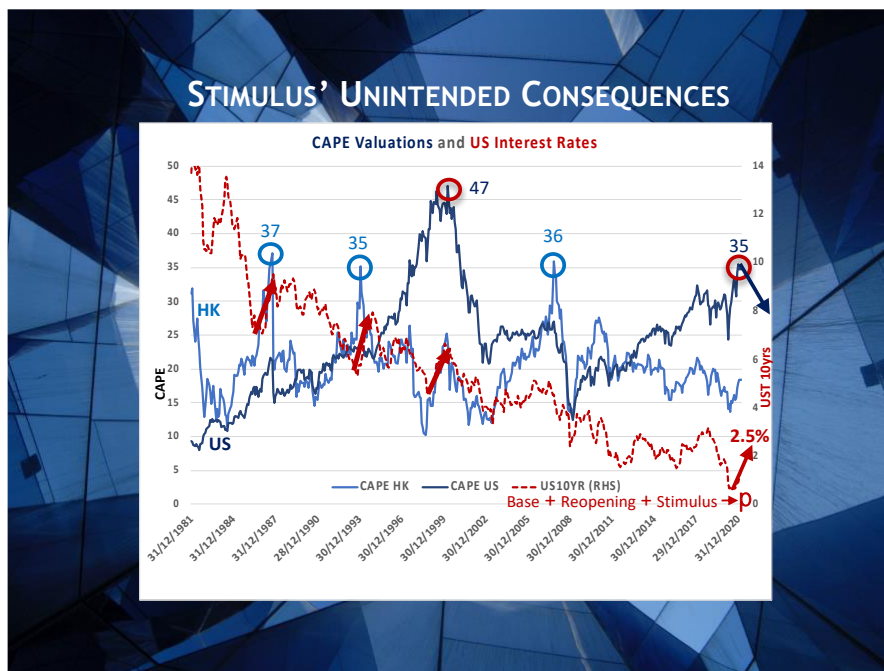




INFLATION MAY REQUIRE YIELD CURVE CONTROL



Stimulus' Unintended Consequences

Which unintended consequences from massive stimulus does our history reveal?
 Why are economists divided on inflation prospects from this stimulus?
 What would be the market reaction to gradually rising inflation?

“Rules are not necessarily sacred, principles are.”

[Franklin D. Roosevelt, August 1935](#)

Welcome to a new discussion between Larry and Xin, two prominent economists from the Keynesian tradition, offering a bi-weekly US-Chinese debate. Today, Larry shares his perspective from Washington with two charts and Xin comments from Beijing.
Disclaimer: names are fictional, but analysis should be realistic.

Larry: Happy weekend Xin, and welcome to the start of a big US recovery. This looks like the US challenge of the century, and President Biden appears to take a page from FDR by insisting on principles while bending the rules.

Xin: Hello Larry, indeed, and you also seem to remember Rahm Emanuel's advice from 2008 where he implored that “you never let a serious crisis go to waste”. In that spirit, the House already passed another \$1.9 trillion stimulus bill last night.

Larry: Well, we have a much more complex problem than often acknowledged, but the markets seem to catch up eventually. This week, interest rates backed up as commodity prices increased by 15% this year, while technology stocks have corrected, with Tesla now in a -20% bear market. Let us look at some unintended consequences, including inflation, rising interest rates, yield curve control, and a weaker dollar.

Xin: Looking at the US from the outside, I observe something like a perfect storm, sadly, with over 500,000 Covid deaths and over 10 million officially unemployed, plus major social, health, infrastructure, environmental and geopolitical challenges amidst political polarization. Could this be the right time for a Biden New Deal?

Larry: Indeed, our politicians say this is the ideal situation to go big, and big we go. We had a \$900 billion stimulus bill in December and have another \$1,900 billion now on the way, even before the bazooka comes out with multi-trillion spending plans on infrastructure and the environment, with a short political window closing by summer.

Xin: The progressive economists finally have the wind of public opinion in their back to fight the pandemic like a war, as [Krugman](#) has stated. Pragmatists like [Wolf](#) call this a risky experiment, given uncertainty about output gaps and inflation pressures. But [Summers](#) sparked an argument with his critique that stimulus exceeding 15% of GDP is excessive without any increase yet in public investment and in jobs programs.

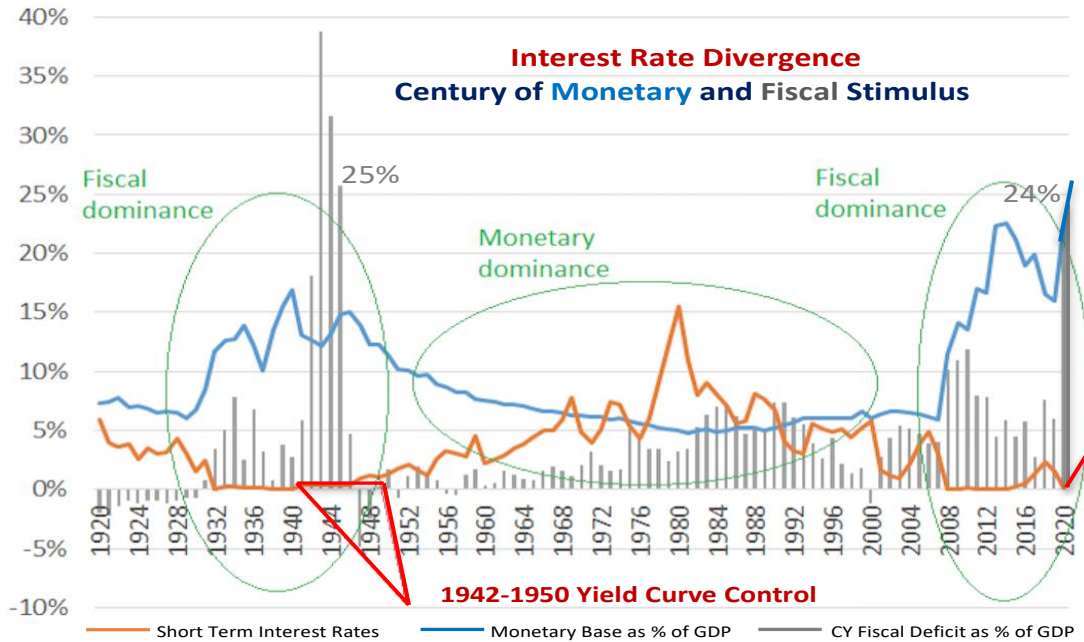
Larry: We have not seen anything of such magnitude since the 1940s. Our fiscal deficit was 24% of GDP in calendar year 2020, it is already on track to be 13% of GDP in 2021 before an infrastructure package that could add another 10% of GDP to the deficit. And 30% broad money growth increased our monetary base from 15% to 25% of GDP with large precautionary household savings waiting to be spent later this year.

Xin: This reminds me of the aggressive [Chinese response](#) to the 2008 financial crisis, where the stimulus exceeded 27% of GDP over two years. And we have built a modern [high-speed rail network](#) of 25,000 km for over \$500bn that has raised our productivity. We have not experimented with big monetary stimulus and our inflation stayed low. But in 2020, China has remained cautious and only added 5% of GDP as [stimulus](#).

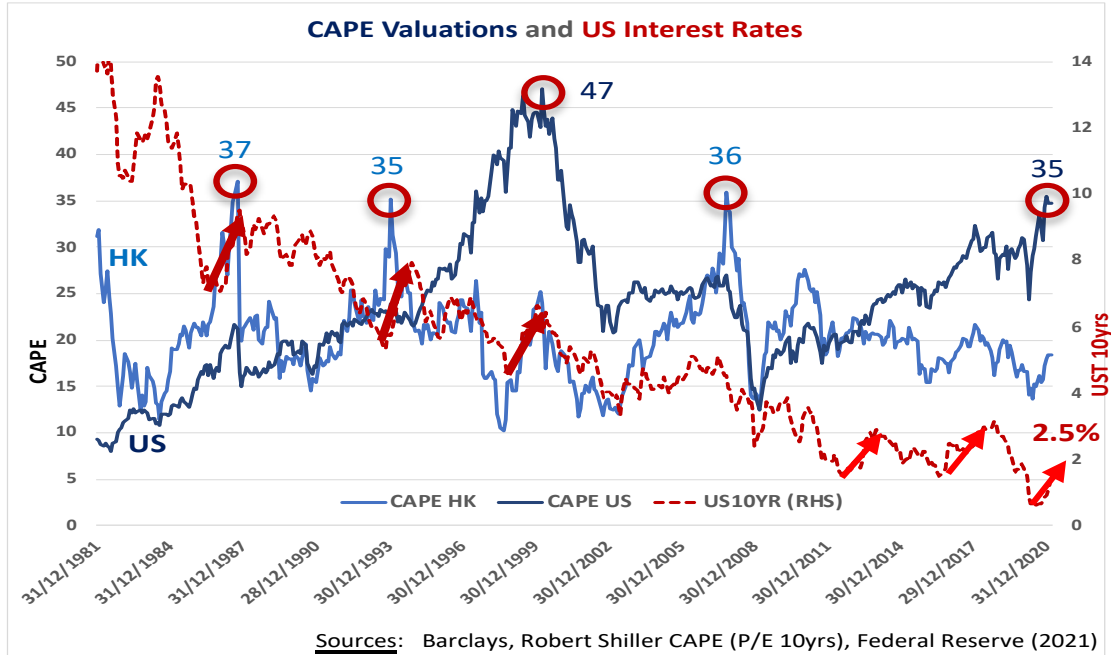
Larry: History has some lessons for us: Never has any OECD economy exceeded fiscal deficits of 15%, with the one exception of Ireland's bank bailouts in 2010. But during 1943-1945, the US did run fiscal deficits beyond 25% of GDP. As illustrated below (chart 23), the US monetary policy had to resort to [financial repression](#), with [yield curve control](#) during 1942-1950, where long-term interest rates were fixed at 2.5%. As inflation rose to 18% in 1946, negative real rates helped to reverse the [debt buildup](#).

Xin: And the Japanese history can add some insights as well, where the [BOJ](#) started yield curve control in 2016 and also purchased a broader range of assets, including equities, without succeeding to bring back inflation. But [fiscal deficits](#) remained more modest while the country remains a net international creditor, despite its high debt. Nowhere has monetary financing of fiscal deficits been considered successful.

Larry: So the big question being asked today is how massive financial stimulus can lead to inflation beyond the customary 2% to 3% range. A necessary condition is that stimulus creates additional spending, rather than higher savings or balance sheet restructurings as in 2009. Some shortage of factors needs to create an excess demand over sticky supply. Moreover, imported inflation through commodities prices can arise when real interest rates are too low and the currency is depreciating. To me, it seems like all three of these conditions are realistic today: higher spending creating higher demand, sticky supply of certain services and commodities, and a weaker dollar.



Sources: US Treasury, CBO, Federal Reserve, IMF, Morgan Stanley, LynAlden (2021)



Sources: Barclays, Robert Shiller CAPE (P/E 10yrs), Federal Reserve (2021)

US Inflation Pressure Three Stages to Watch with Rising Interest Rates:
 Base Effect 2021H1 → Reopening Effect 2021H2 → Excessive Stimulus 2022
 HEAD FAKE up to 2.5% MARKET CORRECTION up to 5% YIELD CURVE CONTROL brake

Xin: And if you wanted to play devil's advocate, you would need to argue that high unemployment and weak unions will keep wages controlled, that we enjoy an abundance of oil and commodities, and that technological innovation and trade as well as population dynamics are disinflationary factors, at least in the longer term.

Larry: Actually, both sides may be correct, but on a different time horizon. We may well have powerful long-term disinflationary forces. But we cannot ignore massive fiscal stimulus programs and unprecedented monetary expansion in the shorter term. We are already experiencing a low-base impact from last year's shutdown that is now reversing in the first half of the year, and then a full-scale reopening demand push and spending spree that is expected during the second half of 2021, before the impact of infrastructure spending and a weakening dollar may create additional pressures.

Xin: Let us then look at the market reaction this week and whether it may signal more trouble down the road. [Inflation expectations](#) have rebounded from 1% to above 2% and [long-term US treasuries](#) have increased to 2.2%, having lost 14% of value this year. Obviously, equity prices are determined by dividend discount models and negatively impacted by increasing interest rates, and tech stocks are most exposed at currently very high multiples. But at which interest level can the straw break the camel's back?

Larry: Mathematically, a one percent increase in interest and funding rates for Tesla would imply that its forward P/E multiple is declining from now 160 to 80. However, markets can be irrational for extended periods, before inflation can break a bubble. As illustrated above (chart 24), we experienced several smaller interest rate increases in the range of 1% during 2012 and 2017, without major impact on equity markets. But when interest rates increased by over 2% in a year, as in 1987 and 1994 and 1999 (red arrows) during high market valuations measured by CAPE (long-term average P/E), we experienced major market declines as during the US tech bubble in 2000. And [recent market surveys](#) show that we may be back into bubble territory for tech stocks.

Xin: Hong Kong is another equity market that is driven by US interest rates through the dollar peg and currency board that was established in 1983. Its average valuation is around 20 P/E as compared to 24 P/E for the US market, given its larger share of less expensive financials. But when valuations reached 35 P/E in 1987, 1994, and 2007 there were sharp reversals. Currently, the HK market valuation stands at 18 P/E, but the US market is at 35 P/E, a danger zone when interest rates increase significantly. Moreover, financials and materials might be the main beneficiaries from inflation.

Larry: So where does that leave us today? We have the largest challenge since FDR and the largest fiscal and the largest monetary stimulus since 1945. And we likely will get 2.5% inflation from a low-base effect by this summer, and we probably will see a market correction if long rates rise beyond 2.5%. If inflation dynamics deteriorate after the reopening with lower savings, supply bottlenecks, demand pressures, a much weaker dollar, and imported commodity price inflation, then we may face a serious inflation problem next year and FED yield curve control may become inevitable.

Xin: As always, economists have different perspectives, but markets will soon decide. Either a "[head fake](#)" as PIMCO recently put it, or an "[inflationary tiger](#)" as the BOE chief economist warned this week. Enjoy the ride but better buckle up.