Fear and loathing in global debt
An analysis of the sustainability and challenges of debt

June 2019

High global debt is currently sustainable, and therefore poses no imminent threat.

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Challenges abound. Central banks will need to keep re-inventing themselves in a structurally low growth world.
Overview

Originally, debt did not bear the negative connotation it carries today. Debt was – and is – at the heart of new projects and underpins the materialisation of innovations.

Yet, the significant rise in global debt over the past two decades to near all-time highs begs the legitimate questions of its sustainability, and of our capacity to grow without further excessive leverage.

Some inevitable pockets of vulnerability aside, we note that most of the debt remains sustainable for now, mainly thanks to low rates across sectors, maturities, and geographies.

However, high global debt carries necessary consequences, in the form of new central bank policies, inequality, and above all, much lower potential growth.

Today, we may have reached the limits of the debt-driven growth model. The current debt sustainability – while fragile and not a given – may nonetheless be our window of opportunity to grow differently, as reducing inequalities in the vast majority of world economies may be an efficient way to support consumption without relying on excessive debt build-up. This offers some hope that the worst end-game scenarios of disorderly default can perhaps be avoided.
Part 1: What is debt and where is it?

“In many cases, the most common risk with high debt is not default (a risk for creditors), but rather the fact that deleveraging weighs on growth and so is a risk for borrowers, whose debt servicing takes an ever-growing share of diminishing revenue streams.”

Global debt has risen significantly over the past two decades. This trend is often portrayed as negative.

But is debt always a bad thing? Without debt, there would be no innovation. Debt helps to make new projects happen. A new company needs money to fund future projects if they are not to remain just ideas. Creditors bet that these ideas will be profitable, and will provide a return greater than the investment. They ask for a part of the success by claiming some interest. The riskier the project, the higher the interest, as there is a higher likelihood that it will collapse within a shorter time, so investors want greater compensation, and faster.

A. Future growth: The biggest casualty of high debt?

In practice, periods of rapid gross domestic product (GDP) growth are often linked to periods of rapid debt growth (Chart 1).

With global debt now close to all-time highs, we may have reached the limit of the debt-driven growth model. Actually, debt has even stabilised over the past three years or so. According to the Institute of International Finance (IIF), total global debt was USD 243 trillion at the end of 2018, or 317% as a percentage of GDP, slightly less than in March 2016 (Chart 2).

As such, debt stabilisation at high levels may be one reason why growth is structurally lower, and why engineering inflation – one of the major stated goals of central banks around the world – has become so difficult.

In fact, in many cases, the most common risk with high debt is not default (a risk for creditors), but rather the fact that deleveraging weighs on growth and so is a risk for borrowers, whose debt servicing takes an ever-growing share of diminishing revenue streams.

Take the example of Japan. Creditors to the Japanese government have never...
lost a cent. However, the country has lost decades of growth, as debt could not grow as fast as in the 1970s and 1980s. No new debt = no new project = no growth.

B. What is behind global debt?

Debt is a very easy term to define *generically*, but very complex to define *fairly*.

There are as many types of debt as there are types of borrowers and creditors. A pension fund lending money to the government – or an institutional investor holding public bonds – has a completely different debt profile from a family taking a mortgage from a commercial bank to buy a house. Each example has different conditions, interest rates, maturities, and for our purposes, creates different risks to the economy as a whole.

Just knowing the total value of debt in the global economy (Chart 2) is of no use at all if we don’t understand what underlies it. The issue in the 2008 crisis was not the debt in itself, but that it was highly concentrated in the hands of borrowers who could not afford it.

So what is the story behind the picture in Chart 2?

2008 and the response to the global financial crisis (GFC) marked a significant turning point in the history of global debt. The public sector took on a substantial amount of debt from the private sector – directly through bank bailouts, and also indirectly by lowering taxes or increasing public spending. In other words, the government stepped in to replace private consumers, giving households space to deleverage.

Financial corporations’ debt fell from 92% of GDP in March 2009 to 80% in December 2018 (IIF data, Chart 3). In the meantime, household debt stabilised at 60% of GDP over the same period (Chart 3 again). However, government debt surged from 62% to 86% between Dec. 2008 and Dec. 2018 (Chart 4). Finally, non-financial corporates, where debt rose at a more reasonable pace than the rest of the private sector in the decade preceding the GFC, kept leveraging.

In short, **debt changed hands after the GFC, from households and banks to governments**, while non-financial corporates increased their leverage. Does that make it safer? As always, the answer is ‘it depends’!

**In the current environment, more debt in governments’ hands at least makes it more sustainable.** In the second part of this publication, we will examine how central banks’ low financing rates for governments and the concentration of debt in one place have contributed to this.

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**3 & 4. Debt changed hands in the period following the global financial crisis, from households and banks to governments**

*Total debt by sector, % of GDP*

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Sources: IIF data, LO calculation, data as of Dec. 2018
Emerging markets (EM) have been increasingly important players in the debt landscape.

**C. Where is the debt?**

Another key for understanding global debt is its geographic distribution.

Firstly, emerging markets (EM) have been increasingly important players in the debt landscape. While their total debt as a percentage of GDP remains much lower than in the developed world, the pace of increase among EM has actually been much faster over the past two decades, accelerating from 12.4% of GDP in September 1997 to 213% in December 2018 (a 72% increase, Chart 5). On the other hand, developed markets’ debt increased by ‘only’ 43% from 266% to 380% over the same period (Chart 5 again). Obviously, different starting points (much lower for emerging markets) are responsible for this divergence. This partly explains why emerging markets have been able to expand so much faster than developed markets over the past 25 years. Their ability to issue new debt underpins their rapid growth.

The catch-up may well continue, as there is still a substantial gap in debt levels between the so-called emerging markets bloc and the developed bloc. Total emerging market debt represented roughly 30% of total world debt in USD terms in 2018 (Chart 6), which is around three times higher than two decades ago. Still, it’s much smaller than developed economies’ share, which accounts for more than 70% of total debt.

Finally, it is interesting to look at each country separately, as differences between national cultures create different approaches to debt.

As Chart 7 shows, the least indebted developed country is Germany, which has a well-known and what some would call ‘dogmatic’ approach to debt management.

In contrast, the most indebted developed country overall is Ireland, which has a bloated financial sector. Japan is also one of the most indebted developed markets, with the highest

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5. Emerging markets’ debt grew more rapidly over the past 20 years but has still room to catch-up with developed economies

6. Emerging markets are taking more space in the debt space, but still under 30% of total

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“Emerging markets (EM) have been increasingly important players in the debt landscape.”
public debt ratio in the developed world.

Switzerland boasts the highest household debt level (33% of GDP) owing to the structure of its real estate market. French corporates are highly indebted, as are UK banks, while Italy’s total debt level is relatively low compared with peers, but investors see its high government debt (141%) as a source of vulnerability. A careful look through Chart 7 reveals a host of country-specific stories. Interestingly, the US may be one of the most balanced countries in this universe. Total debt, at 326% of GDP, lies in the middle of the pack and while government debt has admittedly reached the 100% threshold with the latest fiscal stimulus package, it remains manageable, while other sectors (banks, corporates & households) appear relatively sound.

The same kind of breakdown for emerging countries must take account of an added layer of complexity – one that makes emerging debt more interesting, but also more risky.

"It is interesting to look at each country separately, as differences between national cultures create different approaches to debt."

7. Developed markets total debt as a % of GDP, breakdown by sector

<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>Government</th>
<th>Non-fin</th>
<th>Household</th>
<th>Financials</th>
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<tr>
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<td>31</td>
<td>52</td>
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</table>

Sources: IIF data, LO calculation, data as of Dec. 2018
To be able to borrow globally, and circumvent foreign investors’ lack of trust in their currencies, many emerging markets have historically relied heavily on the dollar as a source of financing. This made it both easier to take on new debt and to import or invest abroad as sellers and creditors were both happy to be paid in USD and so avoid bearing the currency risk. As a result, a substantial part of emerging market debt runs an exchange rate risk on the borrowers’ side in addition to the interest rate risk.

Again, there are many examples (see Chart 8). Total debt in Brazil is high compared with peers mainly thanks to its infamous public debt, related to a loss-making and inefficient pension and social security system, which is due for reform this year. But currency risk in Brazil is fairly low. High currency exposure in Poland is due to households taking advantage of low rates in Switzerland to buy real estate in the run-up to the 2008 crisis (the same is true of Hungary), while elevated FX risk in Hungarian debt is now mostly concentrated in EUR borrowing from the non-financial corporate sector.

8. Emerging markets total debt as a % of GDP, breakdown by sector & currency

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Debt</th>
<th>Total FX debt</th>
<th>Government of which FX</th>
<th>Non-fin Corporate of which FX</th>
<th>Household of which FX</th>
<th>Financials of which FX</th>
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<td>South Africa</td>
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<td>9</td>
<td>43</td>
<td>8</td>
</tr>
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</table>

Sources: IIF data, LO calculation, data as of Dec. 2018

- **Brazil**: High public debt in Brazil (pension reform will be key)
- **Hungary**: EUR borrowing from non-fin. corporate sector in Hungary
- **Turkey**: FX corporate debt in Turkey is the main issue
- **Poland**: FX debt in Poland the result of CHF mortgage before 2008
- **Argentina**: Historically poorly managed public finances in Argentina
- **Russia**: Orthodox fiscal & monetary policies in Russia, very little debt

Please read the important information at the end of the document.

Lombard Odier · Fear and loathing in global debt · June 2019
The main issue in Turkey is private sector debt (corporates), with a huge amount of USD borrowing in an environment where central bank reserves have all but disappeared, making the economic and political situation especially unstable. The story in Argentina is similar, except that the USD debt is in public – rather than private – hands, with historically poorly managed government finances. Russia boasts strong fundamentals, with little debt thanks to a very orthodox fiscal policy, while the need to take on FX debt has been historically reduced by the fact that the country already benefits from USD revenues from oil.

It is striking that three quarters of total global debt is concentrated in just four major economic blocs: the US, eurozone, China, and Japan, while these countries represent just roughly 60% of total nominal GDP (Chart 9). In the next sections, we will look in more detail at the sustainability of this debt, and its consequences.

9. Over three quarters of global debt is concentrated in just four major economic blocs

“...It is striking that three quarters of total global debt is concentrated in just four major economic blocs: the US, eurozone, China, and Japan.”

Sources: IIF data, Bloomberg, LO calculation, data as of end of 2017
Part 2: Is debt sustainable?

“Broadly speaking, the growth-to-interest-rate differential is extremely important for debt dynamics. And it turns out that growth-to-interest-rate differentials are currently particularly favourable in the major economic blocs.”

As we saw in the first section of this publication, debt is complex. High and rising levels of global debt over the past two decades raise legitimate concern about its sustainability. High levels of debt are not a good thing – and we will discuss this more in depth in the third part of this publication – but sustainable high debt poses no imminent threat.

A. Public debt in major advanced economies is sustainable at current rate levels

For debt to be sustainable, borrowers need to generate enough profits to pay the interest and keep functioning.

For countries with balanced primary budgets (excluding interest expenses), nominal government interest rates (the cost of capital) must be smaller than nominal growth (what the country is currently able to produce with the capital) in order to stabilise or reduce public debt levels.

Obviously, countries with primary deficits will need a larger growth-to-interest-rate differential to stabilise the debt ratio (as they also need to cover their primary deficit on top of debt servicing costs with growth), while the opposite is true for countries with primary surpluses (some of the debt servicing cost is already covered by their surplus on top of growth). For example, French public debt could keep growing even with interest rates below nominal growth, as the government runs a primary deficit, while Germany’s surplus would allow the government to keep reducing its debt, even if rates were above growth.

10. US public debt is sustainable despite structurally lower growth, as rates are even lower

11. 10-year rates have never been below growth for such a long period in the US

Sources: Bloomberg, LO calculation

Nominal growth minus 10-year rate, in %

Growth to interest-rate differential is favourable

7.75 years
8.75 years
2.5 years
5.75 years
9.0 years

Sources: Bloomberg, LO calculation, grey zones denote periods when 10-year nominal rates are below nominal growth
Broadly speaking, in any case, the growth-to-interest-rate differential is extremely important for debt dynamics.

And it turns out that growth-to-interest-rate differentials are currently particularly favourable in the major economic blocs (the US, China, the eurozone, and Japan) that represent 60% of world GDP, but over three quarters of total world debt.

Interest rates, both 12-month and 10-year, have consistently remained below GDP growth in the US over the past 9 years (Chart 10). If we go back to 1962, 10-year rates have been below nominal growth in the US ‘only’ 59% of the time, and never for such a long period (Chart 11). It is actually quite striking that despite structurally low and declining nominal growth, the growth-to-interest-rate differential over the past five years has reached levels not seen since the end of the 1970s.

We are indeed experiencing a ‘new normal’, where interest rates have been maintained at levels low enough, among other things, to make debt sustainable. This might not be the case longer term, but while it continues, a public debt crisis is highly unlikely.

The picture is the same in the euro area (Chart 12), where rates have remained below growth for over five years now, a situation experienced in the region only 47% of the time since 1999.

Similarly to the US, the growth-to-interest-rate differential remains close to an all-time high since the creation of the euro, and has never been positive for such a long time (Chart 13).

"We are indeed going through a ‘new normal’, where interest rates have been maintained at levels low enough to make debt sustainable. While it continues, a public debt crisis is highly unlikely."

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12. The Negative Interest Rate Policy in the Euro Area ensures public debt sustainability

13. Growth to interest-rate differential at all-time highs since the creation of the euro

Sources: Bloomberg, LO calculation

Sources: Bloomberg, LO calculation, grey zones denote periods when 10-year nominal rates are below nominal growth
It is striking that the most leveraged government in the world, Japan, with a debt-to-GDP ratio over 220%, pays only 1.8% of its GDP in interest every year.

In Japan, interest rates are extremely low as the central bank targets a rate of -0.1% for 10-year government bonds. Still, Japan’s situation is trickier. Indeed, high debt and aging demographics have created an environment in which generating positive levels of nominal growth is no longer easy. As a result, periods when nominal GDP growth dips into negative territory are much more frequent than in other countries (Chart 14). That said, 10-year rates have remained below nominal growth for 21 of the past 23 quarters (Charts 14 & 15). In addition, Japan benefits from an overall surplus when combining private and public actors, while the majority of its debt is held by the domestic sector (as opposed to foreigners). These characteristics represent an offsetting source of stability.

Low interest rates are a very powerful, and sometimes underestimated, tool for making debt sustainable. As shown in Chart 16, government interest rate expense as a percentage of GDP has decreased in most major advanced economies to levels that seem at odds with high public debt. It is striking that the most leveraged government in the world, Japan, with a debt-to-GDP ratio over 220%, pays only 1.8% of its GDP in interest every year. This is barely higher than Germany, which pays 1.1% of GDP in annual interest, but whose public debt ratio is just 30% of Japan’s at 65% of GDP.

14. Frequent negative growth in Japan makes the situation trickier despite extremely low rates

15. 10-year rates have been below nominal growth in Japan most of the time since the GFC

Sources: Bloomberg, LO calculation

Sources: Bloomberg, LO calculation, grey zones denote periods when 10-year nominal rates are below nominal growth
The power of low rates to sustain high levels of debt is therefore significant.

This is one of the reasons that the first and greatest consequence of high debt levels globally is a new normal not only in terms of growth levels, but also in terms of policymaking, as we will see in the third part of this publication.

16. Government interest rate expense as a % of GDP

![Image of graph showing government debt and interest rate expense as a % of GDP for different countries from 1995 to 2017. The graph includes data for Italy, US, Spain, France, Japan, and Germany, with interest rate expenses ranging from 1% to 6% and debt levels ranging from 60% to 200% of GDP.]

Sources: DataStream, LO calculation, data as of June 2017

“\nThe power of low rates to sustain high levels of debt is therefore significant.\n”
More worrying is the non-financial corporate sector’s debt, which has continued to rise to new highs. This is currently the most vulnerable part of the global debt landscape.

B. What about private debt?

So far, we have discussed the sustainability of public debt, for the most part. The sustainability of private debt requires a more complex assessment, as not all private actors operate under the same lending conditions. As we saw in the first part of this publication (Charts 3 and 4), household and financial corporation debts have respectively stabilised and fallen significantly since the global financial crisis, as the public sector took the pre-crisis liabilities onto its balance sheet.

More worrying is the non-financial corporate sector’s debt, which has continued to rise to new highs. This is currently the most vulnerable part of the global debt landscape.

To get a clearer picture of the aggregate solvency credentials of all the economic actors of a country, one useful metric is the current account balance. This is a record of a country’s international transactions with the rest of the world. A current account surplus indicates that an economy is a net lender to the rest of the world; hence, the probability of a debt crisis is very low. This is Japan’s case, where the government has never defaulted despite many investors betting on the contrary over the past decade.

As shown in Chart 17, all countries with worryingly high levels of non-financial corporate debt (red cells in the second column) display either a current account surplus (Ireland, Netherlands, Sweden, Switzerland, Norway) or a small deficit (Belgium, France).

17. Current account balances are also important to assess sustainability

<table>
<thead>
<tr>
<th>Debt as a % of GDP 4Q18</th>
<th>Non-fin Corporate</th>
<th>Current account balance, % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>671</td>
<td>103</td>
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<td>Netherlands</td>
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Sources: IIF, Bloomberg, LO calculation
C. Debt in the emerging world: A complex and disparate picture

Assessing the sustainability of debt in the emerging world is a delicate undertaking. Given the structure of this debt, which inherently relies more on the US dollar and external funding conditions, financial vulnerabilities can escalate into debt or currency crisis much more quickly than in the developed world.

Therefore, not all emerging countries will emerge unscathed from the past decade’s rapid bout of leveraging.

This means that we should discriminate. Some emerging countries are more at risk, while others appear robust from an external solvency standpoint — sometimes even more than many of their developed counterparts.

So, what should we be looking at, and which countries are the weakest?

In terms of flows, current account balances are a good metric to start with, as they provide a relatively fair assessment of a country’s current solvency credentials. As mentioned earlier, countries running a current account surplus are net creditors to the rest of the world, whilst countries running a deficit are net debtors.

We find that most of the largest emerging countries have improved and strengthened their current account positions over the past five years. Looking at 18 of the largest emerging countries, only three have a current account deficit greater than 3.5% of GDP (Argentina, Colombia, and South Africa). Three quarters of the deficit countries within this universe have improved their current account balance over the past five years (Chart 18). In other words, the largest countries within the emerging market bloc have improved their ability to finance their debt in recent years.

18. Emerging markets current account balances have improved – some pockets of vulnerabilities remain

Sources: Bloomberg, LO calculation
In terms of stock, one way to assess debt sustainability in the emerging world is to look at the size of FX debt (the portion of the debt exposed to currency risk for the debtor) relative to the size of the official reserves the country holds. The ratio of reserves to total FX debt gives an idea of how much of the total FX debt is covered by reserves. Today, we find that only three of the largest emerging countries fall below 30%, i.e. their reserves cover less than one third of their debt in foreign currency (generally mostly USD): Turkey, Argentina, and Chile (Chart 19).

The IMF has developed a model to assess the optimal level of reserves needed to safeguard against a currency crisis while minimising the opportunity cost of holding cash. This model is built on four underlying components: 1) size of exports to reflect exposure to trade shocks, 2) size of broad money base to reflect exposure to potential capital flight, 3) short-term debt, and 4) other liabilities.

The bars in Chart 20 represent the level of reserves each country holds as a percentage of this “adequacy” metric. The International Monetary Fund estimates that adequacy lies approximately between 100% and 150%.

Once again, we see that Argentina, Turkey, and South Africa do not hold enough reserves based on this measure. Otherwise, around half of the countries are within the optimal range, while the rest lie above, i.e. their level of reserves is actually too high.

In conclusion, emerging debt should not be judged too hastily. While some vulnerabilities are clear, particularly as a result of the structural reliance on the USD, countries vary significantly one from another. We find the highest vulnerabilities in Turkey, Argentina, South Africa, and Chile (mainly in the non-financial corporate debt space) – as well as in Colombia (through government FX borrowing). Conversely, some other emerging countries have reduced their

19. Emerging markets official reserves to total FX debt ratio – the picture is disparate. Many countries have adequate level of reserves.

20. Official reserves as a % of IMF adequacy metric – many countries have sufficient reserves; Turkey, Argentina, and South Africa are again among the weakest links.

Sources: IMF, LO calculation
While high global debt is currently more sustainable than is often believed, and therefore poses no imminent threat, it still carries consequences. The characteristics of this new normal of high indebtedness include (but are certainly not limited to) new central bank policies, inequality, and much lower potential growth.

21. Non-financial corporate debt in China is the main point of vulnerability
As we saw earlier, the main reason that high global debt currently looks generally sustainable is that interest rates are low across sectors, maturities, and countries. One obvious consequence of interest rates rising is that debt would become truly unsustainable – and a dangerous source of instability.

A. A new era for policymaking

Central banks’ mandates differ according to their country’s culture, history, and specific strengths and weaknesses. However, one objective shared by all central banks is the preservation of overall financial and economic stability. In a world of high indebtedness, it does not take much tightening of interest rates to undermine that objective, and such a strategy may even appear irresponsible with hindsight.

Of course, not raising interest rates enough when economies are functioning at full capacity (i.e. “falling behind the curve”) also poses a risk to financial stability further down the road. The fact that the US Federal Reserve Bank (Fed) has already raised rates nine times since 2015 is proof that it doesn’t want to fall into this trap.

Nonetheless, the balance of risks in the current high debt environment remains tilted towards tightening too much rather than not enough. The tone of communications by major central banks in advanced economies over the past few quarters confirms that this is indeed their view.

Therefore, high global indebtedness has created a "new normal" in central bank policymaking, whereby rates are peaking at much lower levels than in previous cycles.
High global indebtedness has created a ‘new normal’ in central bank policymaking, whereby rates are peaking at much lower levels than in previous cycles.

As Charts 22 through 25 illustrate, the structural rise in total debt over the past twenty-five years has led to lower policy rates. Indeed, intuitively, higher debt levels require lower rates.

While persistently lower rates are not necessarily an issue per se, they do imply less room to cut rates when the next downturn comes. Clearly, many questions about how to fight future economic slowdowns remain unanswered, including the role of fiscal policy and to what extent it could, or should, coordinate with monetary policy.

In addition, low rates tend to allow non-productive projects to survive, with “zombie firms” structurally weighing on economic dynamics. As such, macro-prudential measures may be needed to limit this side effect without having to tighten financial conditions significantly.

Fortunately, central bankers have already developed a host of new tools to fight slowdowns, and they may well continue to improve their policies as economic research advances.

24. Japan has been trapped in its Zero Interest Rate Policy (ZIRP) for two decades

25. The UK is no exception to the rule
B. Debt-driven growth, or equality? Picking the battle

We should ask ourselves two controversial questions: Should all slowdowns be fought with the same energy? And what levels of growth are we prepared to accept?

High debt levels are the result of decades of wanting more growth in quantitative terms, but the wealth created has not always been shared fairly, let alone equally. As a result, the affluent are richer, while the middle and low-income classes have at best stagnated, or are even worse off than 25 years ago.

The share of total wealth in the hands of the richest 1% of the US population grew from 27% in 1994 to 37% 20 years later (see Chart 26). This happened in synchronisation with the rise of total debt from 304% of GDP to 385% over the same period. In contrast, the middle class is worse off. Their share of total wealth fell from 33% to 27% over the same 20-year period (Source: World Inequality Database).

This is a recipe for lower growth, as the marginal ability of the bulk of the population to consume diminishes, while productivity and willingness to produce decreases with declining rewards for working. As shown in Chart 27, the underlying structural trend in US real GDP growth has been falling consistently over the past 35 years as the middle class loses its purchasing power.

This begs the question: Should we keep aiming for stronger growth levels at a cost of ever-increasing, and eventually, truly unsustainable debt levels? Alternatively, should we aim to reduce inequalities, and accept low but sustainable growth while limiting the amount of additional debt?

From this perspective, concerns regarding debt and structurally lower growth levels may not be a curse, but rather an opportunity to reduce inequality and social tensions while improving societies’ overall wellbeing.

26. Inequality has increased in line with total debt

Sources: World Inequality Database, IIF, LO calculation, data as of end of 2014 (inequality), end of 2018 (total debt)
C. Scenarios for the “endgame”

We see three endgame scenarios for this environment:

(i) A new normal of lower growth and new way to conduct policymaking that avoids default at all cost – such as that experienced by Japan over the past two decades;

(ii) An “explosive” cascade of debt defaults – most likely triggered by an unwelcome tightening of financial conditions, due either to an exogenous shock or a policy mistake;

(iii) Proper deleveraging – leading the weakest links, such as “zombie firms,” to default alongside a painful period of belt tightening. Growth would fall sharply, but this scenario would provide a welcome cleansing of the system and offer a new healthy starting point.

Scenario (iii) – proper deleveraging – seems unlikely to us, given human beings’ natural distaste for drastic solutions unless forced to adopt them.

The middle scenario (ii), a cascade of debt defaults, seems unlikely in the near term, given the currently sustainable nature of the majority of global debt, as we have argued in this paper. However, should this sustainability fade through tighter financial conditions, then debt presents a greater risk today than two or three decades ago, and large-scale default becomes a possibility.

This leaves us with the first scenario (i) as a base case: a new normal of lower growth and a new way to conduct policymaking designed to avoid defaults at any cost. In a way, Japan is already in this endgame, with a form of wealth stability (no growth), price stability (no inflation), social stability (no inequality or populism), and policy stability (no change in rate decisions or balance sheet management) – all while enjoying some of the most advanced technologies in the world.

27. Inequality is a recipe for lower growth

Sources: World Inequality Database, IIF, LO calculation, data as of end of 2014 (inequality), end of 2018 (total debt)
What would make this scenario turn sour in the medium to long run? The main risk is a loss of confidence in central banks. Indeed, central banks’ balance sheets have surged over the past twenty years to reach ~20% of GDP in the US, ~40% of GDP in the eurozone, and ~100% of GDP in Japan (Chart 28).

This is because central banks have been buying public debt. Around 15% of all outstanding US public debt is on the Fed’s balance sheet. That figure is even higher in the eurozone, with almost 30% of the region’s government debt outstanding on the ECB balance sheet, up from under 5% just five years ago. And in Japan, close to half of all outstanding government bonds are in the central bank’s hands.

In other words, as long as trust in central banks is maintained, a lot of outstanding debt is under control, stored “safely” and carefully managed, rather than being diffused throughout the economy, where it is much more difficult to control.

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**28. Central banks’ balance sheets to remain structurally much higher going forward**

![Graph showing central banks' balance sheets](image-url)

Sources: Datastream, LO Calculation
29. As long as trust in central banks is maintained, a good chunk of public debt is in safe hands

Today, we may have reached the limit of the debt-driven growth model globally. As long as debt sustainability is ensured by accommodative financial conditions (borrowing costs below growth) and excess savings, a debt default spiral is very unlikely.

However, challenges abound. Growth will remain structurally low and central banks will need to keep re-inventing themselves with new ways to conduct monetary policies.

In the meantime, current debt sustainability offers a welcome window of opportunity to grow differently. Reducing inequalities in the vast majority of world economies may be an efficient way to support consumption without relying on excessive debt build-up. This path offers hope that the worst endgame scenarios of disorderly debt defaults can be avoided.

Sources: Datastream, LO Calculation
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