SOVEREIGN DEBT

Hamburgisches
WeltWirtschafts
Institut

BERENBERG
PARTNERSHIP SINCE 1590

STRATEGY 2030 CAPITAL AND LIFE IN THE NEXT GENERATION. AN INITIATIVE OF BERENBERG AND THE HAMBURG INSTITUTE OF INTERNATIONAL ECONOMICS.

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Table of contents

Executive summary

In most countries, the global financial crisis led to a huge increase in sovereign debt. Economic stimulus measures and bank bail-outs cost a lot of money. Germany has succeeded in reducing its debt level in recent years, but most other countries are still sitting on a mountain of debt.

Risk factor 1: Collapse of the economy and of growth. Thanks to the strong performance of the global economy, the issue of debt has slipped out of focus slightly in recent years. But this does not mean that the problem has been solved. In principle, there are various factors that could lead to a new debt crisis. But it would seem that the time for such a crisis is not yet ripe. Because the economy as a whole is performing well, it is expected to take some time before debt becomes a major topic for the financial markets again.

Risk factor 2: Interest rate increases. The stricter monetary policy goes hand in hand with a rise in capital market interest rates. This increases governments' cost of financing, and the burden of debt begins to weigh a little more heavily. Nevertheless, there are structural factors at play which indicate that interest rates will rise moderately and not dramatically, even in the face of stricter monetary policy. In addition, the effect of higher interest will be gradual, and thus subject to a time delay, because the majority of debt is financed at low interest over longer periods. So increasing interest does not constitute a direct risk at present.

Risk factor 3: Crisis of trust. Although the present low interest rates may indicate that the high debt levels are unproblematic, a basic level of caution is urged. The mood can change profoundly without much notice, causing interest rates to skyrocket.

Risk factor 4: Contagion. The eurozone is less susceptible now than during the euro crisis to the risk of a crisis in one member state spreading to other countries. By contrast, emerging economies in particular are exposed to significant risk of contagion. Yet the greatest risk stems from large countries such as Japan and the US. If these countries were to lose the trust of the financial markets, international ties mean that other countries would very likely be caught up in the debt spiral.

Risk factor 5: Foreign debt. Emerging economies that hold a high level of debt in foreign currency are subject to an additional exchange rate risk. Time after time, increasing dollar exchange rates have prompted concerns that emerging economies may be unable to repay their debts financed in US dollars.

Risk factor 6: Demographics. The average age in many western societies is increasing – with negative consequences for economic development and for public finances. Nevertheless, this period of demographic change is likely to be of short duration, with very limited potential for risk in the medium term. It is considered very unlikely that demographics will be a trigger for the next crisis.

Based on our assessment, we do not expect an extensive debt crisis any time soon despite high debt levels, provided that the global economy develops positively for the next year or two. However, we need to approach the next downturn with caution. Italy could be the first country to get into serious difficulties in the next recession unless the government moves away from its economic policy plans in the meantime. In the medium term, the US will also have to consolidate its state finances. This is something the world's largest national economy has succeeded in doing several times before. Last but not least, in the long term Japan will need to demonstrate how its mountain of debt can be overcome, as the central bank cannot be the only solution.

1. Introduction

Ten years ago, the global economic and financial crisis was at its peak. When ailing investment bank Lehman Brothers filed for insolvency on 15 September 2008, the smouldering crisis on the financial markets became a full-scale firestorm. While falling real estate prices had already been causing problems for banks and other financial institutions, it was the Lehman collapse that fanned the flames of the disaster.

The consequences were devastating. In several industrial countries, bank after bank was plunged into financial turmoil, and several had to be propped up by the state. The global economy was upended, with many companies and consumers cutting back on spending because of concerns about the consequences of the crisis on the financial markets. Growth in Germany collapsed by roughly 5%, something that had never before been seen in the post-war era. Governments around the world drew up extensive economic stimulus packages in a bid to counter the collapse of private sector spending. Central banks responded with drastic interest cuts, thus laying the foundations for an ultra-expansive monetary policy that would persist for several years.

With the economic stimulus measures and the direct aid for troubled financial institutions (including nationalisation), national governments took on a heavy financial burden. Parts of what had been private debt were converted into public debt. The resulting dramatic rise in sovereign debt, which in some cases had already been running at a high level, caused many market participants and the general public to fear huge inflation, state bankruptcy and even currency reforms. A large number of observers described the situation as hopeless.

It was this widespread concern that prompted us, back in 2009, to take an in-depth look at the topic of sovereign debt as part of our *Strategy 2030* series.[1] The tenor of our analysis at the time was that while the situation in the financial system and with public finances was very serious, there were ways out of the crisis without having to resort to the state bankruptcies, currency reforms or hyperinflation that people feared. Ten years on, we now know that these doomsday prophecies did not come true. With the exception of Greece, there were no state bankruptcies. Similarly, there was no need for currency reforms. Even the euro, which suffered a severe loss of trust in the interim, did not implode. And there has still not been any significant consumer price inflation in the major industrial countries. In fact, in recent years central banks have been more concerned with preventing deflation.

So is this positive outcome merely a »snapshot« of the current moment in time, or is there good reason to suggest that we have weathered the crisis? Is there a risk that these painstakingly achieved successes in stabilising state finances could be lost again the next time the economy takes a nose-dive? What happens if interest rates one day start to spike? And is there a threat of a new debt crisis if highly indebted countries such as Italy destroy the tediously crafted reform successes with another departure in economic policy? These are the questions we want to examine in this study. We will shed some light on the status quo and outline the areas that could pose new risks with the ability to reignite the debt crisis.

1 See Berenberg/HWWI (2009), Staatsverschuldung, in: Strategy 2030.

2. Sovereign debt: Where do we stand today?

In most countries, the global financial crisis led to a huge increase in sovereign debt. Economic stimulus measures and bank bail-outs cost a lot of money. Germany has succeeded in reducing its debt level in recent years, but most other countries are still sitting on a mountain of debt.

After the 2008/2009 financial crisis, the debts of many countries rose sharply (see Fig. 1). In the eurozone, sovereign debt rose by 14.5 percentage points to almost 85% of GDP in the period from 2008 to 2018. The debt levels of the major industrial nations (G7) climbed by 27 percentage points to roughly 117% over the same period. The US accounted for a major share of this large increase, with debt levels shooting up by 31 points to in excess of 100% of GDP in the corresponding period.

Germany is one of the few countries to have bucked the trend.

Germany is one of the few countries to have bucked the trend. In Germany, too, the crisis initially caused the budget deficit and the debt ratio to rise (see Fig. 2). However, since 2014 the budget is balanced or better, and debts have been declining for some years now in relation to gross domestic product, and most recently even in absolute figures. 2017 marked the first time since 2010 that debt returned to a level below EUR 2 trillion. While this reduction in debt is facilitated by the low interest rates, it is in particular the powerful German growth levels and the resulting higher tax revenues that have led to this positive result.

Debt increase as a consequence of the financial crisis

as a % of GDP

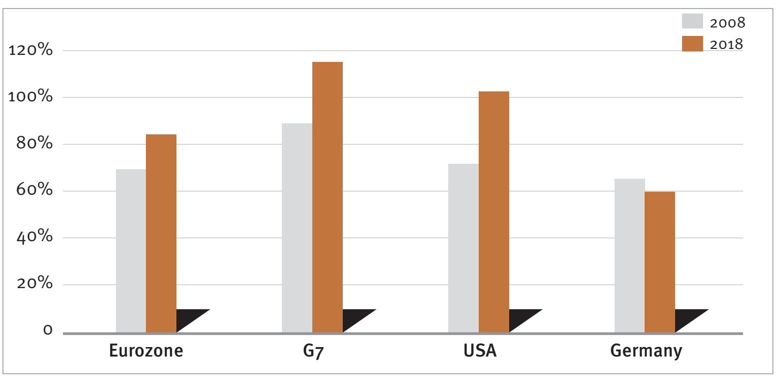


Fig. 1

Source: IWF.

Germany's debt level

as a % of GDP

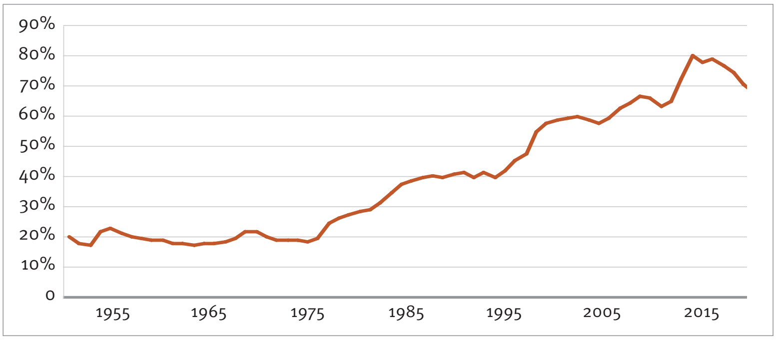


Fig. 2 Sources: Federal Ministry of Finance, Eurostat

Many eurozone countries are facing a very different situation. They are still suffering the financial after-effects of the crisis and in some cases from political (and economic policy) problems of their own making. The financial markets are currently focused on Italy. At over EUR 2.3 trillion, Italy has the highest debt level in Europe in absolute figures. Its debt ratio stood at more than 130% of GDP in 2017. Although this put it in second place behind Greece in a European comparison, it is not unusual historically for Italy to have high debt levels. Italy's debt ratio has only risen by roughly 15 percentage points since 1990. One of the causes of Italy's problems is the lack of economic growth. This is attributable to a combination of inefficient state institutions, structural challenges and a low level of labour productivity (see also Section 4).

At over EUR 2.3 trillion, Italy has the highest debt level in Europe in absolute figures. Its debt ratio stood at more than 130% of GDP in 2017. «

Spain experienced a particularly sharp rise in its debt ratio in the aftermath of the financial crisis. The country's debt levels ran at just around 40% of GDP in 2008, but this had already risen to 100% by 2014 as a result of the crisis. There were two principal reasons for the increase in public debt. Firstly, the anti-cyclical fiscal policy was expensive, and the government had to borrow heavily to pay for it. Secondly, Spanish banks had the possibility to sell non-performing loans to a state-run liquidating company. Since 2014 the debt ratio has gradually been declining again. This is because the Spanish economy is growing faster than its debt. Private debt levels have declined significantly over this period, falling by somewhere in the region of 50 percentage points in relation to GDP between 2008 and 2016.

Portugal's debt ratio was roughly 130% of GDP in 2016, making it one of Europe's most highly indebted countries. However, the International Monetary Fund (IMF) is forecasting the Portuguese debt ratio to drop to approximately 120% in 2018 and to fall further in the longer term. Portugal received financial support from the IMF to the tune of EUR 26 billion in the wake of the financial crisis. Most of this figure has already been repaid. The debt is subject to annual interest of 4.5% by the IMF. Because the interest rates on the capital market are now much lower than previously, Portugal is borrowing on the capital market to repay the outstanding debts to the IMF. Its strong economic performance and especially the booming tourism industry are further factors helping to cut the country's debt ratio.

» **Yet all of these measures were not enough, as not only did Greece's debt mountain continue to grow, its economy remained stubbornly in recession.**

No discussion around sovereign debt would be complete without mentioning **Greece**. Shortly before the onset of the global financial crisis, Greece's sovereign debt was »only« slightly above 100% of GDP, but this figure stands at roughly 180% today. Greece exited the European bail-out programme in mid-August 2018 and has since then been financially independent once again. To date, the measures introduced to reign in Greece's sovereign debt have also included extensive debt restructuring. For example, private bondholders saw more than 50% wiped off the nominal value of their receivables in March 2012, when they exchanged ailing Greek government bonds for longer-term, lower-interest bonds, some of which were guaranteed by the EFSF (European Financial Stability Facility). This measure immediately cut Greece's debts by roughly EUR 100 billion. Additionally, November 2012 saw the terms of Greek loans extended or deferred, along with a cut in interest. Yet all of these measures were not enough, as not only did Greece's debt mountain continue to grow, its economy remained stubbornly in recession. This resulted in a number of bail-outs from Europe and the IMF, most recently in 2015. The country received approximately EUR 85 billion in financial aid in return for far-reaching austerity and reform measures. The last bail-out was exited in August 2018. Greece now has to stand on its own feet finan-cially again.

International sovereign debt

as a % of GDP

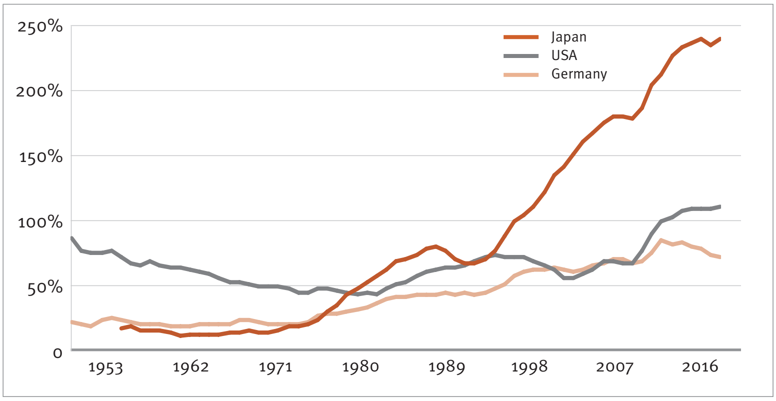


Fig. 3

Source: IWF.

In terms of the industrial countries, **Japan** has by far the highest debt level (see Fig. 3). Its sovereign debt amounted to over 230% of GDP in 2017. There are no signs of saving, with government spending set to increase further in 2018. The IMF at least expects that the debt ratio will not increase substantially in the coming years. Instead it is forecast to stabilise at around 235%. This expansive fiscal policy is financed primarily by bond-buying by the Bank of Japan. The Japanese central bank held over 41% of all government debt in December 2017, which corresponds to in excess of EUR 3.5 trillion.[2] Higher taxes and growth are also helping to finance this course. In 2017, the Japanese economy experienced 1.9% growth. This figure is significantly higher than the average growth of roughly 0.55% over the past ten years. Higher government spending is chiefly related to the ageing population and the rise in military spending in response to threats from North Korea.

In terms of the industrial countries, Japan has by far the highest debt level. Its sovereign debt amounted to over 230% of GDP in 2017.

The debt ratio in the **US** has more than doubled since 2001 and has already topped the level of 100% of annual economic performance. The trend is for debt to climb further. In 2017 alone, the US budget deficit came to USD 665 billion. Rising US interest rates mean that it is becoming more expensive to finance the debt. The economy is performing very well, with GDP expected to grow by almost 3% in 2018, and unemployment is at its lowest

2 https://www.reuters.com/article/us-japan-economy-boj/bojs-government-debt-holdings-hit-record-in-fourth-quarter-idUSKBN1GV06E

in nearly 50 years, at just 3.7%. However, Donald Trump's tax reform is likely to reduce government revenues and fuel a further deficit increase. While household debt is on the decline in the US, it remains at a high level of almost 80% of GDP.

China is not immune to a debt problem either. Although its debt ratio of around 50% is the lowest of the major national economies, the figure is quite high for an emerging economy, and corporate debt levels have exceeded 160% of GDP. This development is being spurred on by the relaxed lending policies of the People's Bank of China. In 2018 the central bank relaxed its lending policies further. Household debt is also rising at a fast pace, up roughly 30 percentage points to almost 50% of GDP within ten years.[3]

In its World Economic Outlook in October 2018, the International Monetary Fund remarked that, ten years after the crisis, the global economy is facing new challenges: The median general government debt-to-GDP ratio is around 15 percentage points higher than before the crisis, central bank balance sheets have seen robust growth and the developed economies have lost ground since the crisis, due in part to the weak economic recovery. By contrast, emerging markets and developing economies have succeeded in expanding their share of global GDP considerably.[4]

In virtually all developed economies, private debt is at a very high level, in some cases far in excess of 100% of GDP. However, debt levels have stabilised in many countries in recent years.

Private debt

While private debt does not impact directly on a country's solvency, it can be an important indicator of an individual country's debt-bearing capacity. Private debt refers to all existing debt commitments of households and companies outside of finance. In addition to mortgages and credit card debt, it therefore also includes loans for investment purposes.

In virtually all developed economies, private debt is at a very high level, in some cases far in excess of 100% of GDP. However, debt levels have stabilised in many countries in recent years. Private debt has waned slightly in Germany, dropping from around 120% of GDP in 2009 to just above 100% in 2016. This places Germany at the lower end of the scale in an international comparison of the industrialised countries. The US, Japan, Spain and France rank much higher, with rates of between 150 and 190%. While the US and Japan have kept private debt more or less stable, France has

3 See https://tradingeconomics.com/china/households-debt-to-gdp
4 See IMF (2018), World Economic Outlook, October 2018, p. 71.

Private debt is a mixed bag

as a % of GDP

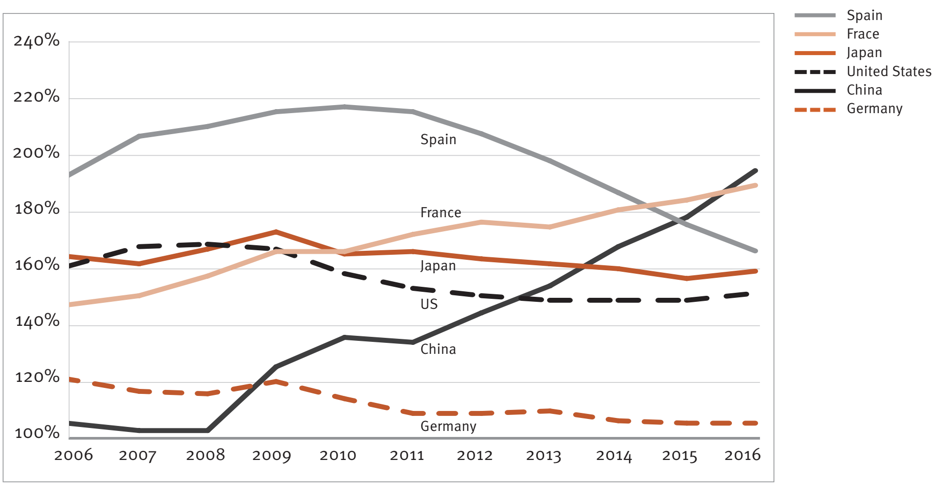


Fig. 4

Source: IWF.

noted a moderate increase, and Spain's private debt has dropped considerably since 2010. This reflects the development described above whereby Spain has converted private debt to public debt. The trend in China stands out from the rest. Private debt there has virtually doubled since 2008, i.e. in just ten years, to reach almost 200% of GDP. But China is still nowhere near top of the table. That position is held by Luxembourg, with private debt of more than 400% of annual economic output.

A nuanced approach must be taken when assessing private debt levels. Although every loan that is granted constitutes a risk, even very high overall debt does not automatically create systemic risks. Instead, high private is initially an indicator of strong economic development and performance. This is because private debt is highest in the best-developed countries, while borrowing is difficult for those in the poorest developing countries. As long as most of the market players can pay off their loans later, the trust placed in them is merely a sign of a functioning market economy.

This does not mean that private lending is never a cause for concern. In fact, the financial crisis clearly demonstrated the potential outcomes of irresponsible lending. For example, risky bubbles can form, and when they burst, it impacts negatively on the economy as a whole. So the key is to have a mix of risk for loans granted: lending that is overly restrictive can hamper economic development, but very lax lending can result in too many borrowers being unable to pay their debts, especially if interest rates rise. In a worst-case scenario, systemic risks can come about if banks are not prepared for default. The state has to step in as an emergency measure, resulting in bad loans being converted to public debt.

It is clear, then, that private debt impacts negatively on sovereign debt only in extreme cases in which ailing institutions that are relevant for the system have to be bailed out by the state.

It is clear, then, that private debt impacts negatively on sovereign debt only in extreme cases in which ailing institutions that are relevant for the system have to be bailed out by the state. That's why the situation is currently calm in the developed economies. For one, private debt has scarcely increased overall in recent years, which suggests that the risk mix of overall debt has not deteriorated. Secondly, it is unlikely that any serious crises will occur in the coming years that would require governments to issue multi-billion aid packages.

However, the situation in emerging economies like China is very different, as it is precisely in these countries that private debt is spiralling. Whether all of this debt can be repaid at a later stage is not so certain in this region. This is particularly true if the financial markets in those countries suffer turmoil. This is why it is important to keep an eye on China's private debt levels. Nowadays the Chinese economy is so important for the global economy that a crisis in China would have knock-on negative effects for other national economies.

3. Potential triggers of a new debt crisis

Thanks to the strong performance of the global economy, the issue of debt has slipped out of focus slightly in recent years. But this does not mean that the problem has been solved. In principle, there are various factors that could lead to a new debt crisis. But it would seem that the time for such a crisis is not yet ripe.

Debt is a promise by a borrower to pay enough in future to allow the debt including all interest to be repaid within the agreed term. When granting the loan, the creditor clearly assumes that the debtor will be able to keep this promise. However, occurrences during the term of the loan may reduce the probability of repayment and lead to partial default on the loan. Each individual loan agreement is subject to a certain risk, but defaults on individual loans do not pose a threat to the economy as a whole. When things potentially get dangerous is when the probability of default increases for a large number of loans and many loans become non-performing at the same time. In a worst-case scenario, a systemic crisis can occur with severe consequences for the national economy. In the following, we outline a number of factors that could trigger a new debt crisis.

3a. Collapse of the economy and of growth

Because the economy as a whole is performing well, it will probably take some time before debt becomes a major topic for the financial markets again. At the same time, individual countries whose economies fail despite the global upswing could experience difficulties sooner. But as long as this doesn't happen in any large country, no widespread debt crisis will occur.

The best way to counter onerous sovereign debt is through economic growth. If the denominator (gross domestic product) increases faster than the numerator (absolute debt), the sovereign debt ratio decreases. «

The best way to counter onerous sovereign debt is through economic growth. If the denominator (gross domestic product) increases faster than the numerator (absolute debt), the sovereign debt ratio decreases. In this way, a country can »grow out of its debt«, even if the absolute debt is stagnant or even on the rise. As long as economic performance grows faster than debt, the debt ratio will fall – and it's the debt ratio that matters. For

German debt

as a % of GDP | in EUR million

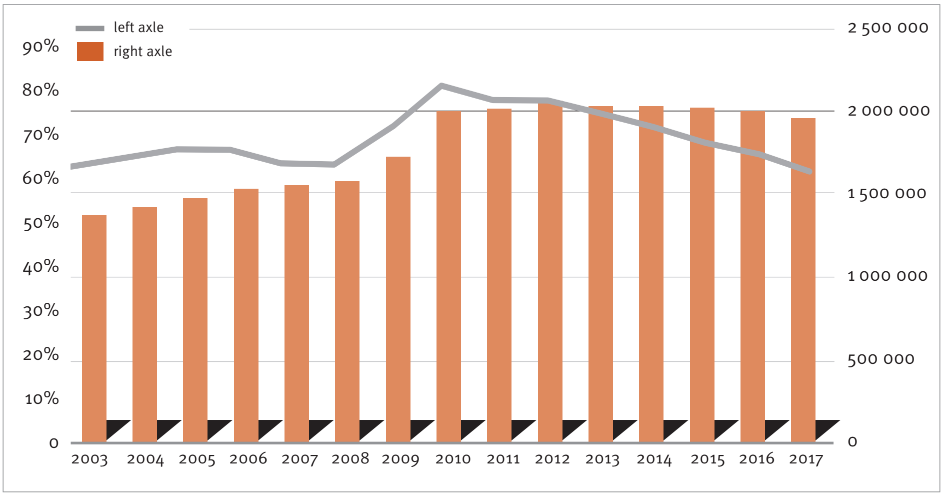


Fig. 5

Sources: Statistisches Bundesamt (German Federal Statistical Office), BMF (Federal Ministry of Finance)

example, Germany's success in cutting debt in recent years was thanks not only to restrained spending and low interest but also to its strong GDP growth.
Figure 5 shows that German debt in the period from 2010 to 2016 was consistently just above EUR 2 trillion in absolute figures. Although the debt level changed only marginally throughout this period, the debt ratio, i.e. the debt level in relation to GDP, fell sharply from nearly 80% to roughly 64%. As a result, Germany is currently doing exceptionally well at growing out of its debt.

GDP growth rate is an extraordinarily important KPI for a country's debt-bearing capacity. If the growth rate falls considerably below the figures expected to date, investor trust in the ability of the country in question to repay its debt may decline or, in a worst-case scenario, disappear altogether. Reasons for a drop in the growth rate can include an economic collapse or misguided economic policy, which drives down the longer-term growth trend. The reason why debt crises are more likely to occur in periods of economic downturn is that market stakeholders refocus their attention on liabilities and are quicker to classify them as unrecoverable. Doubts surrounding debt-bearing capacity may in turn drive interest rates up, thus triggering a spiral of rising interest and negative expectations (see the following section 3b).

Our outlook for the global economy remains positive for the moment. The global economic upswing is likely to continue for another year or two. We are still expecting the global economy to grow by almost 3% in both 2019 and 2020. If this positive outlook proves accurate, a debt crisis in the next two years looks improbable.

3b. Interest rate increases

The stricter monetary policy goes hand in hand with a rise in capital market interest rates. This increases governments' cost of financing, and the burden of debt begins to weigh a little more heavily. Nevertheless, there are structural factors at play which indicate that interest rates will rise moderately and not dramatically, even in the face of stricter monetary policy. In addition, the effect of higher interest will be gradual, and thus subject to a time delay, because the majority of debt is financed at low interest over longer periods. So increasing interest does not constitute a direct risk at present.

> **The reason why debt crises are more likely to occur in periods of economic downturn is that market stakeholders refocus their attention on liabilities and are quicker to classify them as unrecoverable.** «

The default risk for a bond is closely related to the amount of interest. In the current low interest environment, high debt levels for governments, companies and private households can be borne with comparative ease. By contrast, a higher interest level would constitute a burden. This is why market stakeholders are currently monitoring the further development of market interest rates very closely and at times with great concern. The long-expected turnaround in interest rates could mean that debt gradually becomes a problem once again. In recent years, debate on the (supposedly) imminent turnaround in interest rates has led to several smaller and larger market adjustments.

The impact of higher interest is felt in a variety of ways:

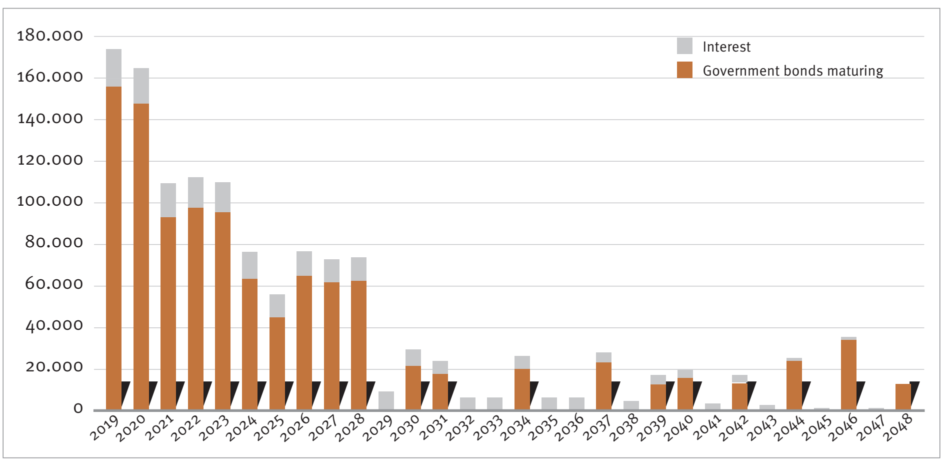
1. Debtors have to pay higher interest for follow-up financing for maturing loan agreements, unless they pay off the loan in full.
2. If interest rates rise in one country, investment deposits get moved around. At present it is the US that is taking the lead on turning interest rates around. This is making the US more attractive as an investment location. Capital is being pulled out of other countries to invest it in the US. For emerging economies in particular, this could cause problems due to the outflow of capital and falling exchange rates (see section 3e).

3. Rising interest rates also lead to transfers between asset classes. In recent years, the zero-interest environment brought about an »investment crisis«. In search of returns, investors channelled much of their funds into other market segments like real estate or shares. If interest rates were higher, some of this money would be returned to the bond market. If this happens abruptly, there may be a more substantial price adjustment, especially on the stock market. If such an adjustment is significant, this can impact negatively on the economy due to what is termed the »wealth effect«, because people consume less if their wealth has shrunk due to share price losses for example (see section 3a).

Clearly there are direct consequences for follow-up financing for maturing loans and for new borrowings. For most countries, however, wide-scale concern about imminent economic strain in the event of interest rate increases is exaggerated. Higher interest always only affects the portion of debt that is falling due for repayment and is up for refinancing. But because the majority of sovereign debt still has a longer term with fixed interest rates, the interest burden for that portion of debt initially remains stable even when interest rates increase. Even if interest rates were to climb moderately, the follow-up financing would even help to reduce the burden on national budgets for a time, because the bonds maturing were often subject to much higher interest.

Maturities of German government bonds

in EUR billion



The bonds included here are solely those that are already currently in circulation. The follow-up financing and new loans will push back the maturity structure by the newly concluded terms.

Fig. 6

Source: Bloomberg.

The case of Italy is somewhat different, however. Analysts and even EU representatives are increasingly alarmed by the most recent developments in finance policy there. This is because announcements by the Italian government that it wants to allow a budget deficit of not 0.8% but 2.4% – based, it must be said, on very optimistic growth assumptions – have caused the interest rates on Italian government bonds to rise further. Unless it is possible to steer Italy away from its path of additional spending, this trend could even accelerate in the coming years.

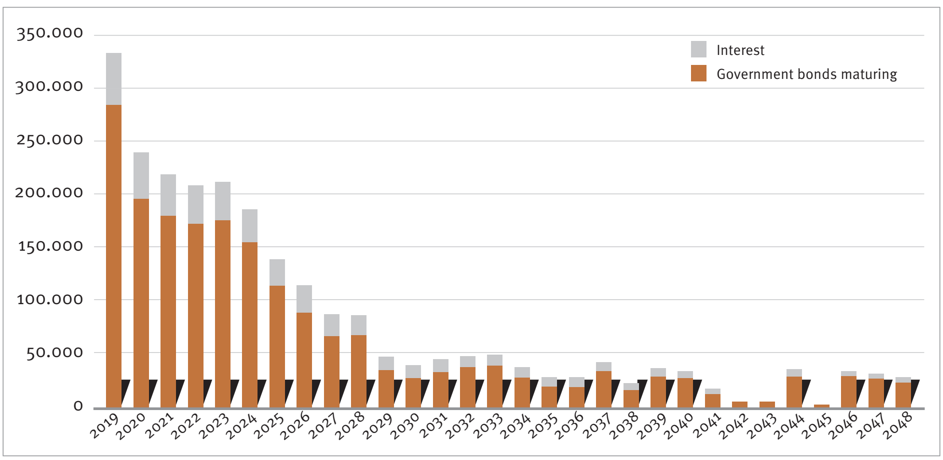
Announcements by the Italian government that it wants to allow a budget deficit of not 0.8% but 2.4% have caused the interest rates on Italian government bonds to rise further.

The Kiel Institute for the World Economy has developed a number of scenarios in which Italy's interest burden could increase dramatically over the next 15 years if the government were to proceed with the planned measures.[5] The scenarios simulate the consequences that a rise in market risk premiums on the one hand and a turnaround in ECB interest rates on the other hand would have on the interest burden of the four largest national economies in the eurozone. Even in the best-case scenario (no increased market risk premiums and no interest turnaround), Italy's interest burden would reach more than 5% in 15 years, which would translate into additional spending of more than EUR 5 billion annually. In the worst-case scenario, Italy would

5 See Stolzenburg (2018).

Maturities of Italian government bonds

in EUR billion



The bonds included here are solely those that are already currently in circulation. The follow-up financing and new loans will push back the maturity structure by the newly concluded terms.

Fig. 7

Source: Bloomberg.

have to pay interest of almost 10%, and this could trigger a profound sovereign debt crisis. This would then cost the Italian tax authorities more than EUR 15 billion annually. Cuts would be needed just to keep the budget deficit stable, and these would be certain to force the Italian economy into recession. It is doubtful whether Italy would even be in a position to pay its debts in such a scenario. And if the government were then to stuck stubbornly by its economic policy, even a bail-out through the European Stability Mechanism (ESM) would be impossible, as this would only help subject to the proviso of economic policy reforms.
A default event like this one would be extremely painful, not just for Italy and its economic and financial system, but also for the rest of the eurozone. As a result, it is vital that the EU and Italy agree on a more sustainable fiscal policy. Even de-escalating the rhetoric could help to reassure the markets. Although the US has already increased interest rates and there is a lot of talk of a turnaround in interest rates for Europe too, the interest levels are still very moderate. We expect that market interest rates will rise, but will remain at a low level for an extended period, even if the central banks tighten up their monetary policy. That's because, apart from the expansive monetary policy, it is structural reasons in particular that are behind the falling interest rates over the past several decades (see Fig. 8). For example, pressure to accumulate personal savings on account of the demographic development has led to a high capital offering, which in turn is keeping interest rates low. In addition, digitisation has resulted in less demand for capital, as the growth of the digital economy requires less capital.[6]

6 See Mayer/Pflüger/Quitzau (2017), Zinswende – ein Stück Normalität, Berenberg Makro from 27 January 2017 for more detail.

Real interest rates in Germany (10-year German government bonds)

as a % · Real interest rate: nominal interest rate minus inflation rate

Fig. 8

Source: Bloomberg.

3c. Loss of trust (multiple equilibria)

Although the present low interest rates may indicate that the high debt levels are unproblematic, a basic level of caution is urged. The mood can change profoundly without much notice, causing interest rates to skyrocket.

In the ideal world of textbook scenarios, financial and debt crises do not come about overnight. Instead, they develop gradually, because the foreseeable risks are priced into the exchange rates over time through corresponding purchases and sales by market stakeholders. If there is a substantial risk that the issuer of a fixed-income security cannot repay the loan at the end of the term, the issuer has to pay higher interest than if such a risk is not remotely possible. The providers of capital demand a premium for the risk they enter into. As a result, shaky economies are punished by the financial markets in the form of higher interest rates. Consequently, the markets have an important disciplinary function. At the same time, the rising interest rates are a reflection of the higher risks and are indicative of a potential crisis.

> **The providers of capital demand a premium for the risk they enter into. As a result, shaky economies are punished by the financial markets in the form of higher interest rates. Consequently, the markets have an important disciplinary function.** «

In the bond segment, government bonds are viewed as particularly secure, because governments can use taxes and levies to obtain the income they need to repay the loans taken out. The economic output of an entire country acts as collateral for government bonds. This is why the risk premiums on government bonds are generally low. There are exceptions, however: If a country is managing its finances so unreliably that there is justified doubt regarding the long-term feasibility of the country's budgetary policy, the financial market stakeholders can also demand risk premiums for the bonds of the country in question. These risk premiums are reflected in the different interest rate compared with other countries whose bonds are considered absolutely secure. Alongside US and Swiss government bonds, German government bonds are seen as amongst the world's most secure.

Figure 9 shows the difference in interest rates on German government bonds with a two-year term compared with government bonds from Italy and Spain. Even at first glance, it is striking that virtually no interest mark-ups were payable on Italian and Spanish government bonds from the time the common European currency was introduced to the onset of the global

Italy unsettling the markets

in % points

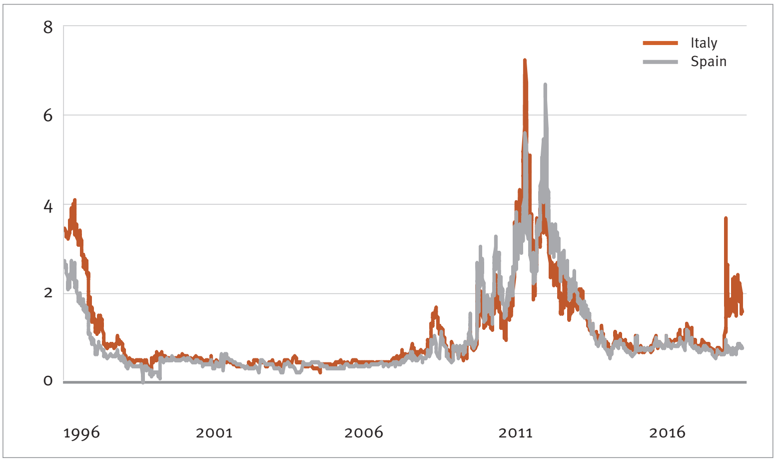


Fig. 9

Source: Bloomberg. Difference in interest rates on two-year bonds compared with two-year German government bonds.

financial crisis. Conversely, this means that the government bonds of the three countries were rated by market participants as equally secure during that period. This risk assessment is astonishing, because Spain and Germany had just moderate debt levels, while Italy at the time already had a debt-to-GDP ratio in excess of 100% with a disconcertingly high debt level.

If a country is managing its finances so unreliably that there is justified doubt regarding the long-term feasibility of the country's budgetary policy, the financial market stakeholders can also demand risk premiums for the bonds of the country in question.

It appears that buyers of Italian government bonds disregarded all the risks during that period, despite the fact that the rules of the currency union expressly prohibited any bail-out of a country in financial difficulties by the other member states in the eurozone.[7]

7 In retrospect, some observers interpret the lack of risk premiums during this phase to mean that the market stakeholders never believed that the bail-out ban would be implemented. Instead, observers say, they expected that the other eurozone countries would bail out a crisis-ridden country in a worst-case scenario. However, this assessment does not explain why risk premiums shot up precisely when the U-turn on the bail-out ban was ultimately made, thus confirming the – apparent – expectations of market stakeholders.

The chart suggests that different interest rates are possible on the financial markets for one and the same debt level and one and the same default risk. If market stakeholders are relaxed because they do not attribute any particular significance to the debt level, they will demand little or no risk premiums despite recognisable risks. By contrast, if market participants are unsettled and nervous about the same debt level, interest rates will be much higher. So interest rates can vary considerably depending on the prevailing mood. In cases like these, economists refer to a concept known as »multiple equilibria«. The decisive factor is that the existence of multiple equilibria somewhat disarms the early warning function of the financial market. In such cases, governments do not necessarily get any warning signs from the financial markets until it is almost too late to change the course of its finance policy.

Many market observers still believe in the adage that »The market is always right.«

Despite adequate evidence that markets tend to exaggerate and risks are at times not priced into the equation correctly, many market observers still believe in the adage that »The market is always right.« In this scenario, low interest rates are seen as a reliable indicator of the absence of risks. But this can be a hazardous false conclusion. For example, before the euro crisis, the markets gave a false sense of security that did not exist in reality. The markets evidently did not assess the existing risks correctly. This shows that it can be a grave error to conclude that low risk premiums mean an absence of risk.

Italy: sovereign debt v. spread compared with two-year German government bonds

as a % of GDP | in % points

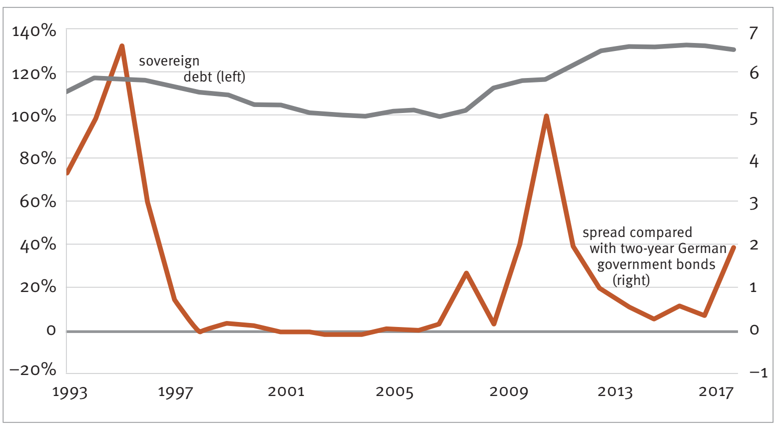


Fig. 10

Source: Bloomberg.

3d. Contagion

The eurozone is less susceptible now than during the euro crisis to the risk of a crisis in one member state spreading to other countries. By contrast, emerging economies in particular are exposed to significant risk of contagion (see also section 3f). Yet the greatest risk stems from large countries such as Japan and the US. If these countries were to lose the trust of the financial markets, international ties mean that other countries would very likely be caught up in the debt spiral.

Debt crises can either affect just one individual country or a whole group of countries. A group of countries is affected if the framework conditions for all countries deteriorate at the same time (for example as a result of rising interest rates, an economic shock or a sudden loss of trust) or if the countries are very closely linked economically, so the problems of one country spread to other countries. This then results in contagion. Figure 11 depicts the contagion phenomenon during the euro crisis very clearly. Although Italy and Spain succumbed to the crisis based on very different macroeconomic situations, the interest mark-ups compared with German government bonds (considered secure) shot up at approximately the same pace. These interest mark-ups are the risk premiums demanded by the investors. There was also a rapid rise in the price of credit default insurance, used by market stakeholders to hedge against payment default.

Italy and Spain

in % points

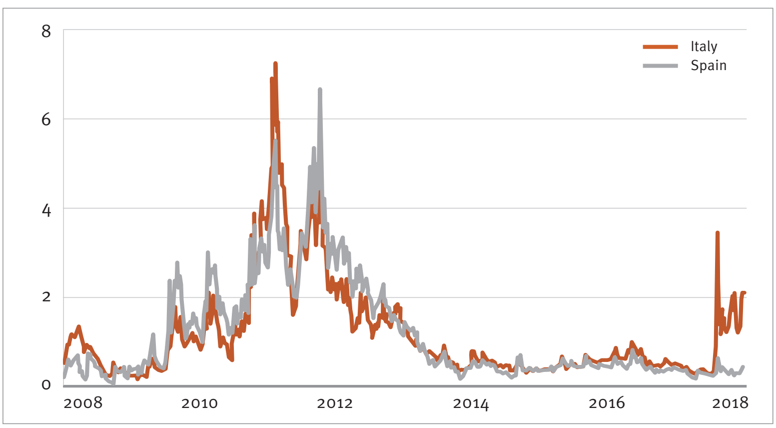


Fig. 11 Source: Bloomberg. Difference in interest rates on two-year bonds compared with two-year German government bonds.

The principal cause of the dramatic spike in risk premiums was the concern that – one after another – the highly indebted countries in the south of Europe could default on their public debt. Behind this lays the assumption by investors that if one country were to default, it would have such a severe financial impact on the other countries that the next-weakest country could be sucked into the quagmire and ultimately become insolvent. The very fear of default resulted in considerable pressure to sell, with the inherent risk of a self-fulfilling prophecy.[8] Furthermore, the higher interest rates reflected the worry of a precedent being set: if one country were to have its debt restructured, the floodgates would open.

It is worth noting that the current crisis in Italy has not yet spread significantly to other countries in the eurozone. There's good reason for this, namely that the euro architecture has been refined as part of the euro crisis to ensure that assistance from the ESM and ECB prevents the problems of one country from spreading to the other countries. The current increase in interest rates on Italian government bonds and the higher prices for credit default insurance are a justified response to the risks that stem from Italy's economic policy, without other countries in the currency union also coming under pressure. The European currency union appears to have learned its lessons from the crisis and implemented the right measures to stabilise the eurozone as a whole.

In the – at present unlikely – event that the major debtor countries Japan and the US should prove unable to repay their debt in full, the risks of contagion would have disastrous effects.

In the – at present unlikely – event that the major debtor countries Japan and the US should prove unable to repay their debt in full, the risks of contagion would have disastrous effects. The volume of the government bonds of both countries is too high for the international markets to remain shielded from the consequences of a default. Japan ranks top of the list of highly indebted industrial nations with a debt-to-GDP ratio of more than 230% – this amounts to USD 11.5 trillion, a good 40% of which the Bank of Japan has purchased and is holding in its balance sheet.[9] The USA is indebted at over 100% of GDP, which corresponds to USD 21.7 trillion in absolute figures. The US Federal Reserve is holding US government bonds of USD 2.8 trillion in total, but has gradually been reducing its reserves since the end of 2017.[10]

8 A self-fulfilling prophecy happens when market stakeholders' fear of a certain occurrence (e.g. state bankruptcy) brings about precisely that occurrence. For example, if market participants have doubts about a country's solvency and stop providing capital to that country as a result, the country first becomes illiquid and can ultimately become insolvent. Whether or not the original doubts were fundamentally justified is irrelevant.
9 See https://www.statista.com/statistics/270121/national-debt-of-japan/
10 See https://www.usgovernmentdebt.us/ and https://fred.stlouisfed.org/series/FDHBFRBN

The government bonds of the world's largest national economies are traditionally seen as particularly secure and are viewed as a safe bet in riskier times especially. This is why they are a very important asset class for private and institutional investors alike. If countries like the US or Japan were no longer able to repay their debt in full, this would be equivocal to the loss of major assets for creditors. The likely consequence would be a downward spiral of falling asset values and economic setbacks.

Close links between debt, banking and currency crises.

The following chart 12 schematically illustrates the key channels through which a debt crisis spreads to the real economy. Interestingly, there are close links between debt, banking and currency crises. Historically, for example (sovereign) debt crises are frequently followed by inflation processes and currency reforms in order to »press the reset button«.

There is a close relationship between a country's debt situation, the stability of the banking sector and the development of the exchange rate. This is true in particular if the capital markets are widely liberalised and the exchange rates of the crisis countries are fixed in respect of one

Visual presentation of the debt crisis

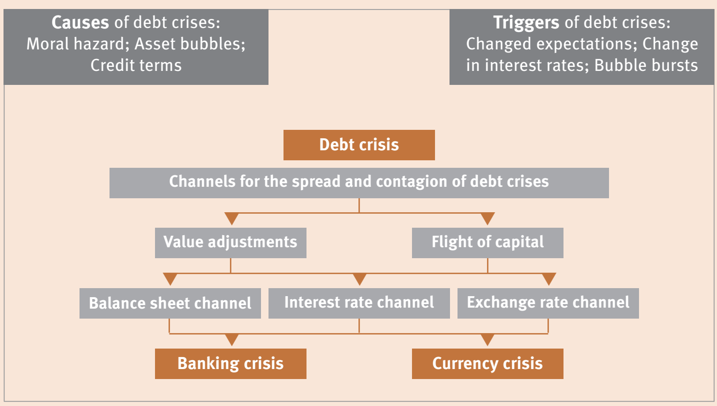


Fig. 12

(or several) other currency (currencies) so that the crisis country does not have autonomy over its monetary policy.[11] The extent to which debt, banking and currency crises can be caused and even deepened by each other is explained briefly below.

The phenomenon of banking and currency crises occurring at the same time or following on from each other is not new. After the crisis in Asia in 1997, however, a detailed discussion of the links between banking and currency crises emerged in the literature. One of the most notable publications in this context was published by Kaminsky and Reinhart in 1999,[12] which coined the term »Twin Crises«[13] and provided insights into the relationship between banking and currency crises based on broad-based empirical analysis: The basic tenet is that joint occurrence of banking and currency crises on liberalised capital markets and the huge capital imports often related to that phenomenon are more likely than in the case of heavily regulated cash flows. Furthermore, problems in the banking sector typically precede a currency crisis, the problems increase when the currency crisis begins, thus deepening the banking crisis. However, a weak banking sector is not the only cause of a currency crisis. In fact, external shocks often occur in advance of the crises – for example the onset of recession, a deterioration in the terms of trade, interest rate increases and the relating rise in credit costs and/or a drop in export value; the vulnerable banking sector is then merely an accelerating factor on the road to crisis.[14] Accordingly, cases in which the macroeconomic fundamental variables develop positively in advance of twin crisis are rather rare. Once a twin crisis has occurred, the damage for national economies has generally been much more extensive than in the case of isolated banking or currency crises.

The link between banking and currency crises is depicted visually in Figure 13 and can be summarised as follows: If decreasing trust in the ability of a country – which later becomes a crisis country – to repay its debts leads to an increased flight of capital, the first effect is that the banks themselves can become insolvent. Secondly, however, they can get into payment difficulty indirectly via company insolvencies, which are also caused by the withdrawal of capital. Of course this is the case in particular if the loans granted by the banks to the companies have

11 This relationship is based on the concept in economic policy of the »Impossible Trinity«, which states that the three objectives of independent monetary policy, free movement of capital and fixed or stable exchange rates cannot be achieved at the same time and in full, see Frenkel/Menkhoff (2000).
12 See Kaminsky/Reinhart (1999).
13 The term »Twin Crises« is defined by Kaminsky & Reinhart, loc. cit., as follows: If the beginning of a banking crisis if followed within 48 months by a currency crisis, this is referred to as a twin crisis.
14 See Kaminsky/Reinhart (1999).

a longer term than the deposits (no congruent terms) or if the companies are financed by issuing short-term securities. In connection with a devaluation of the domestic currency compared with the currency of the creditor countries, the debt burden (which is generally denominated in foreign currency) increases, which leads to further panicked withdrawal of capital. This mechanism is a vicious cycle whereby initial withdrawals of capital due to slight pressure to devalue the domestic currency cause individual corporate insolvencies. These insolvencies in turn can result in the collapse of banks, which can trigger panic among investors and cause further capital withdrawals, leading to increased pressure to devalue the currency. Once a currency is devalued, i.e. a currency crisis occurs, more and more companies tend to become insolvent, posing the risk of a full-blown banking crisis.

Therefore, the greatest risk for a country of being caught up in a banking or currency crisis stems from capital withdrawals that take place at short notice. The moment that triggers the crisis can vary. However, the common factor in past crises appears to be doubts by foreign investors about the debtor country's ability to repay or bear its debts. So the banking crisis or the currency crisis stems from a debt crisis. In other words, the debt crisis entails huge risks of leading to a banking or currency crisis or – in a worst-case scenario – both.

Banking crisis – Currency crisis

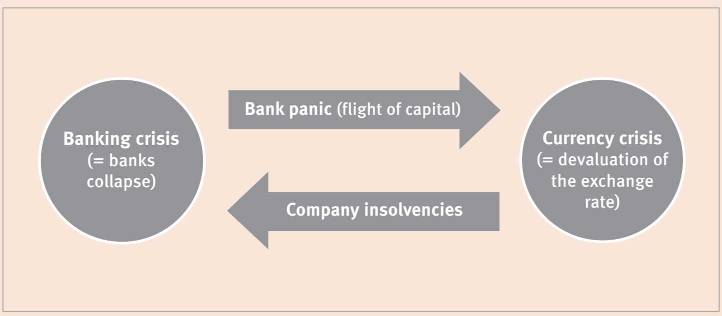


Fig. 13 Source: prepared in-house

3e. Foreign debt and exchange rate collapse

Emerging economies that hold a high level of debt in foreign currency are subject to an additional exchange rate risk. Time after time, increasing dollar exchange rates have prompted concerns that emerging economies may be unable to repay their debts financed in US dollars. Most recently it was Turkey and Argentina that kept the markets in suspense. In the event of debt default, wealth will be destroyed and share prices will fall. However, it is improbable that a sovereign debt crisis in the emerging economies would spread to the industrialised nations. In order for that to happen, the industrialised countries would already have to be in a fragile situation.

There is an additional risk for debtors when borrowings are made in foreign currency. The exchange rate then becomes an added uncertainty. This is because if the value of the home currency falls in relation to the currency of the country in which the debts were accumulated, the value of the debt increases in real terms. This means that the exchange rate weakness of the home currency constitutes an additional burden. This affects emerging economies in particular.

> **There are different reasons why emerging economies borrow in foreign currency. One major reason is if the country's monetary policy lacks credibility.**

There are different reasons why emerging economies borrow in foreign currency. One major reason is if the country's monetary policy lacks credibility. If this is the case, the country cannot reduce its debt denominated in foreign currency by means of an expansive monetary policy and related inflation.[15] This is an advantage for potential investors.
If a lack of investor trust in the debtors' liquidity and solvency then results in loans being terminated and capital being withdrawn, a vicious circle can ensue. The withdrawal of capital, for example through the sale of bonds or sales of shares by foreign investors, may lead directly to a currency crisis through the related devaluation of the exchange rate. This would result in an increase in real debt, which in turn could trigger further capital flight. This vicious circle could culminate in a declaration that the country in question is unable to repay its debts. The amount of foreign debt alone is not necessarily a good indicator of a country's susceptibility to crisis.[16] The structure of foreign debt would appear to be a much more significant factor for the stability of the banking sector: A high proportion of short-term debt in relation to total debt as well as of floating-rate loans in relation to the total loans granted by the banking sector greatly increases the risk of a banking crisis stemming from a debt crisis.

15 See Jeanne (2003).
16 See Sachs/Tornell/Velasco (1995).

In general, the pace of economic development has slowed in most of the emerging economies in recent years. The strength of the US dollar is having a more and more noticeable impact in terms of the negative trade balances combined with sizeable budget deficits in these regions. Some countries are in all-out crisis. For example, we are witnessing a dramatic drop in currency value in Argentina and – despite noteworthy economic growth to date – in Turkey. Both countries have accumulated high foreign debt levels in the past in order to finance government spending. Now the markets are losing trust, as structural reforms necessary to enhance growth and reduce the deficit have not been made. Meanwhile, other emerging economies such as China and India continue to experience strong growth, albeit at a slightly slowing pace.

» **In general, the pace of economic development has slowed in most of the emerging economies in recent years.**

The debt situation and the related susceptibility vary in the different emerging markets. For example, there were times in 2018 when the Argentinian peso and the Turkish lira were in free fall, threatening to drag the respective economy into a deeper crisis. But the Brazilian and South African economies are also stagnating and are potentially endangered as a result.

Argentina

Argentina is proof that the traditional indicator for excessive sovereign debt, namely the sovereign debt ratio, is not necessarily reliable. Because although the country is stumbling from one crisis to the next, the sovereign debt ratio is at a moderate level. Currently it stands at roughly 50%, increasing marginally over time, and thus well below the debt ratio of most established developed countries. Argentina's difficulty is the combination of its budget deficit (5-6%) and trade deficit (5%). A lack of sustainability in its fiscal and economic policy paired with its dependence on financing the country's consumption from abroad is leading to a huge loss of trust on the markets. This is causing the domestic currency to devalue and inflation to rise. For Argentina, the effect is substantial: The Argentinian peso lost more than half its value against the US dollar in 2018. Inflation increased significantly as a result. The country has been battling inflation in particular for almost 20 years now. All of these factors are slowing the pace of economic development. Some powerful economic growth in the early 1990s and mid-2000s was followed by a protracted and pronounced crisis. This now appears to be happening again, with the pendulum of economic growth gravitating around zero growth in recent years – at times marginally positive, at times negative. If Argentina fails to introduce some far-reaching reforms, the country may lose trust entirely.

Turkey

Unlike Argentina, Turkey recorded more or less stable, and even considerable, economic growth over the past 20 years, save for the interruption by the financial crisis. But now symptoms similar to in Argentina are developing. For example, a large portion of domestic consumption has been financed through foreign debt. While Turkey's ratio of sovereign debt is low at less than 30%, it also displays the risky combination of a budget deficit and a trade deficit. This is exacerbated by the high level of external debt coupled with higher private debt. The large budget deficits and interference by President Erdogan in the country's monetary policy led to a currency crash. At times more than 40% has been wiped off the value of the Turkish lira compared with the beginning of the year, followed by a dramatic increase in inflation. Although Turkey is accustomed to high inflation rates, inflation of up to 25% is uncharted territory. Without fundamental reforms of economic policy (restoring the independence of the central bank) and of the state institutions, it will be impossible to restore trust. Turkey could then face even more challenging times.

3f. Demographics

The average age in many western societies is increasing, with negative consequences for economic development and for public finances. Nevertheless, this period of demographic change is likely to be of short duration, with very limited potential for risk in the medium term. It is considered very unlikely that demographics will be a trigger for the next crisis.

A country's population structure affects its debt-bearing capacity. There are specific challenges facing ageing societies. Older people tend to take fewer risks and be more resistant to change. This makes national economies with a relatively old population less dynamic than countries with a comparatively low average age. Growth potential reduces as a result.
Furthermore, an ageing society struggles more to finance the welfare state. The burden of debt is distributed amongst a smaller number of people. In almost all industrialised countries, the governments have given their citizens promises, e.g. for pensions, health and nursing care. They will not be able

to keep the promises with current levels of taxes and levies as soon as the baby boomers retire and switch from being contributors to recipients. Model calculations show that the social security systems of many countries contain hidden or implicit debts, because governments would in future have to borrow in order to keep their promises. In Germany, implicit debt is higher than the officially reported explicit debt. Implicit and explicit debt together amount to somewhere in the region of 150% of GDP in Germany. In some other countries, implicit debt is even a multiple of annual economic output (see Fig. 14). So state finances cannot in any way be described as sustainable.[17]

» In Germany, implicit debt is higher than the officially reported explicit debt. Implicit and explicit debt together amount to somewhere in the region of 150% of GDP in Germany.

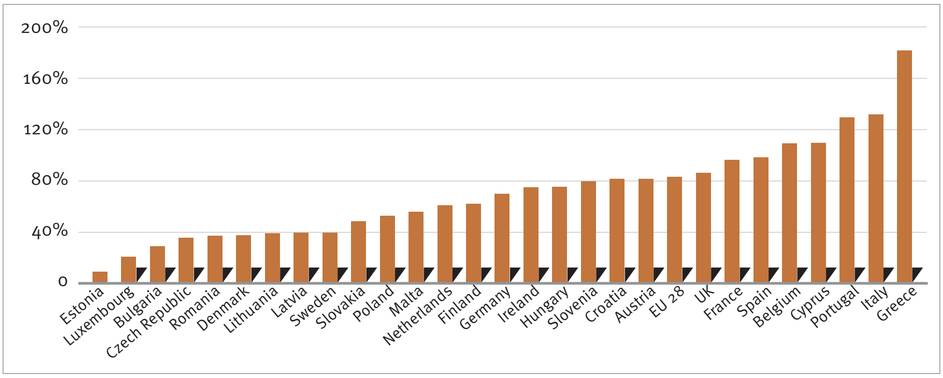
Interestingly, countries with high explicit debt do not necessarily also have high hidden debt. For example, Italy has virtually no hidden debt to date. This is thanks in particular to past pension reforms that will lead to significant savings – if they are retained. If the Italian government implements its new plans, these strong figures will be forfeited.
Luxembourg on the other hand has an explicit debt-to-GDP ratio of more than 20% and thus an almost negligible official debt level. With a hidden debt mountain of an astonishing 895%, Luxembourg ranks very high in terms of implicit debt. So its financial policy is the least sustainable. This is the fault of foreseeable age-related expenditure, in particular the sharp rise in pension payments.

Could this hidden debt spark a new crisis? The somewhat surprising answer is: not for the moment! Even in the longer term, implicit debt is not likely to have the potential to trigger a sovereign debt crisis. The distinction from a financial market perspective is that explicit debt can be securitised as government bonds and traded, but implicit debt cannot. If a country's creditors – i.e. the bondholders – lose faith in the country's ability to repay

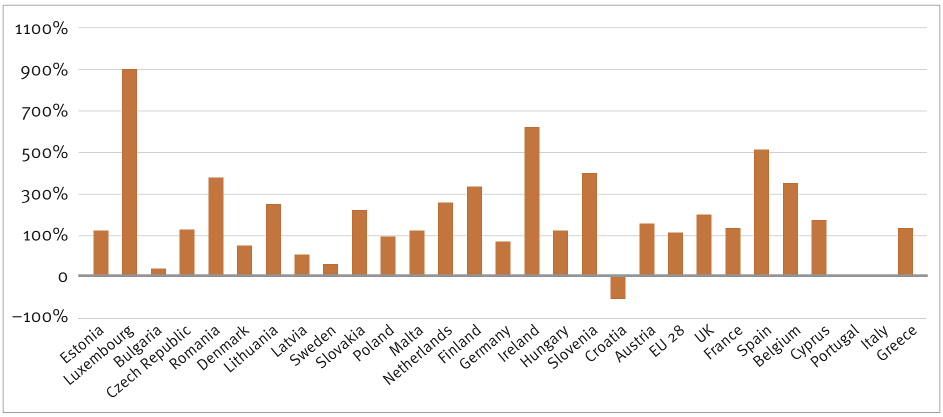
17 See Stiftung Marktwirtschaft (2018), Ehrbare Staaten? Update 2017 – Die Nachhaltigkeit der öffentlichen Finanzen in Europa. In another calculation, Forschungszentrum Generationenverträge even calculates Germany's total debt status at roughly 200% of GDP (see Forschungszentrum Generationenverträge (2018), Ehrbarer Staat? Die Generationenbilanz, Update 2018). This difference of roughly 50 percentage points is due to different growth assumptions. For comparability reasons, Stiftung Marktwirtschaft used the growth forecasts of the EU Commission for the European comparison. By contrast, Forschungszentrum Generationenverträge used the long-term German growth potential of 1.5% for its assessment of the German situation. Because the EU Commission's growth assumptions are more optimistic, the sustainability gap is smaller. As a result, the figures cited above for the countries in Europe are likely to understate rather than overstate the sustainability gap on the whole. Overall, however, this also shows that the sustainability of state finances depends to a large extent on how the model assumptions are made.
In the meantime, Stiftung Marktwirtschaft has published »Ehrbare Staaten? Update 2018«. In that update, the implicit debt levels for some countries are considerably better than in the prior year. The reason is that the forecast fiscal development of public age-related spending is provided by the member states directly. Stiftung Marktwirtschaft itself expresses the suspicion that there is more »political reporting«, in order to be able to show better results. This hugely restricts the reliability of the EU ranking, it says. This is why we have referred to the values from the 2017 update and thus point out that the figures for implicit debt hinge in any case on the underlying assumptions.

Hidden debt often higher than official sovereign debt

Explicit sovereign debt as a % of GDP



Implicit sovereign debt as a % of GDP



Sustainability gap as a % of GDP

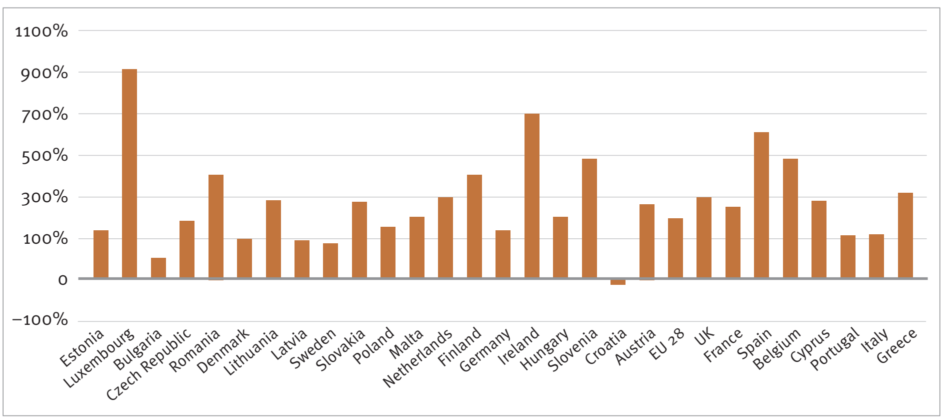


Fig. 14

Sources: Stiftung Marktwirtschaft/Forschungszentrum Generationenverträge.

its debt, they can sell the securitised government bonds. The prices fall and the interest rates rise. In extreme cases, this could start a wave of selling or panic on the markets, ultimately creating a sovereign debt crisis.

The situation is very different in the case of implicit debt: While the owner of a government bond can sell its claim against the state and thus make money, the entitlements to social insurance cannot be sold or made into money. In other words, if a citizen of a country has doubts that he or she will receive the forecast pension in 15 or 20 years in full from the statutory pension system, he or she cannot cash in any pension entitlements as a precautionary measure today. Explicit debt, however, can plunge a country into crisis if the creditors lose trust, sell their government bonds and thus drive up interest rates. In the case of implicit debt, citizens have no such stranglehold on the state.

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Explicit debt can plunge a country into crisis if the creditors lose trust, sell their government bonds and thus drive up interest rates. In the case of implicit debt, citizens have no such stranglehold on the state.

The problems won't arise unless and until the baby boomers retire and the state does in fact have to borrow more to keep its promises in full. This would in effect convert implicit debt into explicit debt, and the state would be dependent on the financial markets. However, this is only likely to happen within comparatively strict parameters. The state will probably introduce a bundle of measures to free itself from a good portion of the implicit debt beforehand. For example, welfare entitlements can be reduced relatively easily by raising the pension entry age. Employees would then have to contribute to the state welfare systems for longer and at the same time would have a shorter period in which to receive pension payments. The implicit debt burden can also be reduced by cutting payments and raising taxes and levies moderately. There is potential for great disappointment amongst citizens, as some of the entitlements promised to them may be taken away. On the other hand, the implicit debt figures now reported would be completely eradicated.

Interim conclusion

A renewed international sovereign debt crisis appears improbable at present: Firstly, the global economic prospects are still too robust; secondly, interest rates will remain at a relatively low level for some years to come despite a moderate increase; thirdly, contagion risks are present but probably manageable, and fourthly, the demographic challenges can be mitigated through reforms.

The single largest risk is that of a more significant economic downturn or a collapse in growth. This could be triggered for example by a normal cyclical downturn, an unforeseeable economic event or failure by a highly indebted country to meet its economic targets. The more countries are affected by a collapse of growth, the more the situation could deteriorate. In a worst-case scenario, several factors would combine, for example a collapse in growth combined with a loss of trust on the bond markets and contagion effects between the countries. In a constellation like this one, an international sovereign debt crisis would be possible.

The current cooling down of the economy must be kept in particularly sharp focus. Our relatively optimistic assessment of the debt situation is based on the assumption that the global economy can exploit its growth potential further in 2019 and 2020.

4. Focus: Italy and the United States

Several countries have excessive debt levels and could potentially experience a sovereign debt crisis. We want to take a closer look at just two selected countries: Italy and the United States.

The financial markets are currently focused on Italy in particular, because the combination of high debts, weak growth and inappropriate and confrontational (economic) policy-making is creating an especially explosive conflict situation. By contrast, there are currently no problems with the creditworthiness of the United States. Nevertheless, the high level of budget deficits during an economic boom does beg the question of how stress-resistant the state finances are likely to be during the next downturn. Is the world facing a new crisis coming out of America in a few years' time?

Italy

The Italian economy has been recording little or no growth for almost two decades. After weak economic growth in the early 2000s, the already-shaky economy was pounded by the financial crisis and the subsequent economic and sovereign debt crises. As a result, economic output for 2018 is still roughly at the level of the year 2000. Employment has also been hit badly, with more than 10% of Italians unemployed. Former pillars of the economy such as the strong manufacturing industry and the construction industry have shrunk considerably. While Italy has had a positive balance of trade again in recent years, the competitiveness of the national economy has deteriorated considerably in an international comparison.[18] While employee productivity has been stagnant for 20 years, the efficiency of the economy overall has even gotten worse. There is also a lack of public and private investment, and domestic demand remains weak. At the same time, sovereign debt has increased further. While this has always stood at a very high level in Italy, the most recent crises have once again driven up overall debt to roughly 130% of economic output at present. This is more than double the level specified by the Maastricht criteria.

The economic output for 2018 is still roughly at the level of the year 2000. Employment has also been hit badly, with more than 10% of Italians unemployed.

When past governments under Monti and Renzi pushed through reform measures, for a few years there was hope that the Italian situation could improve gradually. Labour market and tax reforms were intended to en-

18 As part of our EURO PLUS MONITOR, in recent years we have looked on several occasions at the reform steps taken by the countries in the eurozone – including Italy, of course. See for example Schmieding, Holger and Florian Hense (2017), The 2017 EURO PLUS MONITOR – INTO A HIGHER GEAR, Berenberg/the Lisbon council. See also Gern, Klaus-Jürgen and Ulrich Stolzenburg (2016), Italien am Scheideweg: Wachstumsschwäche erfordert weitere Reformen, Kiel Policy Brief No. 102, Kiel Institute for the World Economy.

hance economic performance, productivity was set to increase, state institutions to be streamlined and the administration and justice systems made more efficient. In addition, a pension reform was to unburden the state's social security funds. Most of the reforms were well received: according to calculations by the EU Commission and the OECD, the Italian economy could have benefited substantially up to 2020, kickstarting both growth and employment.

However, the reforms coupled with the continued weak economy took their toll on the Italian electorate. Gentiloni's government lost its mandate in spectacular fashion at the beginning of 2018. The government has since been made up of populists from the left-leaning Five Star Movement and the right-wing Lega. Both the EU Commission and the markets view this development as a risk to Italy's successes thus far, which include a reduced budget deficit, an improved balance of trade and increased competitiveness. That's because the government intends to cut taxes but also to raise state spending. Other election promises have also been made that will undermine competitiveness. For example, the government has already decided that temporary contracts can only run for a maximum of 12 months instead of for 36 months.

Most of the reforms were well received: according to calculations by the EU Commission and the OECD, the Italian economy could have benefited substantially up to 2020, kickstarting both growth and employment.

A potpourri of measures is planned to boost economic growth and ease the burden on the Italian people. For example, the Five Star Movement wants to introduce a universal income that would guarantee a figure of EUR 780 for the unemployed, pensioners or those in precarious employment. The previous government's pension reform is to be scrapped. Instead, the »Quote 100« points system is to allow people to combine their age with the number of years they have paid social security contributions so that, for example, 62-year olds who have worked for 38 years can retire immediately. Women could even retire before the age of 60. This would affect more than 400,000 Italians, who the government want to make way for the large number of youth unemployed. In addition, Lega leader Salvini wants to introduce a tax reform with a flat-rate tax of 15% for the self-employed and for tradespeople. Furthermore, the tenth tax amnesty since the 1980s is to recover money parked abroad and improve revenues. There are also plans for an investment programme worth billions in order to improve the partially crumbling and obsolete infrastructure.

The government is not even pretending that it will be able to pay for all of these promises. While there are plans for cuts to funds for refugees and migrants, caps on high pensions and an increase in gambling taxes, this will only cover a small portion of the new expenditures. Instead, the government is hoping that the reforms will yield higher economic growth. And ultimately the government is making politics for the people and not for the rating agencies, according to the powers that be.

It is highly questionable that this economy policy will succeed. The additional expenses will scarcely serve to improve economic performance.

But it is highly questionable that this economy policy will succeed. The additional expenses will scarcely serve to improve economic performance. Instead, measures are being taken that will at best fuel consumption but will continue to intensify Italy's structural problems. The reduction in the retirement age is not affordable in the long term, especially in such a rapidly ageing society as Italy. The plan to use this measure to create jobs on the one hand is sabotaged on the other hand by removing incentives to work by introducing a universal income and limiting temporary contracts. While the tax cuts and investment measures could potentially be helpful, they are very weak. It is not clear how the state intends to pay for all of this.

Accordingly, the EU Commission is also showing very little enthusiasm for the Italian government's announcements. For several months now, it has been imploring the Italian government to abandon the planned reforms. But the most recent budget is in keeping with the confrontation course set out on by the Italian government. For example, with a deficit of 2.0%, considerably more debt is to be incurred next year than the 0.8% originally agreed with the Commission.

It remains to be seen how this conflict will play out. Although the Italian economy is extremely important for Europe on account of its size, it does not have the power to hold Europe to ransom. Consequently, the Italians are likely to notice very soon that their current course of action is not sustainable, as the interest on Italian government bonds is likely to rise sharply. If they don't pay attention to that warning sign, then sooner or later the state will go bankrupt. It is highly doubtful that the EU could come to Italy's aid in such a case, as the burden would be too great for existing bail-out mechanisms.

United States

A comparison of Italy with the US shows the difference in the way the market assesses budget deficits. The US is rated much better by the markets, although the 3.5% deficit in 2017 and the probable deficit of 3.9% in 2018 are considerably higher than in Italy. This is because of the economic situation. While Italy has recorded scarcely any growth since the economic crisis, the US recovered gradually under the Obama administration. Now the economy has received additional impetus from the most recent tax reforms and deregulation. Corporate income tax fell from 35 to 21%, with profits recorded abroad now taxed at even lower rates – just 8% instead of 35% in a best-case scenario. Additionally, the maximum tax rate was lowered slightly and tax credits were doubled. Alongside the tax reform, further measures to incentivise private investment include the abolition of environmental protections that were introduced under Obama, deregulation of the banking sector and the abolition of net neutrality.

In the long term, international value added chains could move away from the US, while new free trade agreements could be brokered without the United States.

Coupled with full employment and rejuvenated industry, these measures feed into growth rates of almost 3% in 2018 and in 2019. There is, however, a question mark over whether this level is sustainable going forward. For one, there is a risk of overheating, and secondly the protectionist measures could be extended, which could cause trade tensions with China to escalate. The latter in particular could pose a threat to the economy. While criticism of China's trade practices is entirely justified, Trump's tariffs and diplomatic faux-pas are allowing trade relationships to worsen and the US's position in the global world order to weaken in the short term. In the long term, international value added chains could move away from the US, while new free trade agreements could be brokered without the United States. Even the Americans themselves would not benefit in the long term. Because instead of increasing competitiveness, scarcely viable industries are being kept alive artificially. The price for this is also paid by consumers, who have to pay higher prices for consumer goods.

Furthermore, the current boom is being paid for dearly and is not sufficiently matched by financing. The loss of tax revenues due to the tax reform has certainly not been followed by a cut in spending. Instead, expenditures

A comparison of economic policy reforms

Italy	United States
Introduction of universal income: minimum income of EUR 780 for all low earners. This measure could benefit up to 6 million Italians.	Cut in corporate income tax from 35 to 21%, cut in tax rate for profits recorded abroad from 35% to 15.5% or 8%.
Reduction in pension age from 67 to 62 for men with at least 38 years of contributions. Female employees can retire at 58 if they have paid 35 years of contributions, and self-employed females can retire at 59.	Reduction in the top tax rate from 39.6 to 37%, doubling of lump-sum tax credits and inheritance tax exemptions.
Limitation of temporary employment contracts: From now on, temporary contracts can generally only run for a maximum of twelve months and can only be extended four times.	Deregulation: In the banking sector, for environmental regulations (coal, oil extraction), abolition of net neutrality.
Introduction of a flat-rate tax of 15% for the self-employed and tradespeople who earn less than EUR 65,000 per year.	USMCA: Ratification of the NAFTA successor agreement.
Some tax amnesties for tax evaders. In addition, a VAT increase planned by the previous government will no longer take place.	Introduction of 10% tariffs on steel and aluminium.
Investment programme: Additional investment of EUR 15 billion is planned over the next three years.	Trade war with China: Tariffs of 10% on Chinese imports with a value of USD 250 billion.

seem to be increasing, and the administration is claiming that the tax reform will ultimately pay for itself through growth. There is, however, no real basis for this assertion. This is astonishing policy-making from the Republicans, who were once so conservative on fiscal policy.

In addition, deregulation could also be linked to costs. Opening up the coast of Florida to oil-drilling activity could go horribly wrong, as the US has already experienced enough environmental disasters like the Deepwater Horizon.

So the question remains of the extent to which the markets are pricing the future challenges in the US into their ratings. Because if the United States has racked up new debt of USD 780 billion even in times of a booming economy and full employment, we must ask ourselves how high this figure would be in the event of a recession.

Overall, the comparison between Italy and the US shows that the markets have justifiably homed in on Italy because of its ongoing weak economy and the misguided economic policy aimed at boosting consumption. As much as the Donald Trump style of politics and some of his political measures warrant criticism, Trump's economic policy – unlike Italy's – is at least providing impetus for growth.

5. Outlook

The global economy has recovered very well from the global financial crisis and the subsequent euro crisis. Fortunately, the worst-case scenarios feared by many observers, such as state bankruptcies, inflation and currency collapses, did not eventuate for the most part. At the same time, we need to be mindful that the strong global economy would not have been possible without determined monetary and fiscal policy measures. Years of zero interest rates have facilitated borrowing and fuelled economic growth. The global economy is still not in a state of normality. In many countries, debt has risen considerably in some cases because of the crisis. It is time to repay these debts. To do this, supply-side reforms are necessary to spur on economic growth, because the global upswing will not last forever unless further reform efforts are made. It would be naive to rely on expansive monetary policy alone, particularly as many central banks have scarcely any scope in the event of another crisis to resort once again to monetary policy in order to counteract any developing crisis. Financial policy is also limited in many countries on account of their high debt levels.

Based on our assessment, we do not expect an extensive debt crisis any time soon despite high debt levels, provided that the global economy develops positively for the next year or two. However, we need to approach the next downturn with caution. Italy could be the first country to get into serious difficulties in the next recession unless the government moves away from its economic policy plans in the meantime.[19] In the medium term, the US will also have to consolidate its state finances. This is something the world's largest national economy has succeeded in doing several times before. Last but not least, in the long term Japan will need to demonstrate how its mountain of debt can be overcome, as the central bank cannot be the only solution.

19 In a worst-case scenario, Italy may exit the currency union, in which case the Target2 balances would also become a real problem. Italy has liabilities of EUR 489.2 billion in the Target2 system (as of September 2018), which would have to be repaid if it were to leave the eurozone. Because Italy could default on (some of) these liabilities, that would result in losses for the countries that have positive Target2 balances – first and foremost for Germany. See Reinhardt, Carmen (2018).

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