, which is obviously a long way from today's reading of 35 (consistent with a plunge in prices of around 40%, assuming constant earnings). This analysis is consistent with Russell Napier's recent observation that "bad things" start to happen in stock markets when inflation rises above 3-4% because it elicits a different sort of policy response. We can see this in the 1960s/70s episode, where 4% inflation was a critical danger level for stocks and bonds.

**Chart 36: Value outperformed during 1970s** 



Source: Fama-French database, TS Lombard

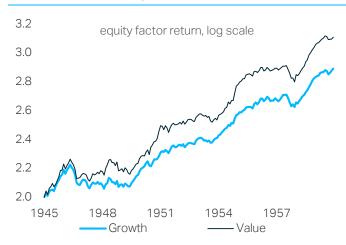
Chart 37: Is Bitcoin really a "safe asset"?



Source: Datastream, TS Lombard

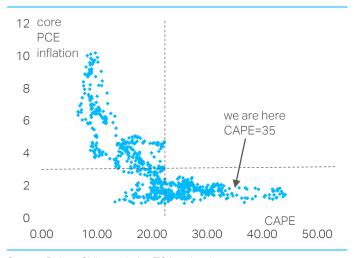


Chart 38: Value outperformed in the 1950s



Source: Fama-French database, TS Lombard

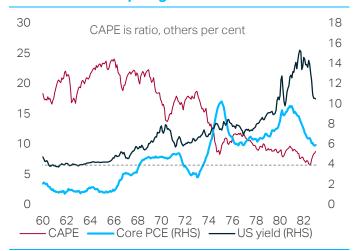
Chart 39: CAPE never above 22 if inflation>3%



Source: Robert Shiller website, TS Lombard

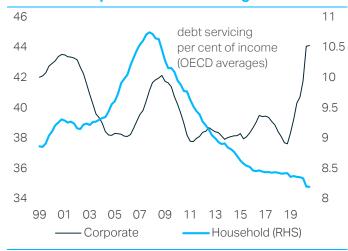
Inflation above 4% would clearly be a disaster for asset prices, though it is less obvious what would happen if inflation moved into the 2½ to 4% range. We suspect the authorities would initially make every effort to suppress yields in such an environment, rather than allow a potential collapse in bond markets to spill over into widespread financial destruction – especially if they believed inflation was only temporarily at these levels. For some of the bears, this is act of "financial repression", which would "take us down the spectrum of a command economy". Yet there might be good reasons for central banks to voluntarily do this, even if they are not forced to do so by governments who are worried about the sustainability of their fiscal positions. Corporate debt ratios are high compared to the past and the authorities might need to suppress yields in order to prevent widespread corporate stress (assuming higher rates do not reflect a better revenue outlook). While such actions increase the threat of a more serious inflation outbreak, they also mean the authorities are providing a degree of protection against rising yields - this is essential for investors who are trying to figure out how to set up their portfolios.

Chart 40: Stocks plunged once inflation>4%



Source: Robert Shiller database, BLS, TS Lombard

Chart 41: Corporate debt servicing risk



Source: BIS database, TS Lombard estimates



#### Bottom line - what should investors do?

While we are skeptical about the "new macro regime" narrative, COVID-19 (plus the policy response from the authorities) has created serious uncertainty about the medium-term outlook. Our analysis suggests, after a temporary burst of strong growth and a spike in inflation, the basic macro environment will not be radically different from how it looked before the pandemic. There will be no sustained breakout in the equilibrium real interest rate (r\*), which means the broad theme of secular stagnation will continue. Nevertheless, given the uncertainties we face, we have outlined two alternative macro regimes for the 2020s - the bulls' "Roaring 20s" narrative and the bears "Sounds of the 70s" scenario. The good news for investors is that, since the immediate post-COVID recovery will offer a flavour of both these regimes - strong growth and the occasional inflation scare - they don't really need to take a strong view on the medium-term outlook. A portfolio that is short bonds, constructive stocks and positioned for a rotation between equity sectors is likely to be appropriate both for the global "re-opening" phase and potentially also the longer-term. Analytically, this is because r-star is already moving higher, albeit due to the reversal of the COVID-19 recession rather than a new secular growth story.

Of course, it is harder to protect portfolios against an eventual rerun of the 1970s, especially if the bond-equity correlation flips from negative to positive. "Value" would again outperform "growth", but real returns across all asset classes (except gold) would be poor. Yet even if we cannot totally exclude 70s-style stagflation as a medium-term outlook – especially if there is a genuine regime change in fiscal attitudes – this scenario is unlikely to materialize quickly. There is no reason to think inflation becomes "non-linear" once it breaches 2%. And, of course, central banks will try to suppress any serious selloff in bond markets to preserve financial stability, which provides a degree of protection for the COVID-19 recovery period - the policy "put" remains in place. Maybe the bears are right to warn about "financial suppression" but, for the short term at least, this is actually a good reason not to panic about what "regime change" might bring.