



Global

Cross-Discipline

Thematic Research

Date

4 June 2019

Is Europe going to be the next Japan? - Part 3 - The conclusions...

In this three-part series, we have compared and contrasted Europe post 2008/09 with Japan post 1990.

In the prior two notes, we first examined areas where Europe looks like Japan ([link](#)) with the appropriate lag, and then looked at areas where the experience so far is very different ([link](#)). In this third part, we take a more balanced and holistic view of the debate and draw what we think are some non-consensus conclusions.

[Jim Reid](#)

Strategist

+44-20-754-72943

[Francis Yared](#)

Strategist

+44-20-754-54017

[Mark Wall](#)

Chief Economist

+44-20-754-52087

[Quinn Brody](#)

Macro Strategist

+1-212-250-0275

[Marc de-Muizon](#)

Economist

+44-20-754-77635

[Sukanto Chanda](#)

Strategist

+44-20-754-52461



Abstract

In this three-part series, we have compared and contrasted Europe post 2008/09 with Japan post 1990. The definition of what being 'like Japan' entails is open to much debate and interpretation, but the area of most similarity is undoubtedly demographics. If you believe the 'demographics is destiny' mantra, then Europe's path has been well mapped out by Japan. However, the two experiences are a quarter of a century apart and the global environment has moved on since the early 1990s. Back then, globalisation was accelerating, multilateral organisations were thriving, and the global labour supply (ex-Japan) was growing quickly. This was positive for global growth and disinflationary. Japan's failure to normalise inflation was due not only to an inadequate policy response to the bursting of the credit bubble but also to the global disinflation environment. Maybe, low inflation was also partly a political choice by an ageing population that was economically and socially homogenous and that had significant net savings.

Europe could be different. On the one hand, Europe's response to its 'turning point' recession was more proactive. On the other, the background is very different. A combination of a shrinking global workforce outlook, less globalisation, and more populism could lead to higher inflation in the future than Japan experienced post 1990. Fewer workers may mean more wage pricing power, and populism may reinforce this by increasingly directing policy (e.g. fiscal) towards those 'left behind'. Also, while we live in a fiat currency era, money printing can always be used to finance this if there is political will. Inflation is a political choice that may become more attractive globally as the years of lower growth and high debt progress. So ultra-low inflation need not be inevitable despite bad demographics.

An interesting angle we consider is that on many measures (e.g. GDP per capita, human development, education, living standards, income inequality), Japan has actually had a good outcome over the last 25-30 years. Europe would be pleased to have 1% annual productivity growth!

But is this realistic? Although we have argued that Europe's policy response was collectively superior to Japan's, the reality is that Europe remains highly vulnerable. The heterogeneity across its member states and the lack of political, fiscal and banking union mean that divergences are not internalised as they are in other large economies.

Europe faces weak links at both ends of the economic spectrum. At one end lies Italy. Unfortunately, a Japan-like scenario of long-term persistent low nominal GDP growth is thus not a sustainable equilibrium for Europe. Divergent conditions internally mean relatively weak economies like Italy would be threatened by perennial stagnation or worse. At a member-state level, it is Italy that most resembles Japan. Its public debt problem is perhaps the greatest threat to the sustainability of the single currency area. Without more integration and convergence, crises will be more likely. Europe would struggle to survive in its current form with a long-lasting Japanification.

At the other end lies Europe's exporter nations with their large current account surpluses. Despite its travails, Japan at least had the benefit of strong global growth. Not only is Europe more export-sensitive than Japan, but also globalisation is under threat, as are the multilateral organisations that Europe relies on, and China's economic model is under increasing scrutiny. Indeed, we argue that China has more striking parallels with Japan than Europe does. And if China converges more

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towards a Japan outcome, countries like Germany will import the ramifications. Add to this the headwinds for global growth from global depopulation, retreating globalisation and perhaps lower global productivity, and Europe's heavily export-oriented economic model feels like an increasing risk to stability and sustainability.

Europe urgently needs to rethink its business model: it can't rely on China economically, it can't rely on the US geopolitically, and it is falling behind in information technology. It is time for Europe to spend its excess savings to prepare for a new global order – and a very different one to the relatively benign one faced by Japan nearly 30 years ago.¹

1 In this report we have interchanged the terms "Europe", "Eurozone", "Euro Area" and "The EU". However, unless stated otherwise, the analysis is referring to the Euro Area region.



Introduction - What have we learnt from the first two notes?

In the prior two notes in this series, we first examined areas where Europe looks like Japan ([link](#)) with the appropriate lag, and then looked at areas where the experience so far is very different ([link](#)). In this third part, we take a more balanced and holistic view of the debate and draw some conclusions.

One of the biggest problems in comparing Europe to Japan is defining what being 'like Japan' actually means. In the bullets below, we highlight some of the perceived definitions of what the issues might have been for Japan and briefly comment on how much Europe already looks like it or could easily look like it in the near future, referencing work from the first two parts of this series.

Poor demographics/depolutating - This is where Europe's past experience and likely future path looks very similar to Japan's. On this basis, Europe will be the next Japan.

Low real GDP growth - European growth is low and the trend rate is likely to remain low, but it has actually outperformed potential for the last five years, helped by a consistent positive credit impulse that Japan struggled with as it was deleveraging (see Figure 3 in part 2). Low European growth today partly reflects lower global productivity trends over the past two decades. Japan's low growth initially began in an era of higher global productivity growth and, we argue, was as much to do with an inadequate response to the bursting of the credit bubble.

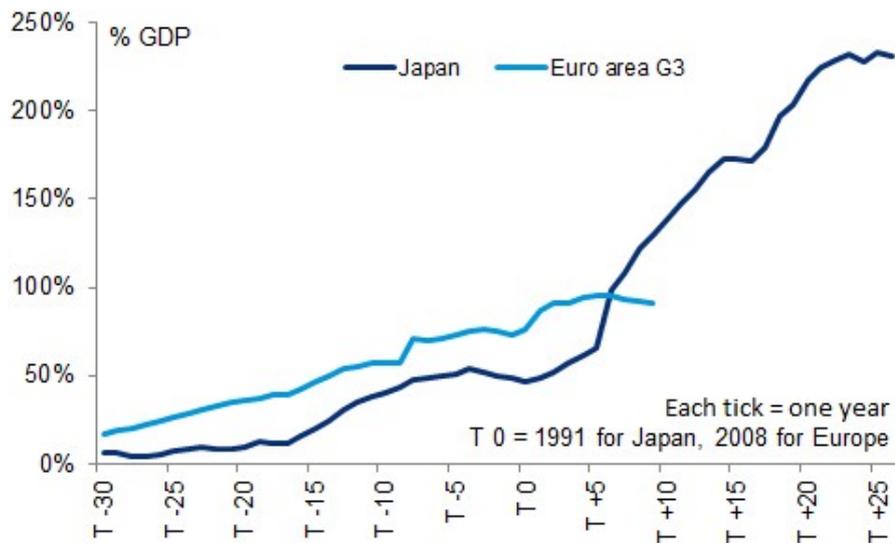
Bursting of a credit bubble - Credit growth in Japan rose from c.10% to c.25% of GDP in the early 1990s. In Europe it rose to nearer c.10% in the lead-up to its 2008 'turning point' recession, suggesting that a credit bubble bursting wasn't Europe's main problem. So, as with the bullet above, much of Japan's initial problem was that it spent years slowly deleveraging with the credit impulse negative for nearly a decade after the bubble burst. Europe's credit impulse turned positive after about 3.5 years post GFC and has stayed positive since. (see Figure 2 in part 2)

Persistently low and undershooting inflation - Europe has consistently missed the ECB's target and underperformed the US but is generally outperforming the Japan experience at a similar point following its 'turning point'. (see Figure 10 in part 2)

Expansion of government debt - Figure 1 shows that five years after Japan's bubble burst, government debt started an aggressive and consistent climb. However, Europe is yet to see such a climb – and with current fiscal rules in the continent, it's difficult to see this climbing without a fresh and substantial crisis and new rules. Obviously, this is possible in the future, but for now the debt profile looks quite different.



Figure 1: Government Debt-to-GDP ratios



Source : Haver Analytics, Deutsche Bank Research

Banking sector weakness - As we showed in our recent "How to fix European Banking... and why it matters" note ([link](#)), Europe's banking market is much more similar to Japan's than the US's. Corporates and households are very reliant on bank funding relative to capital markets funding in Europe and Japan. We argue in the note that European NIMs and equity valuations increasingly look like they are adhering to the Japanese playbook. Given how important banks are to the European economy's financing, this similarity is a worry.

These are most of the traditional ways that Europe is compared to Japan. In this note, we explore some of the similarities and differences between the two areas in greater detail and highlight some interesting conclusions. We focus on four areas:

1) **Demographics** - Although demographics are very similar, with a 20-year lag, the global demographics are very different now than they were in the 1990s, when Japan first faced its problems. This may lead to different global policies than those seen starting in the 1990s.

2) **Geopolitics** - Globalisation and mainstream global politics were the order of the day when Japan initially encountered its problems. Today, the former is in danger of reversing, and the latter is at the mercy of populism. In addition, European politics is becoming fragmented and the region currently has a lack of economic homogeneity that might not even allow for a Japan-like outcome if faced with similar issues.

3) **China and Italy more like Japan than Europe?** As a curveball, on some measures China looks more like Japan. Within Europe, Italy looks worse than Japan did, highlighting the lack of economic homogeneity.

4) **Would Japan actually be a good outcome?** - Finally, for all the talk of a Japan-like outcome for Europe, we delve deeper into post-bubble Japan and discuss whether a Japan-type outcome might actually be a pretty good one. On many measures, Japan looks like a healthy and balanced society and economy. Could Europe possibly reach such a scenario?

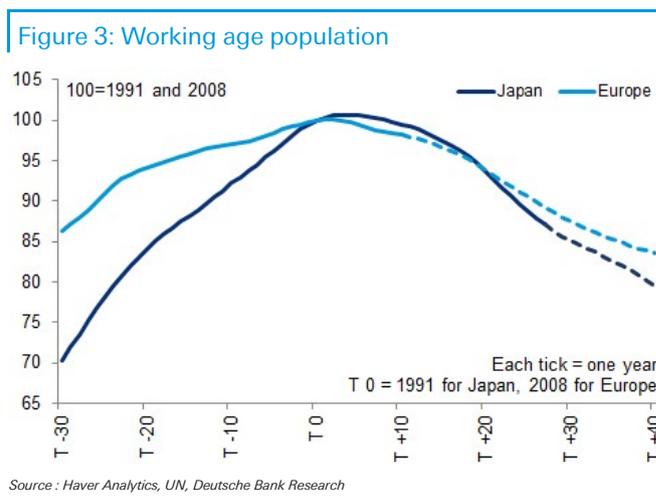
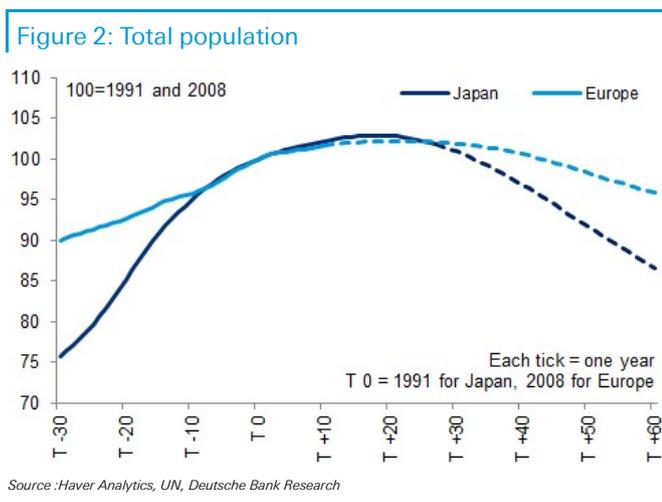
Let's now move to our four main sections. First, demographics.



Demographics - the key similarity but might not lead to the same macro outcome

Overall, it is clear to all of us working on this series that the most compelling argument suggesting that Europe looks like Japan is demographics. As such, it is worth focusing more on this and assessing whether this will be the overriding way that Europe will increasingly look like Japan in the years ahead.

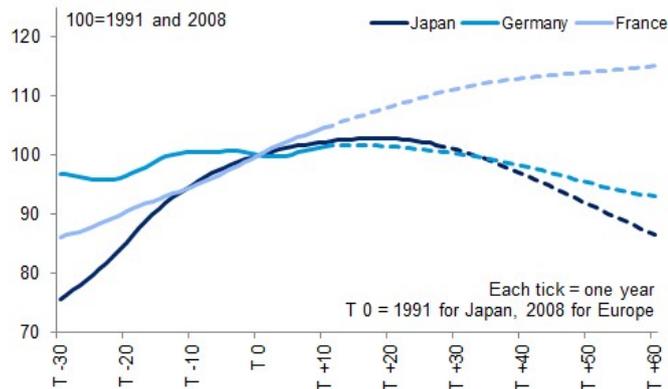
As a reminder from part one of this series, Figures 2 and 3 show total and working age populations in both areas with T=0 representing their turning point recessions (1991 - Japan and 2008 - Europe).



Interestingly, of the EU Big Four (Germany, France, Italy and Spain) all bar France are expected to see depopulation from here, with sharper falls in the working-age population mirroring Japan's experience over the last couple of decades. France should see population growth and its working age population broadly flat over the next couple of decades. This could lead to tensions as the right policies for Germany (and Italy and Spain) may not be the right policies for France. A lack of homogeneity across Europe is a big and consistent barrier to policies that may help Europe experience a superior outcome to Japan's over the next few years. When the two largest countries within Europe have quite different likely future demographic outcomes, that's not a great start. As a sweeping top-level assessment, France may want to spend to invest more in its younger population, while Germany may want to save more for its ageing population. Everything in Europe relies on compromise. More on the lack of homogeneity across the continent later.

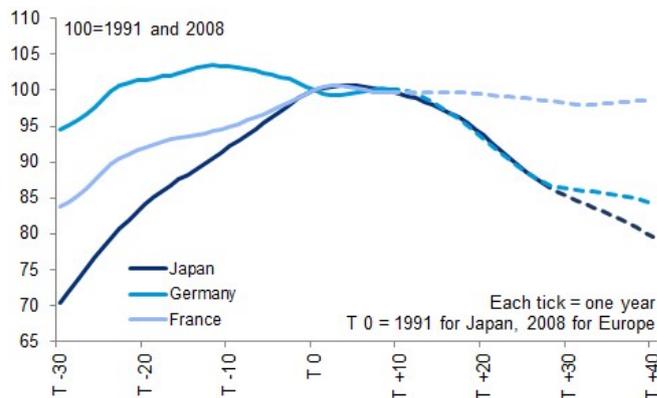


Figure 4: Total population



Source : Haver Analytics, UN, Deutsche Bank Research

Figure 5: Working age population

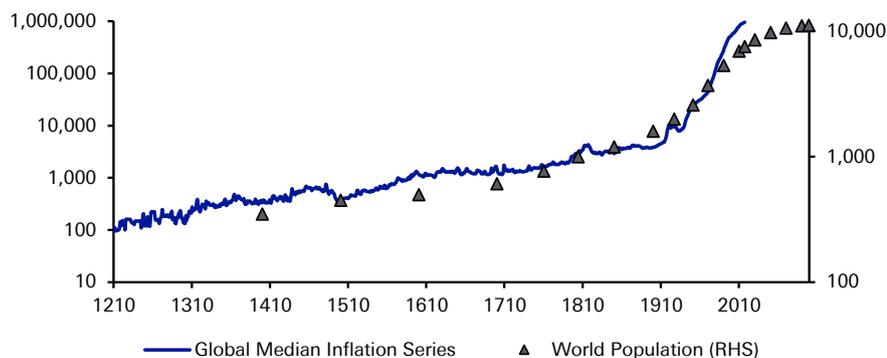


Source : Haver Analytics, UN, Deutsche Bank Research

Outside of an unlikely turnaround in the EU's immigration policies, it is quite clear that Europe will face depopulation, and without a near equally unlikely radical overhaul of retirement ages, they'll also face falls in the number of workers. As a minimum, this will constrain the potential rate of real GDP growth in the continent to very low levels relative to the past. Structural reforms and a global productivity rebound will likely be needed to improve this from what will be a population-constrained low level. In this respect, real growth will have similarities to that seen in Japan.

Given the poor demographic outlook, the common perception is that there is an inevitability that inflation will also follow the same path. Indeed, figure 6 below shows that through very long-term history, global population growth has been very correlated with global inflation. As such, it would be very simple to suggest that with Europe about to depopulate, it will suffer the same battle against deflation that Japan has faced over the last 20-plus years.

Figure 6: Global median inflation versus world population over the last 800 years (with population forecasts to 2099). On log scales.



Source : Deutsche Bank, GFD, UN, www.worldometers.com

However, we need to put things into a wider perspective. Throughout virtually all of history, money was backed by precious metals – outside of periodic breaks, mostly due to wars. As such, it was near-impossible to expand the monetary base and create inflation without discovering more precious metals. The rapid population growth of the 20th century put pressure on this precious metal currency system and thus helped usher in fiat money and inflation. In the post-1971 fiat-currency world

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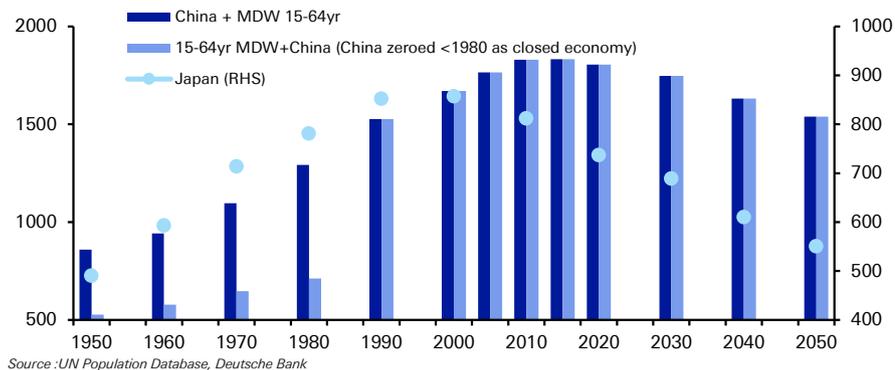
we live in today, in theory it's easy to create inflation if there is political will, regardless of lower population growth. High global debt and populism may be the catalyst in the future. If central banks were to print a substantial amount of money and give it to the population (via governments), that would create inflation. So, if the global challenges are different in the future than those in 1990s Japan, then the political will and preferences could be different.

Indeed, one of Japan's biggest problems after its early 1990's 'turning point' recession was that it was facing its deflationary 'bust' off the global macro super-cycle. In other words, when it was trying to reflate, its insufficient policy responses (see part two in the series) were happening at a time of a huge wave of positive disinflation for the rest of the global economy. As we argue below, a big surge in the global work force between 1980 and 2015 (in the opposite direction to Japan's beginning in 1990) and a one-way globalisation tidal wave ensured that global inflation was on a 35-year structural downshift that was positive for the vast majority of countries. Japan was always going to struggle to fight that trend, especially with relatively tame domestic policies, and no policy support from other nations.

The graph that best represents our long-term structural thoughts on this is a stylised representation of the global labour supply over the last few decades and going forward. Figure 7 shows the working-age population in the More Developed World (MDW) plus China over the last 70 years and that expected over the next 30 years. In the light of the two bars, we have zeroed China before 1980, as prior to the late 1970s the Chinese economy was effectively closed to the outside world. China then decided to integrate itself into the global economy and over the last 35-plus years has effectively dropped over a billion cheap workers onto the global economy at a time when baby boomers in the West were already naturally helping to dramatically boost the global labour market size. Thus, labour costs – and with them a big part of inflation – have likely been exogenously controlled by this surge in the global labour force since 1980. Japan's working-age population started to level off around 20-25 years before the MDW+China number, so the external global macro environment was very different in the 1990s to what we'll likely face over the next decade or so given we're now arguably at peak MDW + China labour. The consequence is that labour will likely regain some pricing power in the years ahead as the supply of it now plateaus and then starts to slowly fall. Any economic growth should therefore see upward pressures on labour costs, all other things being equal. The global inflation outlook may therefore be different (higher) to global inflation from the 1990s to the present day. Indeed, if 'bad' future demographics are so negative for inflation, why has inflation been on such a 35- to 40-year downward trend when demographics have been so good?



Figure 7: More Developed World (MDW) + China working age population versus Japan



If we are correct, then Japan could be considered unlucky that it faced its credit bubble bursting in a sea of positive global disinflation. However, today Europe shares a lot of the same demographic issues as the rest of the developed world and China. With so many important economies now facing similar demographic problems together, there is also a good chance that global policy will be more reflationary than it needed to be when Japan faced its 1990- problems. The incentive to create more inflation at a global level will be much higher going forward than it was in the 1990s onwards, especially when global debt is so high now relative to where it was 25-30 years ago.

As we'll see below, global politics may reinforce this theme, but for more reading in the academic literature as to whether an ageing population is inflationary or deflationary, see pages 15-19 of our ["The Future and History of Inflation"](#) - our 2018 long-term study. There is clearly some academic support to the view that ageing can be inflationary. This is certainly against the perceived wisdom.



Globalisation and global politics very different 1919- to 1990-

On to politics now. The period from the Japan early-1990s turning-point recession to the GFC saw a very benign global political and geopolitical environment that helped support globalisation, lower inflation, and decent MDW and global growth. Figure 8 shows that global trade as a percentage of GDP saw the most consistent and strong growth over this period relative to pretty much any period in observable human history. The graph suggests this growth has leveled off over the last few years, and there are increasing signs from across the globe that globalisation is under threat as the political order changes. The most obvious example is the current trade dispute between the US and China. Brexit is another instance of a reversal in attitudes to the themes that have prevailed over the past 35-plus years. Multilateral organisations that policed this benign world order, and which Europe relies upon, are also becoming less influential.

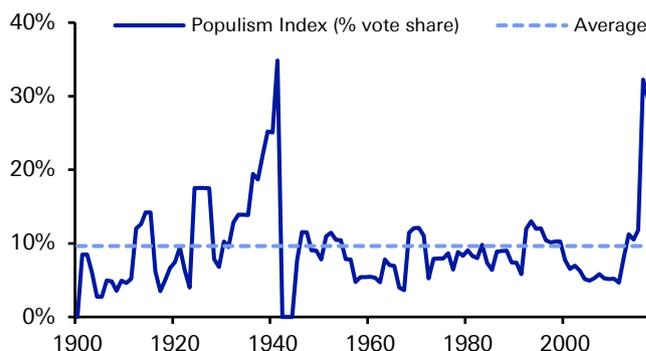
Related to this, populism is increasingly taking over from the generally mainstream/centrist politics of the 1990s and 2000s. Figure 9 shows the rise of populism for seven of the most important economies of the world since 1900 and illustrates that it is as high as at any point in modern history outside the 1930s.

Figure 8: Global Trade as % GDP



Source : Klasing and Milionis, World Bank, Haver

Figure 9: Populism Index (% of vote across key countries, population weighted)



Source : Deutsche Bank, Author's Calculations
See: [The Next Financial Crisis](#) for details

Putting this together, the global political and geopolitical landscape now looks very different than it did in the 1990s and 2000s. The risks to globalisation could mean higher inflation as barriers to trade increase, pushing prices and costs up. Rising populism could also mean more fiscal spending as politicians appreciate that to gain (or stay in) power they need to spend on the poorer half of their population – generally those left behind by the globalisation era and those now rebelling against it. This higher fiscal spending at a global level is likely to lead to a more reflationary era than that seen over the last 35-40 years.

So we shouldn't automatically assume that Europe will face the same outcome as Japan even if there are many similarities, especially demographically. It could be that inflation will be structurally higher in the future than it was in the post-1990 Japan bust era.

All of us in the group working on this mini-series agreed that it would be very hard for Europe to become like Japan, where 'like Japan' is defined as a long period of

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low/stagnant growth and inflation. The rationale being that given the lack of regional homogeneity in Europe, by definition ultra-low nominal growth would mean divergence across nations. Without a fully functioning political and fiscal union, it seems inevitable that such a Japan-like economic environment from here would lead to an economic crisis and/or more serious political upheaval within a few more years. Mainstream political parties in Europe are already under severe pressure, and it feels like a continuation of the weak growth environment will remain a risk to wider EU harmony. All of the contributors felt that economic and political crises were far more likely to arise in the years ahead than occurred in Japan. Japan has actually been a fairly stable country politically throughout the last 25-plus years of notable headline economic weakness.



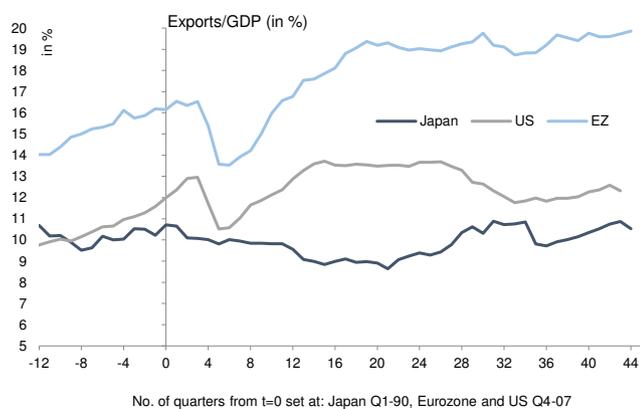
Are China and Italy more "Japanese" than the Eurozone?

In this piece, we focus on Europe's distinct issues, which Japan did not have but which may propel Europe towards a Japan-type outcome nonetheless. First, Europe is a more open economy than Japan was at the time. This implies that Europe will be more dependent on global growth in general and China in particular. Second, Europe is an imperfect fiscal and banking union. This implies that the weakest link (Italy) may matter. As we discuss below, along some dimensions both China and Italy are more "Japanese" than the Eurozone is.

Eurozone's excessive dependence on global growth

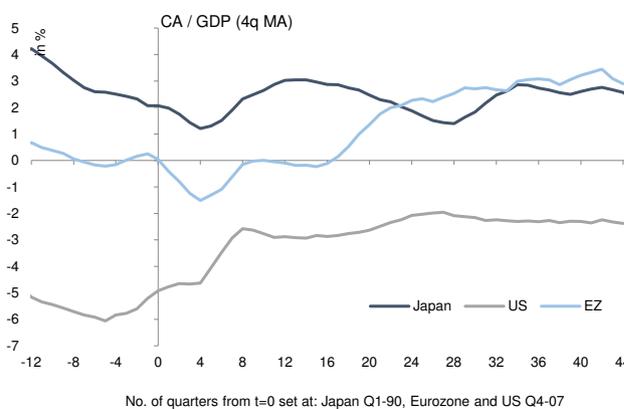
The Eurozone is a more open economy than Japan was in the early 1990s. Its exports/GDP are nearly double the level in Japan at the time and have been on an upward trend since the crisis (left graph below). Also, the imperfect fiscal union has constrained the ability of fiscal policy to stimulate domestic demand. This is reflected in the sharp improvement in the current account position of the Eurozone, while Japan's current account remained broadly unchanged post crisis (right graph below).

Figure 10: Europe is more dependent on global growth than Japan was in the 1990s



Source : Deutsche Bank, Haver, eurostat, IMF

Figure 11: Europe's current account position has improved more than the US's and is better than Japan's at the time



Source : Deutsche Bank, Haver, ECB, eurostat, BEA, BoJ, MoF

These observations suggest that Europe is excessively dependent on global growth and arguably has too much savings rather than too much debt. A common remedy would be a shift in fiscal policy to (a) reduce excess savings, (b) support domestic demand and (c) (hopefully) increase potential growth. In the absence of a fiscal union, such a policy would need to be determined at the country level – in Germany in particular. So far, Germany has demonstrated little appetite for a proactive fiscal policy. To some extent, this is because its *cyclical* position is not dire enough to justify a *countercyclical* fiscal stimulus.

However, the *structural* shift in the geopolitical and economic environment is supportive of a *strategically* expansive fiscal policy. First, Germany is particularly exposed to an unraveling of the global trade construct. Second, there is increased pressure on Germany to raise its defense spending. Third, Germany is not best placed to compete in an increasingly digitalised world. Last but not least, Germany has benefited over the last 10 years from a very aggressive Chinese stimulus. As we discuss below, this is unlikely to be sustainable in the medium term, and China's



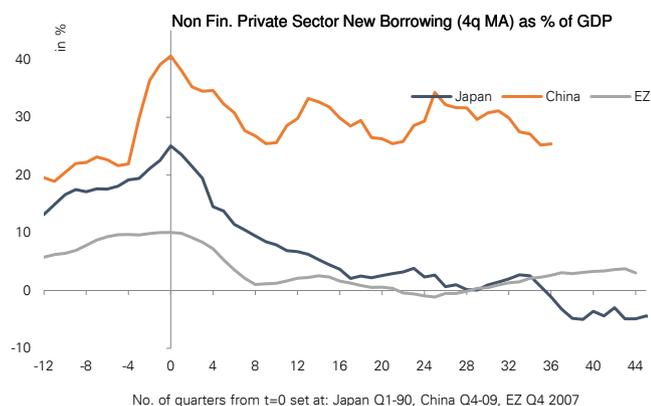
GDP growth is likely to decline. Indeed, on some key metrics, China resembles Japan more than the Eurozone does.

Is China more Japanese than Europe?

We apply to China the same framework as in part two of this series, "[How Europe is different from Japan](#)". For this exercise we define a Japan scenario as a situation in which there is a large private-sector credit bubble that bursts. The private-sector deleveraging is slow and is not accommodated by aggressive fiscal or monetary policy. As a result, the credit impulse (i.e. the pace of deleveraging) never reverses, and domestic demand remains under pressure. To assess if China has some Japanese features, we analyse the evolution of key variables in event time, setting as a reference date (t=0) the peak in credit growth (Q1-90 for Japan and Q4-09 for China).

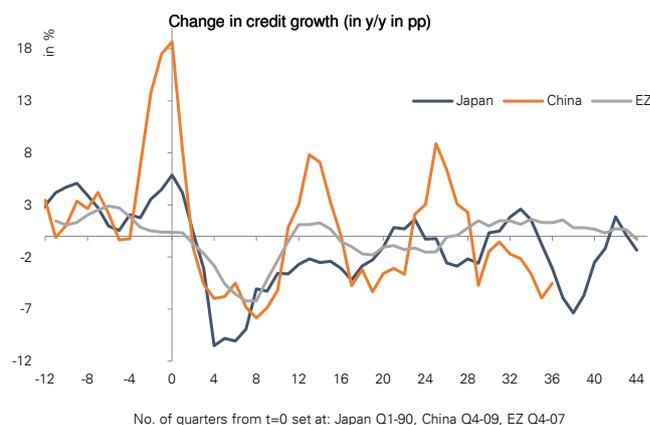
First, we focus on the dynamics of credit growth. This provides information on the extent of the credit bubble and the subsequent necessary adjustment. China has a significant credit overhang, which has so far not been convincingly resorbed. Indeed, credit growth in China increased from ~20% pre-crisis to ~30% post-crisis and is materially higher than in Japan in the 1990s (left graph below). The excessive credit growth is preventing a sustainable improvement in the credit impulse beyond the mini-cycles engineered by the Chinese government (right graph below).

Figure 12: China's credit growth is materially higher than in Japan in the 1990s



Source :Deutsche Bank, Haver, China NBS, Cabinet Office, BoJ, ECB

Figure 13: China's credit impulse struggles to remain positive beyond the mini-cycles engineered by the Chinese government

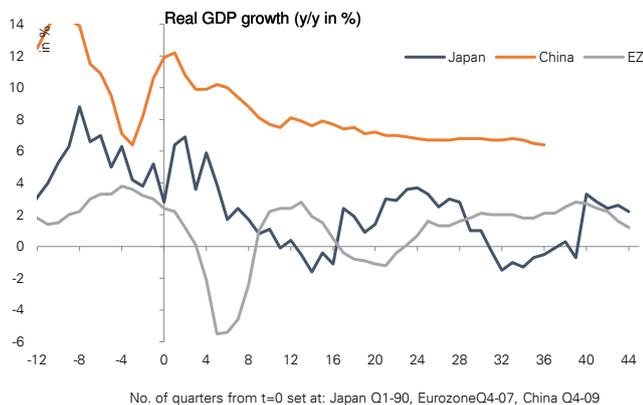


Source :Deutsche Bank, Haver, China NBS, Cabinet Office, BoJ, ECB

As a result, China's GDP growth has been on a general downtrend (left graph below). The excessive credit creation has resulted in investments in unproductive sectors of the economy, leading to a decline in potential growth. As a result, despite its decline, GDP growth has remained close to estimates of potential (right graph below).

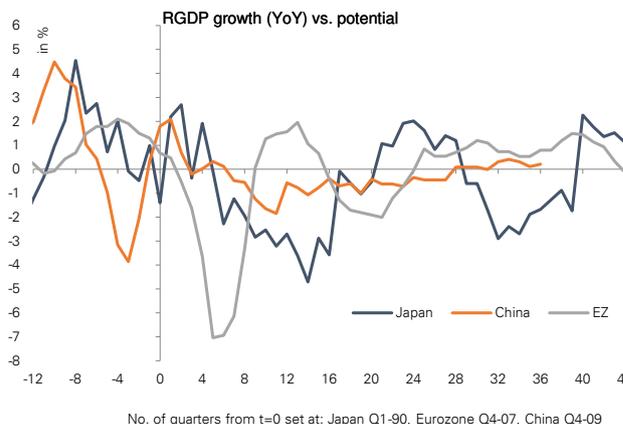


Figure 14: China's GDP growth has been on a gentle downward trend



Source :Deutsche Bank, Haver, Cabinet Office, CNBS, eurostat

Figure 15: China's real GDP growth is close to potential



Source :Deutsche Bank, Haver, CNBS, Cabinet Office, OECD, eurostat

Monetary policy in China has been relatively restrictive as 10Y real rates have remained high (left graph below) and the currency appreciated by ~25% (right graph below). As [highlighted by our FX team](#), the JPY appreciated in the mid-90s on the back of pressures exercised by the US via higher tariffs, which is reminiscent of the current situation between China and the US.

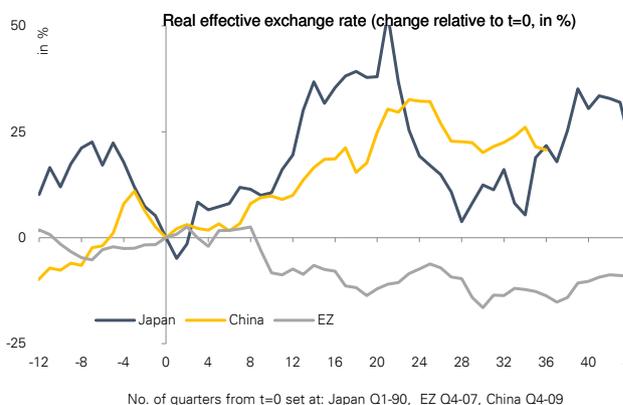
On these two metrics, China is in fact much closer to Japan than is Europe, where 10Y real rates declined by 250bp into negative territory and the currency depreciated by 15%. One should temper these observations by the fact that the neutral rate in China is likely to be higher than in Europe and that the CNH was potentially undervalued going into the crisis.

Figure 16: China's 10Y real rate have remained relatively elevated despite a significant decline in potential growth



Source :Deutsche Bank, Haver, Cabinet Office, BoJ, CNBS, Bloomberg Finance LP

Figure 17: China's real effective exchange rate has appreciated substantially

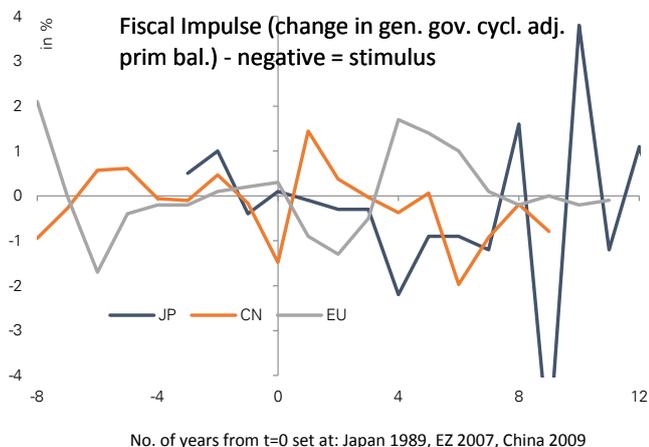


Source :Deutsche Bank, Haver, OECD

China's fiscal space enabled it to adopt a more proactive fiscal policy early in the crisis. As in Europe and the US, China subsequently tightened its fiscal stance. In recent years, it has used fiscal policy to manage GDP growth (left graph below). Inflation in China so far has remained more anchored around 2% than in Japan or Europe (right graph below).

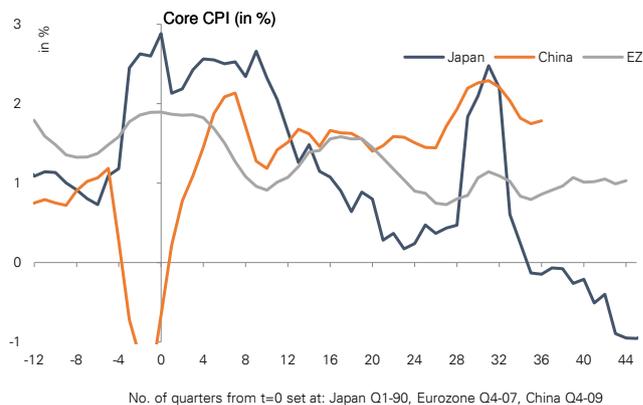


Figure 18: China has used fiscal policy to manage its growth trajectory



Source :Deutsche Bank, Haver, OECD

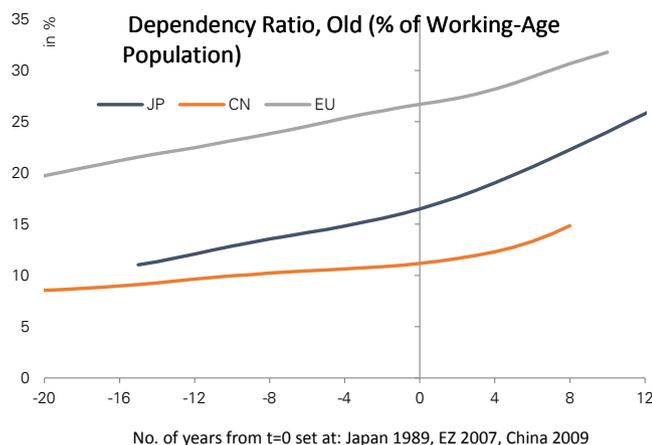
Figure 19: Core inflation in China has remained close to 2%



Source :Deutsche Bank, Haver, Cabinet Office, BoJ, CNBS, PBoC, eurostat

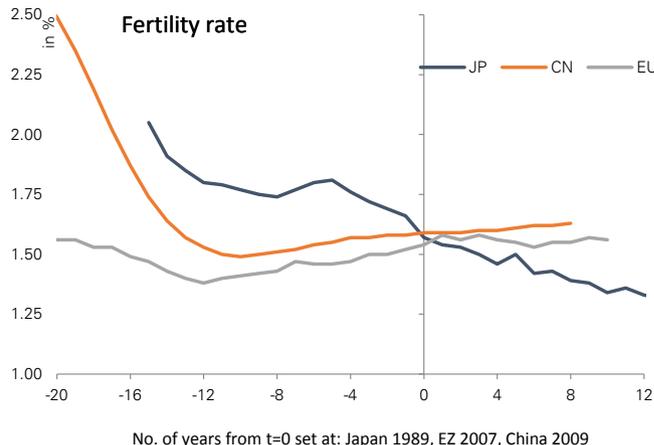
The demographics in China are better than in Japan at the time, but still on a deteriorating trend. The dependency ratio is ~5% lower than it was in Japan (left graph below) but is on an upward trend. Pre-crisis, the fertility rate had already declined to levels comparable to Japan on the back of the one-child policy. It has recovered slightly (while in Japan it deteriorated further) and is at levels comparable to the Eurozone.

Figure 20: China's dependency ratio is better than in Japan, but deteriorating



Source :Deutsche Bank, Haver, World Bank

Figure 21: The fertility rate in China is at levels comparable to the Eurozone



Source :Deutsche Bank, Haver, World Bank

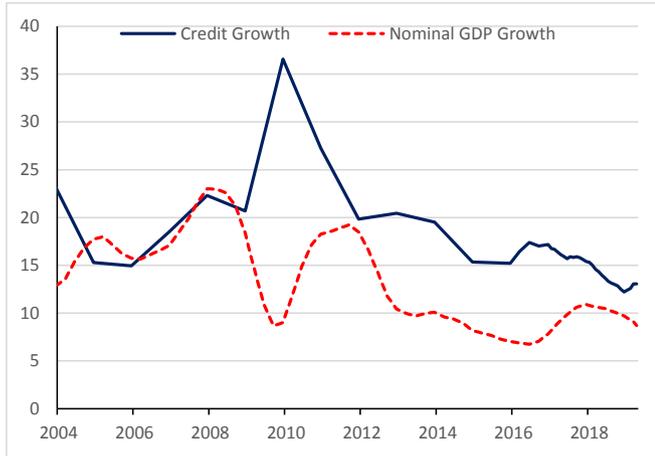
Credit growth overhang a structural risk for China

One has to be careful when applying DM standards to an EM economy as initial conditions can be vastly different. Nonetheless, one key feature could put China on a Japanese trajectory: the size of its credit bubble. Ultimately, credit growth will need to decline back to levels in line with nominal GDP growth (~8%) from current levels of closer to 15% (left graph below) to avoid having its total-debt-to-GDP on a continued upward trajectory (right graph below). As long as this adjustment has not



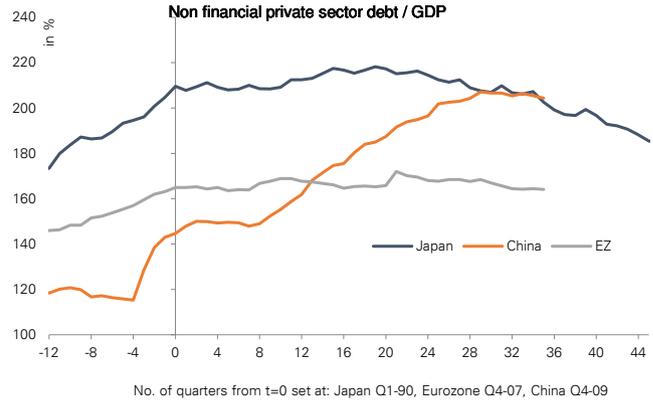
occurred, the risk of a Japan-type outcome will remain. Given Europe's exposure to global trade and to China, how this plays out is crucial to the continent.

Figure 22: China's credit growth exceeds GDP growth



Source : Deutsche Bank, Haver, PBoC

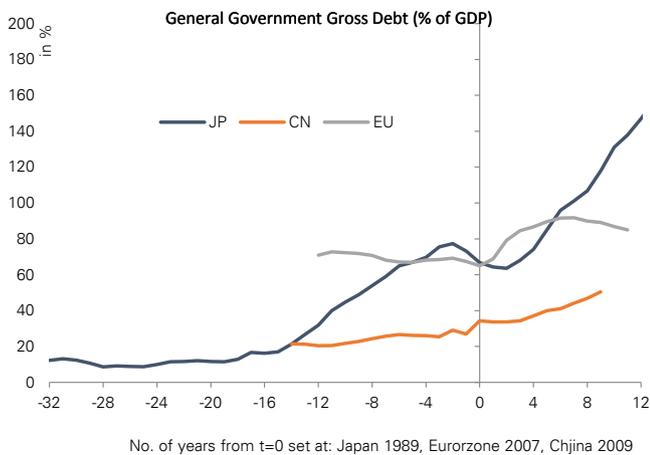
Figure 23: Private sector debt/GDP is already very high in China



Source : Deutsche Bank, Haver, BIS

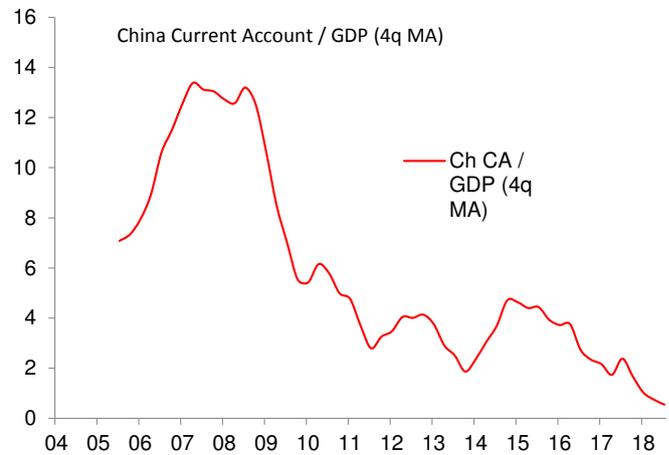
The initial conditions in terms of dependency ratio and population ageing are better than in Japan but are deteriorating at a similar pace as in Europe. On the positive side, China is a "command and control" economy with a lower public-sector debt-to-GDP (left graph below). This provides some capacity to manage the inevitable deleveraging. However, the decline in the current account position suggests that the policy space is becoming more constrained (right graph below).

Figure 24: China has more fiscal capacity



Source : Deutsche Bank, Haver, IMF

Figure 25: The decline in China's current account could signal that China's policy space may be declining



Source : Deutsche Bank, Haver, IMF, NBS

Overall, given the private-sector debt overhang and population dynamics, China's potential GDP is likely to continue to decline. The size of China's economy makes it still a very relevant export market for now, even if its growth slows. Longer term,



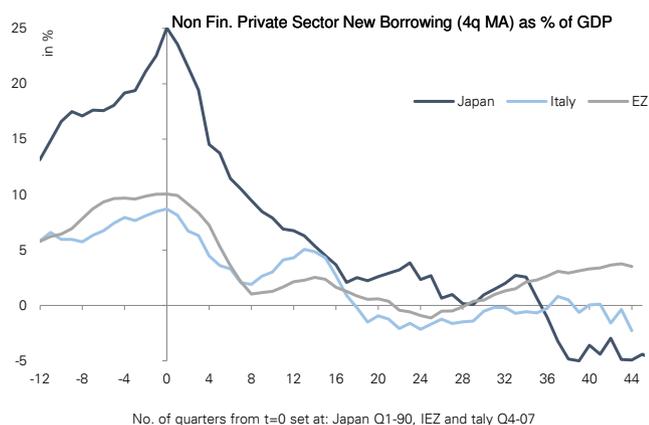
Europe in general and Germany in particular will likely need to reassess their export-oriented business models.

Italy, the weakest link

As we discuss elsewhere in this note, there are significant intra-Eurozone divergences. As Europe is an incomplete fiscal and banking union, monetary and fiscal policies are de facto constrained. As a result, the weakest link within the Eurozone may become an important binding constraint. As we discuss below, on most metrics, Italy shares more similarities with Japan than the Eurozone average does.

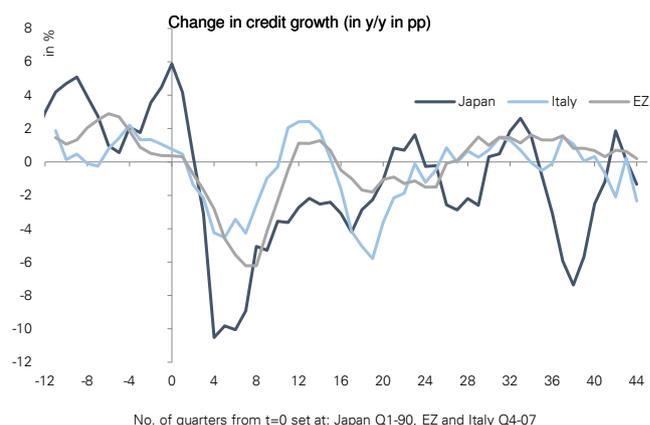
Italy did not witness a very large credit bubble, and in that respect it does not resemble Japan too closely (left graph below). However, even if private-sector credit excesses were relatively limited, the credit impulse struggled to turn meaningfully positive (right graph below).

Figure 26: Credit growth in Italy was more subdued than in Japan



Source :Deutsche Bank, Haver, ECB, Cabinet Office, BoJ, ECB

Figure 27: However, the credit impulse is struggling to remain consistently positive

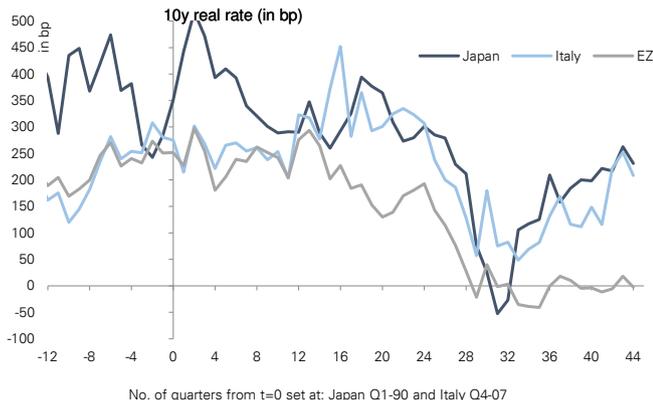


Source :Deutsche Bank, Haver, ECB, Cabinet Office, BoJ

The evolution of credit conditions was relatively disappointing because the transmission of monetary policy was impaired and fiscal policy was constrained. Indeed, while the GDP-weighted 10Y real rate in the Eurozone turned negative, it remained positive and close to Japan levels in Italy (left graph below). As potential growth in Italy is about 1% lower than for the Eurozone as a whole (right graph below), the neutral rate in Italy should be (other things being equal) 1% lower than for the Eurozone as a whole. As a result, financial conditions in Italy will be even tighter than implied by the level of 10y real rates.

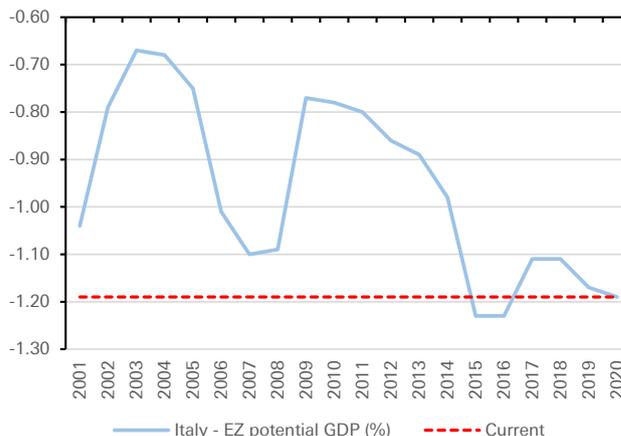


Figure 28: 10Y real rates are at Japanese levels



Source : Deutsche Bank, Haver, Bloomberg Finance LP, Cabinet Office, BoJ

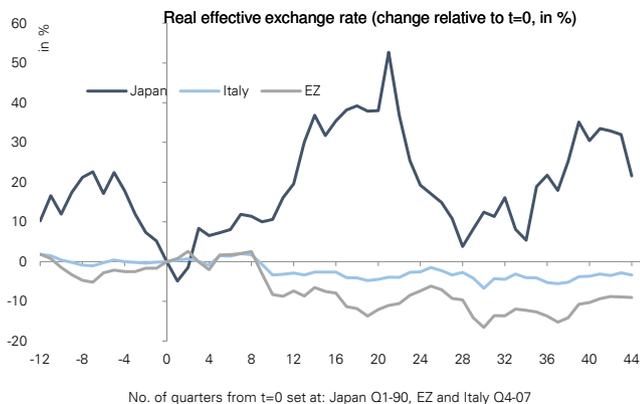
Figure 29: Italy potential GDP is ~1% below EZ



Source : Deutsche Bank, Haver, OECD

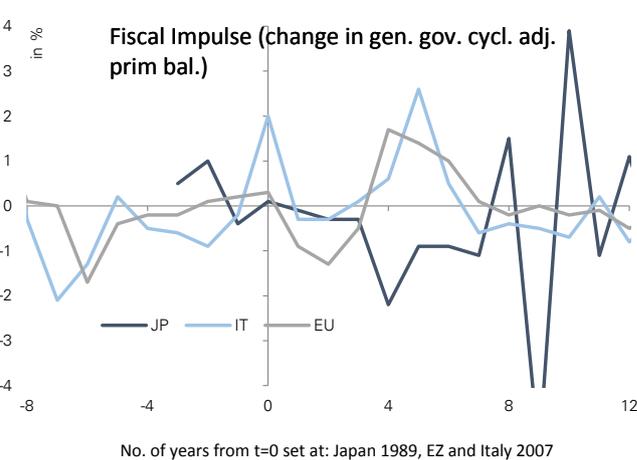
Similarly, the real effective exchange rate depreciated for Italy, while it increased in Japan (left graph below). However, the extent of the depreciation was smaller than that for the Eurozone as a whole (-5% vs. -15%). Due to a high initial debt-to-GDP, fiscal policy in Italy was constrained, and the fiscal impulse did not turn substantially negative, i.e. Italy could not ease fiscal policy to accommodate the private-sector deleveraging (right graph below).

Figure 30: Italy's real effective exchange rate depreciated, while it appreciated in Japan



Source : Deutsche Bank, Haver, OECD

Figure 31: Fiscal policy in Italy has been constrained by high debt levels

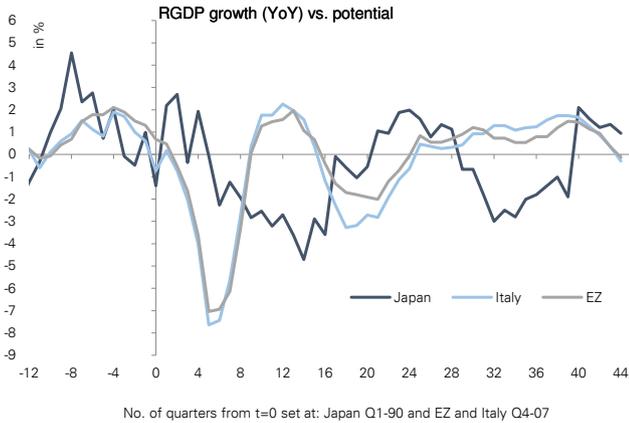


Source : Deutsche Bank, Haver, OECD

Despite these constraints, Italy did manage to grow above potential for a few years (left graph below) thereby reducing its unemployment gap (right graph below). But the improvement has stalled well before the unemployment gap has been resorbed.

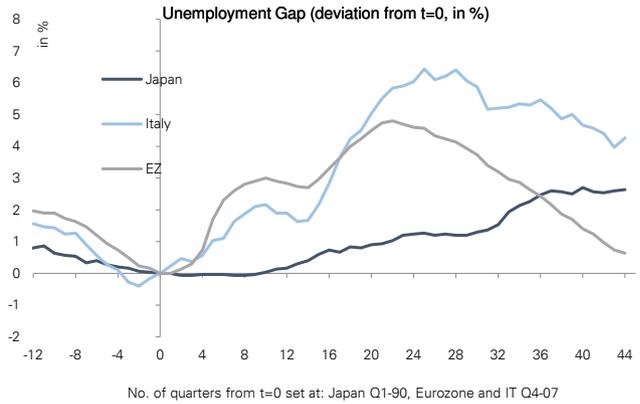


Figure 32: Italy did manage to grow above potential



Source : Deutsche Bank, Haver, OECD, eurostat, Cabinet office

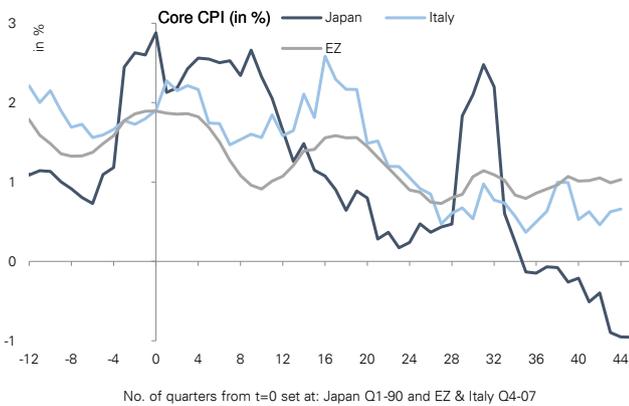
Figure 33: But the progress has stalled far from full employment



Source : Deutsche Bank, Haver, eurostat, Ministry of Internal Affairs and Communications

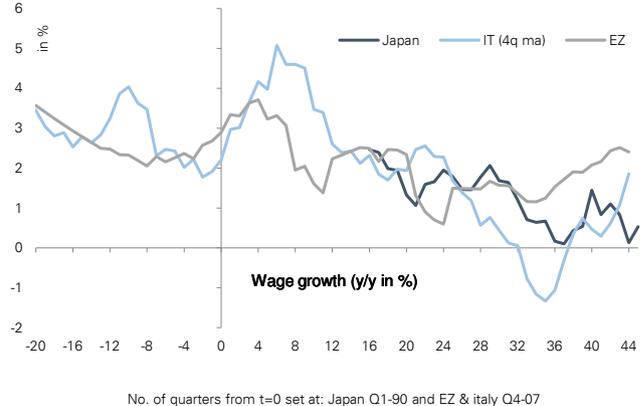
Inflation in Italy is higher than it was in Japan in the 1990s and is below, but not materially dissimilar to, inflation levels observed in the Eurozone as a whole (left graph below). Wage growth has improved recently but remains subdued overall (right graph below), which is consistent with the view that the unemployment gap has not yet been resorbed.

Figure 34: Core PCE stabilised above the levels observed in Japan in the 90s



Source : Deutsche Bank, Haver, euostat, Cabinet office

Figure 35: Wage growth has recently been better than in Japan in the 90s but lags the rest of the Eurozone

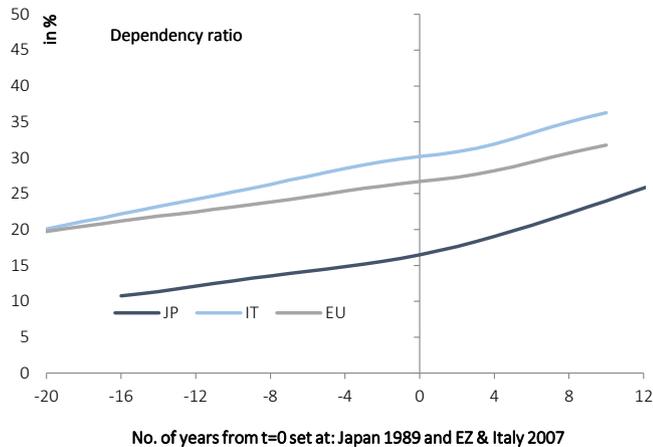


Source : Deutsche Bank, Haver, euostat, Ministry of Health, Labour & Welfare

Last, but not least, population dynamics in Italy are arguably worse than in Japan in the 1990s. The dependency ratio is higher (left graph below) and the fertility rate is comparable (right graph below).

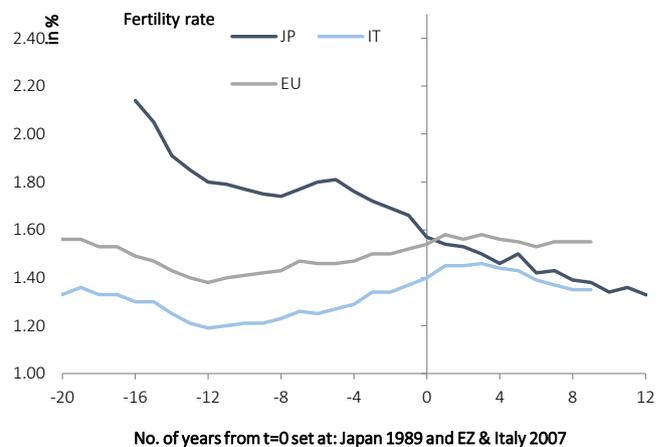


Figure 36: Dependency ratio is higher in Italy than in Japan in the 90s



Source : Deutsche Bank, Haver, World Bank

Figure 37: Fertility rate is lower in Italy and is comparable to that observed in Japan in the 90s



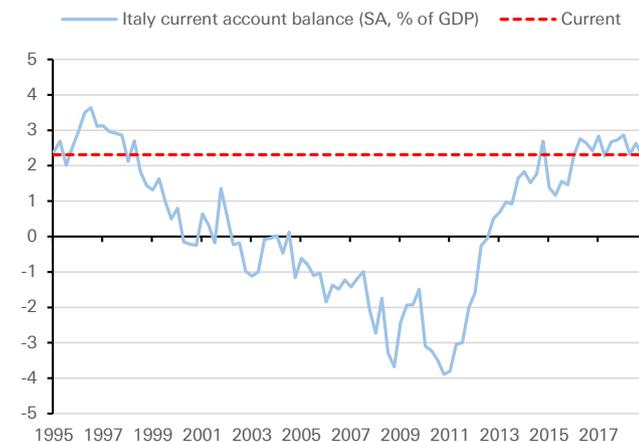
Source : Deutsche Bank, Haver, World Bank

Italy is the most Japanese of the Eurozone economies

While the size of the private-sector bubble in Italy was materially smaller than in Japan in the 1990s, the lack of a fiscal and banking union has prevented monetary and fiscal policies from being as accommodative for Italy as they should have been. As a result, the deleveraging process has been protracted and credit growth has remained relatively subdued. Despite these constraints, Italy did manage to grow above potential for a few years and reduce its unemployment gap. However, the process of resorbing excess capacity has stalled, and monetary and fiscal policies may not be as accommodative as necessary. Demographics in Italy are worse than in Japan at the time. This leaves Italy dangerously close to the Japanese experience but perhaps without some of the benefits we discuss in the final section below.

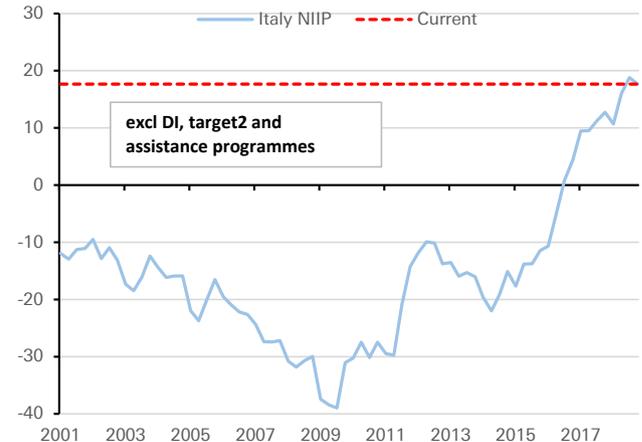
On the positive side, Italy shares some of the strengths of Japan as it has a relatively robust external position. Its current account is positive (left graph below) and its NIIP (adjusted for Target 2) is also slightly positive (right graph below).

Figure 38: Italy current account has turned positive



Source : Deutsche Bank, Haver, Bank of Italy

Figure 39: Italy NIIP is positive



Source : Deutsche Bank, Haver, Bank of Italy, eurostat

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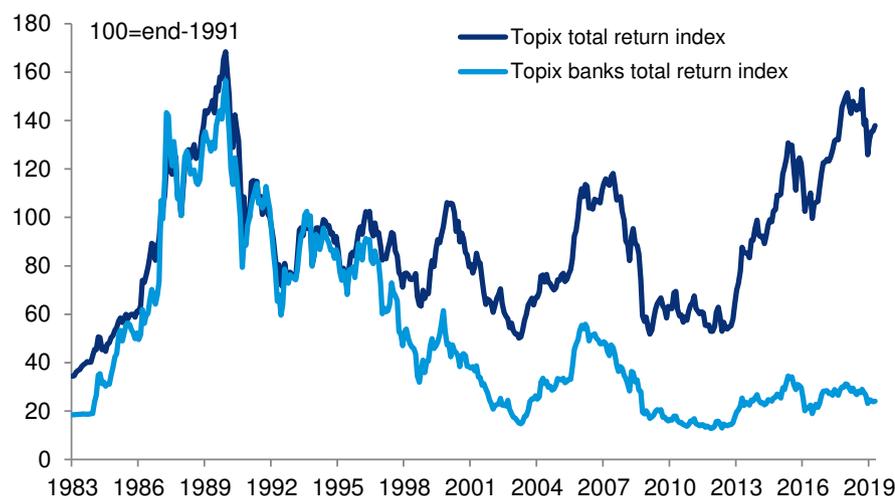
This implies that as long as the ECB maintains the current level of liquidity, Italy can fund itself domestically. Thus, Italy has in theory more policy space than the high debt-to-GDP level would imply. However, for this policy space to be used effectively, it will need to be accompanied by credible structural adjustments to avoid any risk of domestic capital flight.



Is a Japan scenario actually that bad?

The conventional wisdom surrounding Japan over the last 2-3 decades has been that it's faced a gloomy and negative experience. Nominal GDP growth stagnated, public debt levels exploded, and policy appeared impotent. The experience has been acutely painful for investors in certain asset classes. As shown below, the Japanese stock market sold off over 60% between 1989 and 1991, and it has still not recovered to those levels again some 30 years later. In contrast, the S&P 500 has returned almost 1,400% since 1990. Bank stocks, which are highly cyclical and can be used as a proxy for the impact of persistently low rates, have performed even more poorly. On a total-return basis, an index of bank stocks languishes at around 10% of its peak value. Banks have been suffocated by slow growth, depressed inflation, and persistently low nominal interest rates.

Figure 40: Japanese equities have never recovered from their 1990s selloff



Source : Bloomberg Finance LP, Deutsche Bank Research

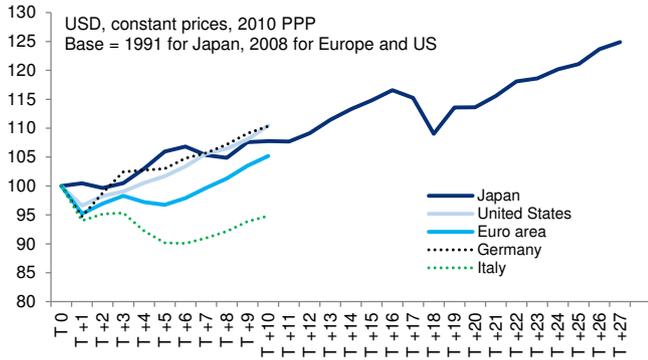
The diagnosis that so frustrates investors in Japan, the lack of nominal growth, actually betrays a key point. Once we peel back the inflationary and demographics façade to look at the economy through other lenses – via real performance, per capita growth, inequality, health, and education outcomes – Japan stops looking so terrible. Below, we analyse these metrics and argue that, contrary to the poor market outcomes, Japan's socio-economic performance over the last several decades has not been as bad as most investors believe.

On some measures Japan's economic performance was not that bad

Following its crisis, and despite low inflation and adverse demographics, Japan has been able to generate real GDP growth of ~1% thanks to productivity growth. This resulted in a relatively strong real GDP per capita performance for a country emerging from such a large (private) debt crisis. Productivity growth has remained robust. Looking at Figure 41, could Europe actually be fortunate enough to match Japan's post-1990 experience? For Italy, the Japan outcome looks like the equivalent of climbing Everest without oxygen. Furthermore, according to economic theory, in the long run, only productivity growth results in rising living standards. Figure 42 below reports the average growth rate of the World Bank's Human Development Index since the crisis years. The index summarises health, education and living standards outcomes across time and countries and confirms that Japanification does not necessarily translate into poor socio-economic outcomes.

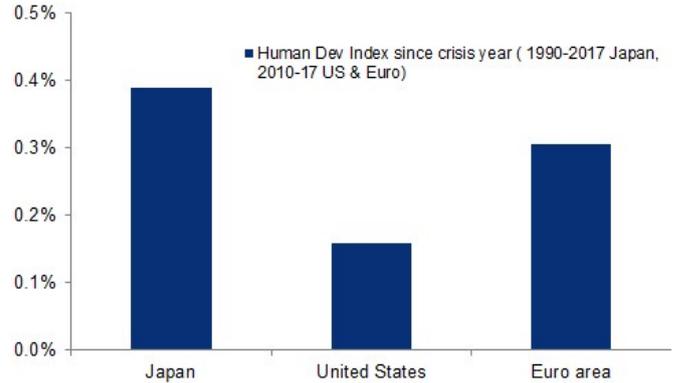


Figure 41: GDP per capita since crisis year



Source : OECD, Deutsche Bank Research

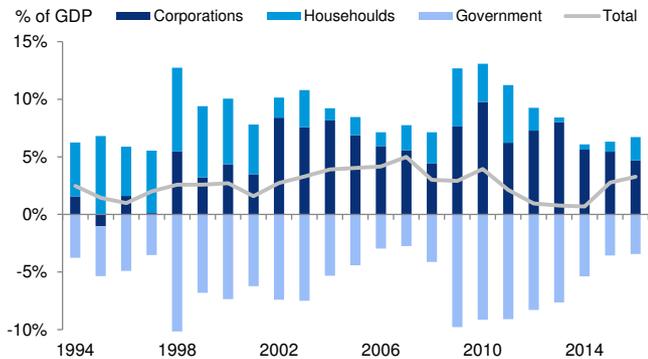
Figure 42: Human Development Index annual growth rates



Source : World Bank, Eurostat, Haver Analytics, Deutsche Bank Research

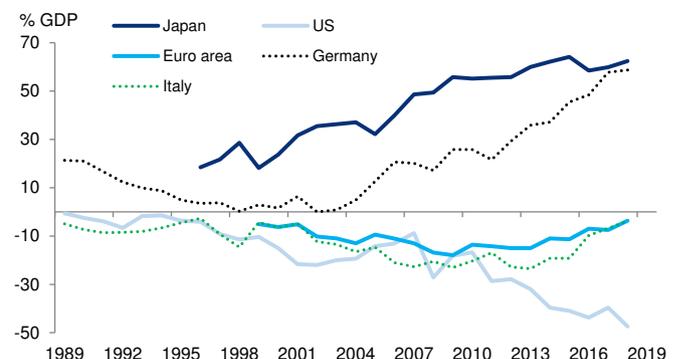
Contrary to popular belief, this rise in living standards did not come at the expense of large overall indebtedness. The rising public debt was accompanied by large private savings from corporates (and households); this led to increasing net savings, with Japan being one of the largest creditors in the world, as reflected by its net international investment position. While the public sector in Japan undoubtedly is a huge driver of dissavings, the chart below shows how this was more than outweighed by the private sector.

Figure 43: Japan new lending/borrowing by sector



Source : Haver Analytics, OECD, Deutsche Bank Research

Figure 44: Net international investment position (positive = net creditor, negative = net debtor)



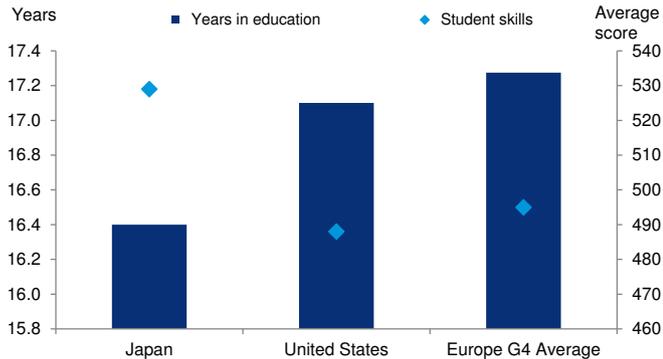
Source : Haver Analytics, IMF, Eurostat, Deutsche Bank Research

A broader look at socio-economic metrics

By international standards, the Japanese seem to have developed an efficient public education system. While they spend fewer years at school than peers in other developed nations, the teaching they receive leads to better skills, as reflected by the OECD Pisa scores. This suggests an efficient use of public spending on education. Beyond human capital considerations, the Japanese population seems to enjoy healthy lives with enough time for leisure.

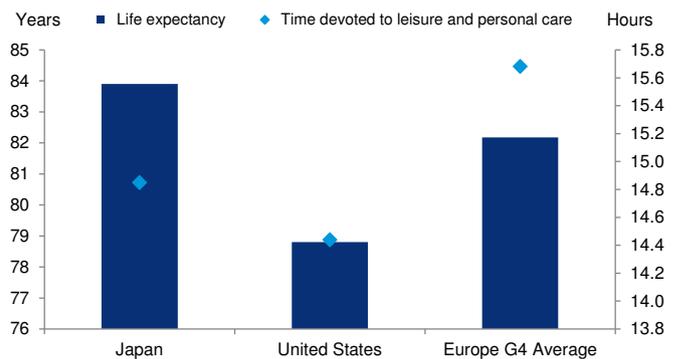


Figure 45: Educational outcomes



Source : OECD, Deutsche Bank Research

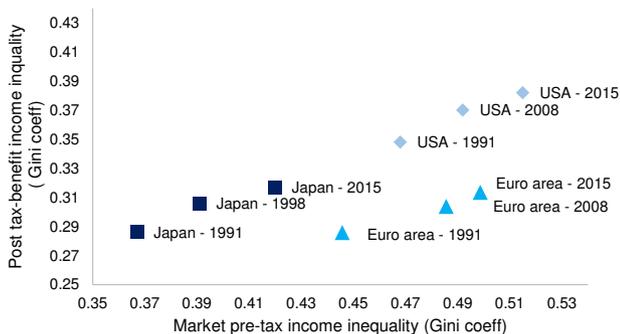
Figure 46: Quality of life proxies



Source : OECD, Deutsche Bank Research

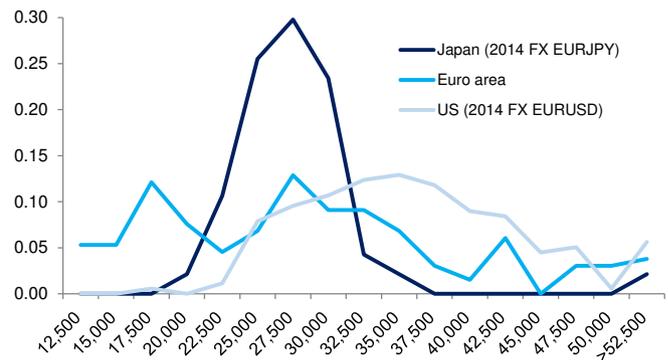
Finally, Japan has faced the same technological and globalisation shocks as the rest of the developed world but has managed to maintain impressively low levels of income equality. Figure 47, reports the Gini coefficient for pre- and post-tax household income inequality at various points in time. Japan appears to achieve post-tax inequality levels of a typical Euro-area country with a much lower pre-tax level of inequality. This suggests that the need for redistribution is more limited there. Finally, the level of development in Japan is far less heterogeneous than in the US or the Euro-area. Figure 48 reports the distribution of GDP per capita of small regions in each economic area. While the levels of inequality between Japan and a typical Euro country are comparable, the heterogeneity across countries in the Euro-area leads to a large dispersion of GDP per capita in Europe (e.g. inequality within France may be low, but the difference between the poorest region in the Euro periphery and the richest region in the Euro core is much higher than the equivalent in Japan).

Figure 47: Japan has less income inequality than Europe and the US



Source :Deutsche Bank Research, Solt, Frederick, 2019, "The Standardized World Income Inequality Database, Version 8"

Figure 48: Japan's regional income distribution is far more equal than in Europe and the US



Source :Deutsche Bank Research, Haver analytics LP, OECD

So when looking at Japan beyond the traditional lens of its low growth, low inflation and high government debt experience, we actually find a country that has managed to maintain high living standards, decent per capita growth and a relatively stable and equal society across all of its population. Could Europe ever dream of getting close to such an outcome?

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Appendix 1

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David Folkerts-Landau

Group Chief Economist and Global Head of Research

Pam Finelli
Global Chief Operating Officer
Research

Michael Spencer
Head of APAC Research

Steve Pollard
Head of Americas Research
Global Head of Equity Research

Anthony Klarman
Global Head of
Debt Research

Kinner Lakhani
Head of EMEA
Equity Research

Joe Liew
Head of APAC
Equity Research

Jim Reid
Global Head of
Thematic Research

Francis Yared
Global Head of Rates Research

George Saravelos
Head of FX Research

Peter Hooper
Global Head of
Economic Research

Andreas Neubauer
Head of Germany Research

Spyros Mesomeris
Global Head of Quantitative
and QIS Research

International Production Locations

Deutsche Bank AG

Deutsche Bank Place
Level 16
Corner of Hunter & Phillip Streets
Sydney, NSW 2000
Australia
Tel: (61) 2 8258 1234

Deutsche Bank AG

Equity Research
Mainzer Landstrasse 11-17
60329 Frankfurt am Main
Germany
Tel: (49) 69 910 00

Deutsche Bank AG

Filiale Hongkong
International Commerce Centre,
1 Austin Road West, Kowloon,
Hong Kong
Tel: (852) 2203 8888

Deutsche Securities Inc.

2-11-1 Nagatacho
Sanno Park Tower
Chiyoda-ku, Tokyo 100-6171
Japan
Tel: (81) 3 5156 6770

Deutsche Bank AG London

1 Great Winchester Street
London EC2N 2EQ
United Kingdom
Tel: (44) 20 7545 8000

Deutsche Bank Securities Inc.

60 Wall Street
New York, NY 10005
United States of America
Tel: (1) 212 250 2500