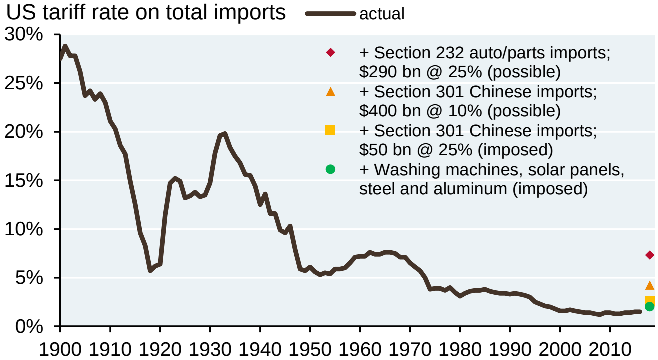
The room where it happens: my meeting with a group of Congressmen and Senators

First, a comment on tariffs. A half-century of globalization drove US tariff rates from 7.0% in 1960 to 1.5% on all imported goods[1]. Tariffs imposed so far on washing machines, solar panels, steel and aluminum don't move the needle much, and neither do 25% tariffs on $50bn of Chinese imports. But if China does not address intellectual property issues and also retaliates, Trump has mentioned 10% tariffs on another $200 - $400 bn in Chinese imports. This would affect US consumer prices more than tariffs imposed so far, which are mostly applied to commodity/machinery imports. Trump also mentioned possible tariffs on US auto and auto parts imports as part of a Section 232 national security investigation.

If all these tariffs were imposed, it would represent the largest tariff increase since the 1930's and "trade war" would be a fair way to describe it, particularly if the US withdraws from NAFTA as well. Markets would probably shoot first and ask questions later, rather than waiting to see what the inflation or profit consequences are; some damage to the US would be self-inflicted given the global nature of supply chains. On profit risks, this includes US companies operating in China against whom China might retaliate, a topic we discussed last time and which is illustrated in the third chart. Despite impressive increases in US GDP growth (which might hit **4% in Q2**) and in profits, business/consumer confidence, capital spending and housing demand, it looks like it's going to be a volatile summer for investors.

A century of globalization: US import tariffs, 1900-2018
US tariff rate on total imports



Source: Esteban Ortiz-Ospina and Max Roser "International Trade", US International Trade Commission, JPMAM. 2018.

The "own goal" of US Section 301 tariffs on China
Most of them actually affect non-Chinese companies

Industry	NAICS code	Exported to the US by: US and other non-Chinese companies located there	Chinese companies
Chemicals	325	15%	85%
Machinery	333	59%	41%
Computers	334	86%	14%
Electrical equipment	335	63%	37%
Misc. manufacturing	339	68%	32%

Source: Table 3 in "Trump Tariffs Primarily Hit Multinational Supply Chains, Harm US Technology Competitiveness", M. Lovely, Peterson Institute, 2018. There have been 5 "own goals" so far in the World Cup, and 46 in the history of the tournament.

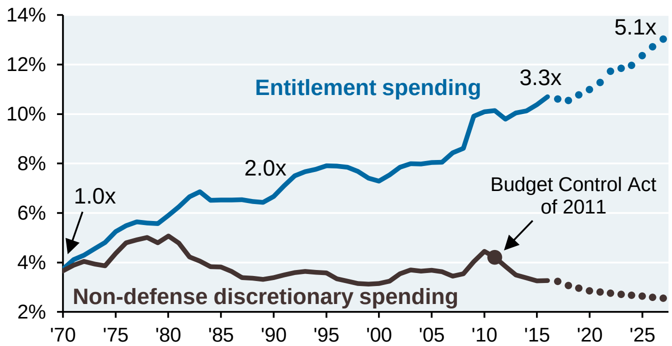
The US does a lot of business in China, but through its in-country subsidiaries rather than via exports, US$, billions

Source: Deutsche Bank. June 2018.

[1] Our chart shows tariffs as a % of **total imports**. Tariffs could also be shown as a % of goods subject to US tariffs (e.g., dutiable goods), which declined from 12% in 1960 to 5% in 2016. These figures are higher since 70% of US imports are now duty-free (see **chart**). When estimating tariffs, we assume that import levels do not change. In reality, some imports would be displaced by domestic goods, limiting the amount of tariffs actually paid.

The room where it happens. In 2017, I wrote about how entitlement spending is squeezing out the non-defense discretionary spending that is critical to future US growth and productivity. The Committee for a Responsible Federal Budget[2] invited me to address some members of Congress on this subject, and on why Treasury yields have remained low despite a deteriorating debt and deficit outlook, a respite that may not last forever. This rest of this note summarizes materials I presented to them last week in DC.

Non-defense discretionary spending gradually fades away
% of GDP, with ratio of entitlement to non-defense discretionary



Source: CBO, Haver, JPMAM. January 2017. Dots are CBO projections.

On the chart above, most Representatives and Senators at the meeting were open to discussing the issue, but were far apart in terms of solutions. I had a similar experience at a recent board meeting of a global foundation that my wife has been on for many years. Harvard's Graham Allison spoke to the board about the US-China rivalry, and on how a bridge near his office in Boston has been under repair for *years* while a similar bridge in China was repaired in just 48 hours (he showed a time-lapse video as proof). Everyone was frustrated by this anecdote and nodded in disapproval, but **Allison let them off too easily.** He might have asked them a couple of questions… Why does this happen in the US? What fiscal resources might have to be diverted from other programs to fix crumbling US infrastructure, and when might the government need to invoke eminent domain to advance the common good over the rights of individuals or interest groups[3]? For the (mostly) progressive board members in attendance, this could have been a more interesting and revealing discussion.

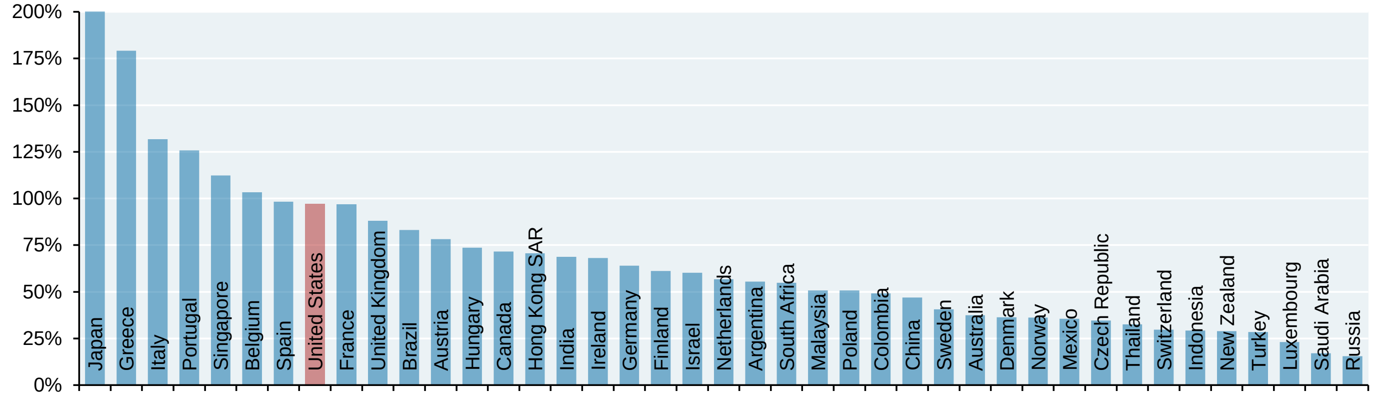
[2] The **CRFB** is a bipartisan public policy organization that addresses federal budget and fiscal issues. Its board of directors includes former Members of Congress and directors of the Office of Management and Budget, the Congressional Budget Office and the Federal Reserve (Volcker, Panetta, Rivlin, Bowles, Simpson, Hoagland, etc).

[3] In our energy paper this year, we discussed the proposed 1 GW high voltage direct current line project designed to bring hydropower from Quebec to New England states looking to reduce reliance on nuclear power and natural gas. The project was **rejected** by New Hampshire for tourism reasons after being approved by neighboring states.

Topic 1: The US Federal debt in context

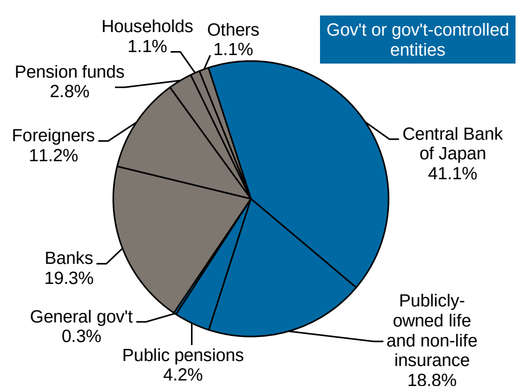
- The US doesn't have the *highest* debt in the world, but this is not a club it should be looking to join
- How does Japan survive with high debt and low rates? By abandoning a central pillar of capitalism, in which the private sector determines the yield on government debt rather than the government determining the yield itself. As seen in the pie chart, government and government-controlled entities own well more than half of all Japanese government bonds
- As for Italy, its debt levels have resurfaced again as an issue for markets[4], and have contributed to miserable growth conditions that are even worse than Japan's over the last 30 years
- In other words, you pay a price in the long run for high levels of government debt, even if you monetize them

Government debt as a % of GDP



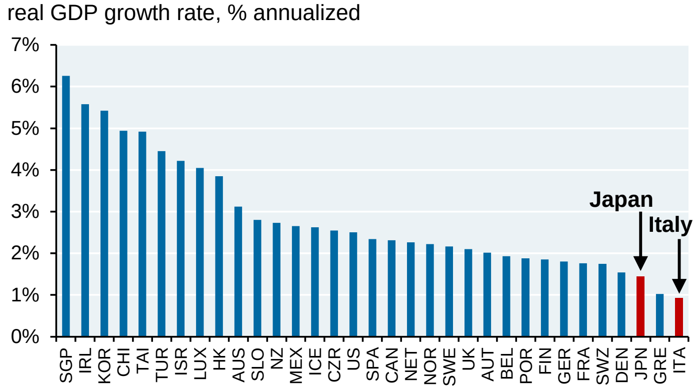
Source: Bank for International Settlements. December 31, 2017.

Breakdown of Japanese Government Bond holders



Source: Bank of Japan, Ministry of Finance. December 2017.

Italy and Japan: lowest growth rates of the last 30 years
real GDP growth rate, % annualized



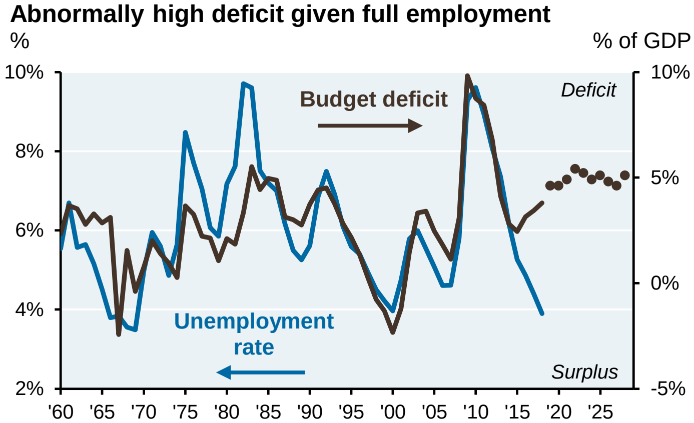
Source: IMF, JPMAM. 2017. CZR data is since 1996, SLO since 1993.

[4] In recent weeks, the cost of credit default swaps on **Italy** that protect investors against the risk of Italy converting its Euro-denominated government bonds back into Lira has been rising. This has occurred despite comments by Italy's new finance minister Giovanni Tria stating that this would never happen: "*there is no discussion about leaving the euro. The government is determined to prevent any emergence of market conditions that would lead to leaving the euro. It's not just that we don't want to leave it: we will act in such a way that conditions that could call into question our presence in the euro area don't start to emerge*". Source: JP Morgan Economic & Policy Research.

Topic 2: The budget deficit and interest costs

- The budget deficit is abnormally high for a time of full employment. While CBO projections peg the deficit at 5% of GDP over the next decade, in the next recession it could easily hit 8% of GDP
- Recent tax cuts were unusual in that they took place late in the cycle rather than early in the cycle, and took place at a time of high debt rather than low debt[5]
- Interest costs to GDP are manageable when looking at the *existing* Federal debt, even when factoring in a rising yield curve as the Fed hikes rates (blue line, third chart). But once you add the cost of financing future deficits to the mix, interest costs start to reach 1980's levels again (red line)

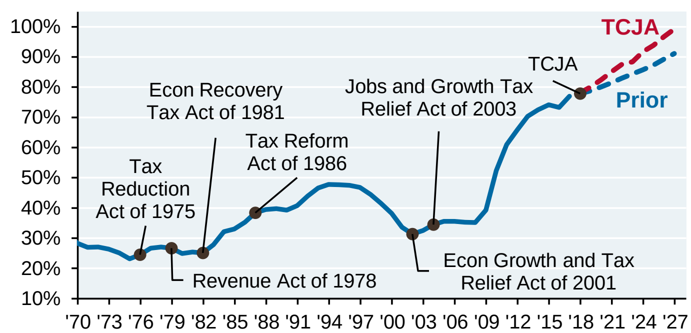
Abnormally high deficit given full employment



Source: JP Morgan Economic Research, CBO. 2018. Dots indicate estimates.

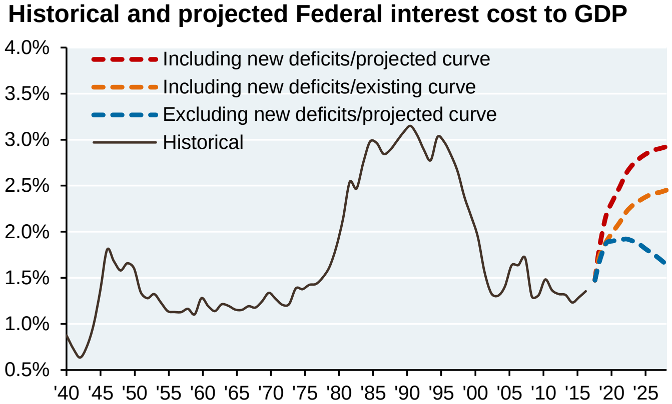
Prior tax cuts coincided with much lower levels of debt

Federal debt as a % of GDP



Source: Congressional Budget Office, U.S. Treasury, CRFB. TCJA projections based on Senate bill as of November 14, 2017.

Historical and projected Federal interest cost to GDP



Source: Bloomberg, JPMAM, CBO, Federal Reserve. April 2018.

[5] **Tax Cuts and Jobs Act**: its corporate tax cuts cost $329 bn, while its personal tax cuts cost $1.1 trillion. I understand the rationale for *corporate* tax reform, a policy that **Obama's Fiscal Commission** supported as well in 2010: "*The current system puts US corporations at a competitive disadvantage vs their foreign competitors. A territorial tax system should be adopted to help put the US system in line with other countries, leveling the playing field*". However, I don't understand the reason for the TCJA *personal* tax cuts for the reasons cited above.

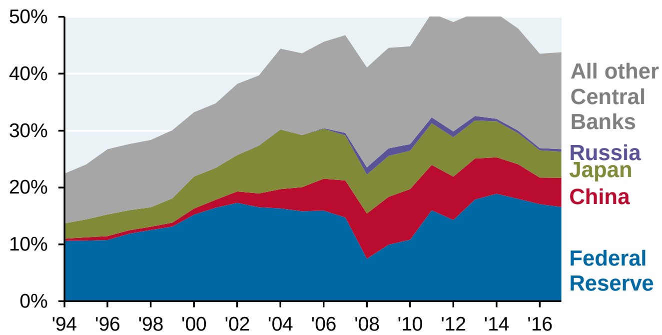
Topic 3: The elephant in the room

- Why hasn't the worsening debt and deficit outlook resulted in rising US Treasury yields? The elephant in the room: trillions in intervention by Central Banks in the developed and developing world, as they purchase US Treasuries and other G-3 long maturity bonds
- Bizarre experiments in Europe and Japan have resulted in *negative* government bond yields, and the ECB buying *corporate* bonds faster than companies issue them. These incestuous relationships have indirectly created artificial demand for US Treasuries, which still have positive yields. Central Bank ownership of all US Treasury bonds rose from 15% in the 1980's to 50% a couple of years ago
- I wouldn't count on these experiments lasting forever, after which the private sector will once again be the marginal source of demand for US Treasury bonds. The latest projections show the supply of US Treasuries, high grade and high yield bonds rising from $1.0 trillion in 2017 to $2.3 trillion in 2019

G-4 central bank balance sheets
Fed/ECB/BoE/BoJ balance sheets, US$ trillions

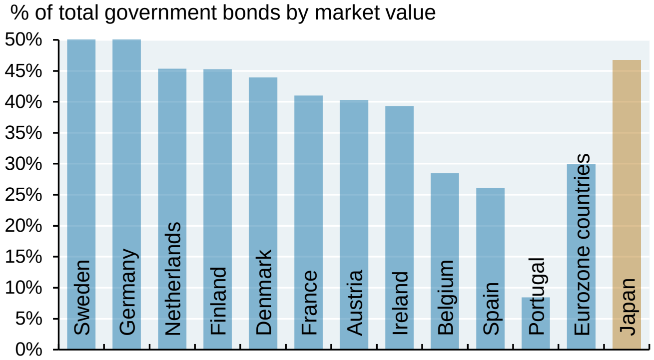
Source: National central banks, JP Morgan Economic Research. May 2018.

Official sector ownership of US Treasuries
% of total owned



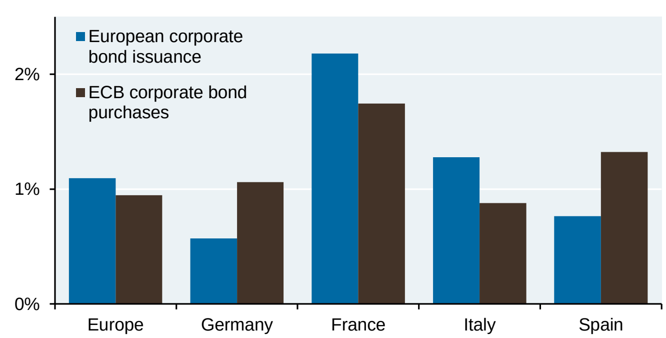
Source: US Treasury, JPMAM estimates. 2017.

Government bonds trading below 0% yield
% of total government bonds by market value



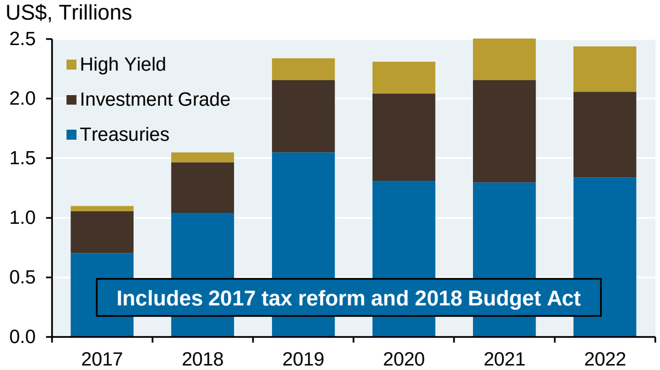
Source: J.P. Morgan Index Research, JPMAM. June 18, 2018.

ECB buying corporate bonds as fast as companies issue them
% of GDP, since Corporate Sector Purchase Programme inception in 2016



Source: Bridgewater Associates. February 7, 2018.

US fixed income supply
US$, Trillions

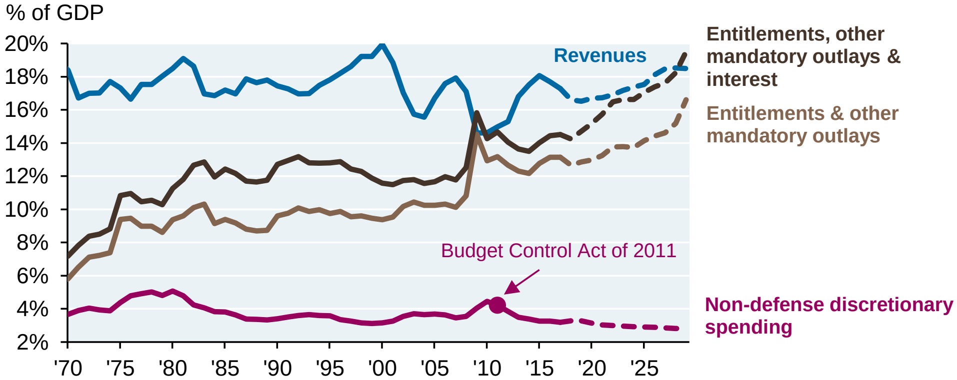


Source: Deutsche Bank Global Research. June 8, 2018.

Topic 4: what about the future?

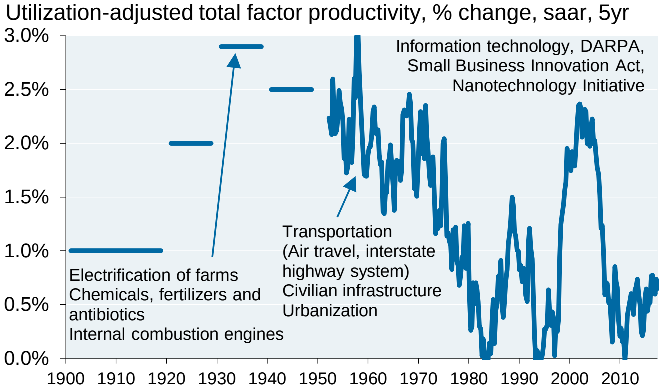
- The dreaded **crossover point** is coming: when 100% of government tax collections are entirely consumed by entitlements and interest on the Federal debt
- The steady decline in non-defense discretionary spending raises concerns about where the next US productivity wave will come from, since prior ones were in part catalyzed by government spending on farm electrification, civilian and military transportation infrastructure, information technology and drug development
- Over the last 1,000 years, reserve currency eras often came to an end due to a combination of too much government spending relative to tax collections, and military adventurism. The crossover point shown below is not a confidence-builder in this regard

Non-defense discretionary spending gradually fades away
% of GDP



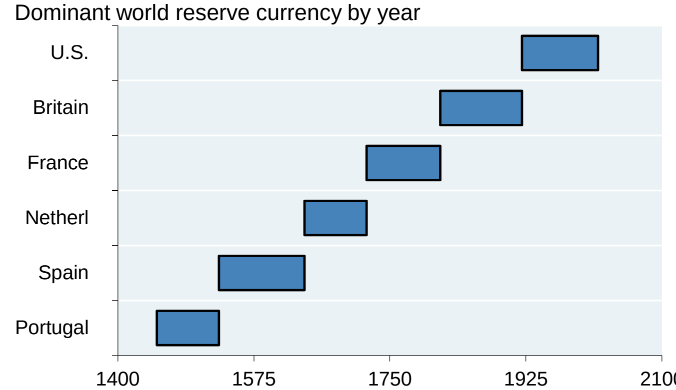
Source: CBO, Budget and Econ Outlook, JPMAM. April 2018.

Where will the next productivity wave come from?
Utilization-adjusted total factor productivity, % change, saar, 5yr



Source: CBO, Federal Reserve Bank of San Francisco. Q1 2018.

Nothing lasts forever
Dominant world reserve currency by year



Source: JPMAM, Hong Kong Monetary Authority, Central Bank archives

In the next *Eye on the Market*: the remarkable outperformance consistency of the US-EM regional equity barbell vs Europe and Japan; of an overweight to tech/healthcare/staples; and of private vs public equity.

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