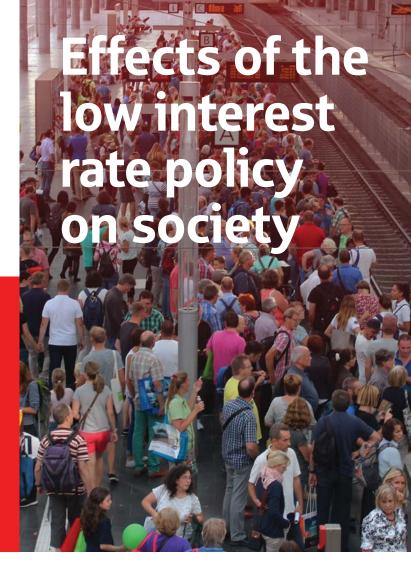


STANDPUNKTE DER CHEFVOLKSWIRTE





Berlin, 19th November 2019

For many years, The European Central Bank has pursued an ultra-loose monetary policy, comprising negative interest rates and bond purchasing programmes as well as an overabundant supply of liquidity. This policy was prompted by the economic consequences of the global financial crisis in 2007 and 2008 and the euro debt crisis in 2011 and 2012. The gradual return to a normal monetary policy, which had been planned up to the beginning of the current year, has come to a grinding halt. Since the Governing Council's September meeting at the latest, it has been clear that the low and negative interest rate environment will continue for some time – and along with it, the negative side effects.

Against this background, it is important to shed light on the effects of the sustained period of unusually low, often negative interest rates. The present statement will examine four main fields of action and stakeholders in society:

- → Banking sector: countermeasures increasingly difficult in low-interest environment
- → Corporates: golden age of borrowing
- → Pension schemes: under considerable strain
- → Economic and financial policies: facing major challenges

Authors

Uwe Burkert - LBBW
Uwe Dürkop - Berliner Sparkasse
Jochen Intelmann - Haspa
Dr. Ulrich Kater - DekaBank
Christian Lips - NORD/LB
Dr. Jürgen Michels - BayernLB
Dr. Gertrud Traud - Helaba
Prof. Dr. Carsten Wesselmann
- Kreissparkasse Köln

Coordinators

Dr. Reinhold Rickes Reinhold.Rickes@dsgv.de Dr. Holger Schulz Holger.Schulz@dsgv.de

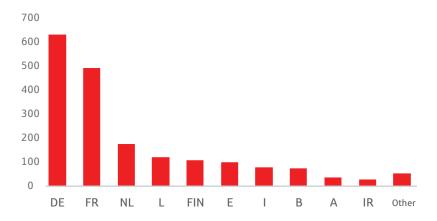
Effects of the low interest rate policy on society

Banking sector: countermeasures increasingly difficult in low-interest environment

The net interest income of European credit institutions has come under pressure in the low interest-rate environment. This applies in particular to income from the high liquidity reserve and net interest income from customer deposits. In addition, income from maturity transformation has decreased because of the flatter yield curve, which is due, not least, to the long-term funding programme of the ECB and its direct purchases of long-term bonds.

Current money market rates lead to negative deposit margins, in particular in retail banking. While negative bank deposit rates have been the rule in institutional and corporate banking for many years, banks still shy away from charging their customers negative interest on retail deposits across the board. Traditionally, German banks have relatively high customer deposits. The balance sheet items affected in Germany are therefore substantial. At the same time, a large share of the excess liquidity created in the euro area ended up in Germany. The ECB's deposit rate of -0.5 percent places a heavier burden on German credit institutions than on banks in other European countries, although the new tiering system which is in effect since the end of October will bring some relief.

ECB's negative deposit rate places a particularly heavy burden on banks in Germany Excess liquidity of European banks at the ECB in August 2019, bn EUR



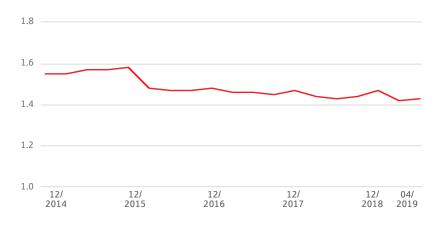
Sources: EZB, Helaba Economics/ Research Throughout Europe, credit institutions are trying to stabilise their net interest income by generating more volume growth, increasing their net commission income and cutting their costs. In addition, historically low loan defaults, higher trading profits and low funding costs help to bolster profits. In our view, however, the credit cycle is in a mature phase with intense competition for margins. After historically low loan defaults in the previous year and releases of loan loss provisions in corporate banking, the credit risk costs of European banks have recently been rising significantly. This trend was exacerbated by the IFRS 9 accounting standard, which has been in force since the beginning of 2018 and which takes greater account of the economic outlook than in the past.

The competition has increased substantially since the beginning of 2018. The impact varies because of different business models: While the income of German credit institutions was approx. 10 percent lower in 2018 than in 2015, the income¹ of French and Spanish banks increased slightly in the same period of time – by approx. 1 percent and 4 percent, respectively. French banks benefited above all from substantial net commission income, while big Spanish banks have held particularly strong positions in the high-growth markets of South America in recent years.

Interest margin can be stabilised by adjusting business models only to a certain degree

Net interest income, net commission income, trading income, and other operating income

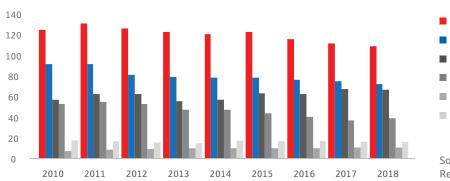
Interest margin in Europe still fairly stable on balance ... Interest margin*, percent



^{*} Net interest income / interest-bearing assets, weighted average

Sources: EBA, Helaba Economics/ Research

... however with significant regional differences Net interest income of banks, bn EUR



Germany

France

■ Spain
■ Italy

■ Sweden

Belgium

Sources: SNL, Helaba Economics/ Research Nevertheless, the recent Bank Lending Survey conducted by Deutsche Bundesbank has not indicated excessive easing of lending standards by German banks. According to the survey, the percentage of credit institutions that tightened their credit standards has so far been virtually on par with the percentage of credit institutions that eased their credit standards. Overall, banks tend to be more careful with regard to the economic outlook of corporate clients and are increasingly cautious in the assessment of their creditworthiness. This is also reflected in the statements made on the development of margins. While credit institutions tended to be rather lenient in this respect in the period from 2015 to 2018, the percentage of institutions with restrictive lending policies has recently even been higher than the percentage of institutions which eased their lending standards. Stabilising the margins in the face of the tough profit situation of the credit industry and the increased risks is definitely warranted.

Lending standards linked to the situation

Overall, banks and Savings Banks with traditional, regionally focused business models and a relatively high share of interest-bearing business suffer most from the low interest-rate environment. Many of these institutions have existing holdings of higher-yield loans and securities that will soon expire and will need to be replaced by lower-yield exposures. A stress test carried out by Deutsche Bundesbank in smaller institutions had therefore shown that the latter expected in Q2/2019 over a 5-year period, despite the planned 12-percent increase in total assets, that the return on asset would increase only slightly. Their return on assets is scheduled to go up to just 0.46 percent from the historically low level of 0.42 percent of total assets in 2019. On the date of the collection of the data, the institutions still assumed that interest rates would increase, which might prove to be too optimistic from today's perspective. According to Deutsche Bundesbank, more than 40 percent of the banks also stated that they had already factored in negative interest on customer deposits in their medium-term projections; in 2017, this had been true for only one in four institutions.

On the other hand, rising interest rates would have a positive impact on the return on assets only in the medium or long term, while they would lead to falling valuations of securities and additional loan defaults. In addition, different fixed-interest periods on the asset and liability side would mean that it would take longer to pass on higher interest rates on the asset side than higher interest rates on deposits. Hence, the longer the low interest-rate environment continues, the stronger the adverse effects will be when interest rates rise again.

Aside from the low interest rates, banks are adversely affected by additional sector-wide upheavals. The measures adopted in response to the

financial and euro crisis have led to high regulatory costs. Moreover, the institutions have to make enormous investments in digitalisation. As a result of much stricter capital requirements, the return on equity has significantly decreased across the sector. According to BIS, the common equity tier-1 capital of 86 globally operating big banks² doubled between June 2011 and December 2018, rising by approx. 91 percent to EUR 3,720 billion. Monetary easing, on the one hand, is counteracted by higher capital requirements for credit exposures, on the other hand.

With total capital (tier-1) of more than EUR 3 billion per institution

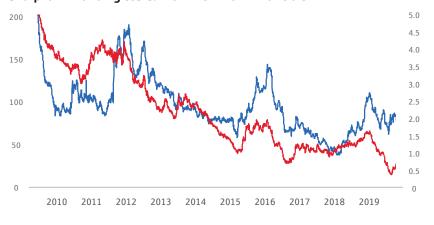
Due to the highly fragmented market in Germany, profitability in the banking business is particularly low. Conversely, however, customers stand to gain from the intense competition because they can have access to attractively priced banking products. Rising costs, as well as the depressed earnings resulting from the low interest-rate environment, have enormously increased the pressure to cut costs. The trend towards consolidation will therefore probably continue. In our view, this constitutes a radical structural change. In addition, staff cutbacks can be expected to continue.

Corporates: golden age of borrowing

In the past few years, the European Central Bank's low interest rate policy has led to a decline in funding costs for European corporates. Driven by the substantial fall in the interest rates of German government bonds, the yields of iBoxx Non Financials dropped to 0.37 percent in August 2019, which was a new record low. Very solid investment-grade borrowers can now obtain fresh capital at an interest rate of zero or even below. Overall, this has significantly reduced ongoing interest expenses for the majority of enterprises. While the non-financial STOXX600 corporations had to spend nearly 5 percent on their financial liabilities in 2008, their interest burden is now below 3 percent.

Funding costs at historical lows

Sharp fall in funding costs: iBoxx EUR Non-Financials



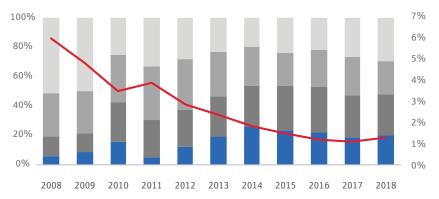
Yield (right scale), percent

 Asset Swap Spread (left scale), Basepoints

Sources: Datastream, Helaba Economics/Research

Companies use favourable long-term financing

Maturity segments primary market EUR corporate bonds vs. bond yields



7 to 10 years
5 to 7 years
< 5 years
Average annual yield of iBoxx EUR

Non-Financials (right scale)

■ > 10 years

Sources: Bloomberg, Datastream, Helaba Economics/Research

However, companies have benefited from the favourable market conditions not only to reduce interest outflows but also to extend maturities. In the period from 2008 to 2014, the proportion of longer-term bond placements in the EUR corporate bond market with maturities of more than 7 years gradually increased from 20 percent to half the market volume and has settled at this level in the past few years. In view of the prolonged period of low interest rates, the majority of companies may not intend to extend maturities any further.

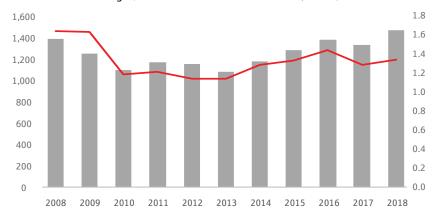
Our analysis has shown, however, that the low funding costs have not led to a serious deterioration of the rating structure in the primary market for EUR corporate bonds. Apart from 2008 and 2009 – the years of the crisis – the percentage of sub-investment-grade issues has not increased significantly. On the other hand, the lower investment grades with the BBB rating classes have become the predominant type of issuer. In terms of absolute numbers, however, high-yield liabilities have increased significantly as the total market volume has grown. In a crisis scenario, higher defaults need to be factored in.

Structure of financial standing mostly unchanged

In the past few years, there has been no widespread deterioration of the credit profiles of non-financial STOXX600 corporations. While gross debt has increased significantly, in particular since 2014, the net effect is limited. In addition, the increase in operating earnings has recently contributed to a ratio of net debt to EBITDA of just1.3x, which is within the range of ratios observed in recent years. The results are similar with regard to financial gearing (debt-to-equity ratio). Financial gearing amounted to 78 percent, which was exactly the median ratio of the past eleven years. Hence, the balance sheets of the majority of the non-financial STOXX600 corporations are likely to continue to be robust.

Debt ratio remains at moderate level

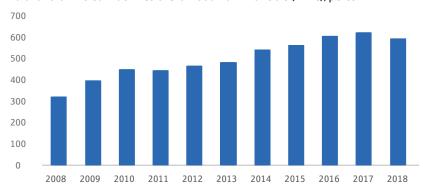
Net debt* and leverage (Stoxx600 non-financials in mn €, x-fold)



- Net debt
- Ratio of net debt to adj. EBITDA (right scale), percent
- *Excluding financial debt of financing subsidiaries, defined as long-term and short-term financial debt minus cash and current securities
- Sources: Bloomberg, Helaba Economics/ Research

Increasing credit facilities support liquidity position

Total undrawn credit facilities of Stoxx600 non-financials (mn €), percent



Sources: Bloomberg, Helaba Economics/ Research

In addition, corporates have strengthened their liquidity reserves by increasing their undrawn credit facilities. Apparently, some corporates have learned from the negative experience of the financial and sovereign debt crisis that a solid, forward-looking supply of liquidity is very important to prepare for periods with increasing risks. In view of the extended maturities of financial liabilities, credit metrics that remain solid, and the increase in liquidity reserves, we believe that, today, large European corporates are better prepared for future crises than they were in 2007.

Corporates are prepared for potential backslashes

Since the yields of government bonds will most likely remain at a low level in the years to come, we believe that the interest burden of European companies will probably continue to decline significantly. In addition, we expect volumes to increase in the EUR corporate bond market. Nevertheless, prices of M&A transactions have become relatively high, so that corporate debt will probably increase only moderately as a result. Currently, we do not expect a dramatic deterioration of credit profiles.

Pension schemes: under considerable strain

The investment conditions for pension schemes are changing significantly due to the low and negative interest-rate environment. In the long term, it will be barely possible to generate positive returns with simple and conservative strategies. Current valuations of shares and properties are benefiting from this investment emergency. While the savings ratio has been increasing for years, it is questionable whether this will be sufficient to close the growing pension gap. There will probably be signficiantly growing pressure on the State to distribute higher benefits, especially since the State is benefiting considerably from the negative interest rates.

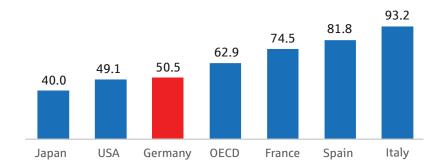
Retirement pension schemes are continually exposed to new social challenges. Changes in the employment patterns of contributors as well as demographic developments played the key role in the past. Due to the prolonged period of low and negative interest rates, the focus has shifted to a new parameter for retirement pension schemes. Of course, this will affect the statutory pay-as-you-go pension schemes less than the fully funded occupational and private pension schemes.

In this context, Germany is in a difficult starting position. Compared with other countries, the net replacement rate – which reflects the income available during retirement in the form of a statutory pension relative to earnings during employment – is below average. Comparisons with other OECD countries show that the rate of 51 percent for average income earners in Germany is significantly lower than the average rate of 63 percent for all OECD countries (2017 data). In the other euro countries, the statutory pension schemes cover a much bigger proportion of earnings: In France, the rate amounts to 75 percent, in Spain to 82 percent, and in Italy to as much as 93 percent. Germany also trails behind – in some cases far behind – other countries in terms of the home ownership rate and gross financial assets.

Statutory pensions cover standard of living only under-proportionally in Germany

Germans have a longer way to go than others

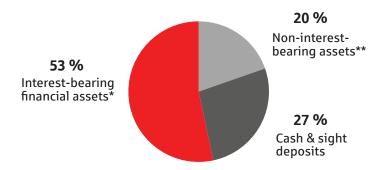
Net replacement rate as a percentage of average earnings (men), 2017



Sources: OECD, Helaba Economics/ Research

Assets generate less income

Financial assets held by private households in Germany, percentages



- * Term and savings deposits, bonds
- ** Direct and indirect equity investments and property fonds

Sources: Bundesbank, GDV, Helaba Fconomics/Research

Given these circumstances, it comes as no surprise that German savers are not happy about the monetary policy pursued by the ECB. The income on more than half of the financial assets of approx. EUR 6.2 billion is directly affected by the interest rate. Cash and sight deposits account for approx. one-quarter of the financial assets. The remainder is made up of assets that are not directly related to interest rates. These assets are above all equities and investment fund units, as well as corresponding portfolio components of insurance companies and retirement pension schemes. There is growing pressure to venture into unknown territory. It is true that realigning the investment strategy is not necessarily a disadvantage and certainly provides opportunities. However, investment decisions are made more difficult by an increasingly complex geopolitical environment and by asset prices that are distorted in many ways and that result, not least, from the low interest rate policy. The central banks' purchasing programmes have left marks.

Yield on capital depends on its structure

Nevertheless, the expansionary monetary policy pursued during the Draghi era also had positive effects. The strong economic growth of the past few years has significantly increased the demand for labour in Germany – a development from which older workers have benefited most. In the period from 2008 to 2018, the employment rate of the 55-to-60-year-olds increased by 14.3 percentage points to 62.3 percent. The employment rate of the 60-to-65-year-olds increased by as much as 21.8 percentage points to 42.3 percent. This has had a positive impact on the pension schemes of older employees and has eased the burden on the pension system as a whole. However, the current weakness of growth raises the question as to whether this trend is sustainable.

More than ever before, employed persons anxiously ask themselves what they can do to provide for their old age financially. In this context, planning reliability is a key criterion, in particular for older workers. In the past, fixed-interest securities and capital products based on such securities provided precisely this advantage. The focus is now shifting to riskier forms of investment. In this context, low-income employees are at a disadvantage. Since they are more risk-averse because of their reduced financial headroom, only very few of them have tried their luck in equity and property markets in the past. Ho-

wever, since Draghi's historic "whatever-it-takes" speech in July 2012, these markets have achieved the best performance by far in Germany.

It is well known that Germans are not (yet) a nation of shareholders. In 2018, only 16.2 percent of the population owned shares – although this share is growing. According to the German Equities Institute (DAI – Deutsches Aktieninstitut), investments in equity funds have recently increased significantly. Nevertheless, benchmarks in other countries demonstrate that there is still considerable upside potential. The share of equities in occupational pension schemes in Germany amounts to approx. 17 percent, which is much lower than in other countries such as Switzerland and the Netherlands, where equities account for approx. 30 percent. The gap separating German pension schemes from those of the Anglo-Saxon and Nordic countries is even wider. Since it is foreseeable that the performance of bonds will be weak, further adjustment processes can be expected. Equities are likely to benefit structurally from this development. Properties will probably also remain sought-after investment opportunities.

It is clear that there will be substantial gaps in provisions for old age. Calculations performed by Prognos AG show that, to secure the standard of living in old age, the savings rate of a person who is approx. 30 years old today would have to more than double in a low-interest-rate scenario (yields on 10-year German government bonds within a range of between 0 percent and 1 percent in the next roughly fifteen years, subsequently within a range of between 1.0 percent and 1.5 percent), compared with a more optimistic baseline scenario (yields returning to levels above 4 percent until 2060). However, if more efforts were made to save money, this would further exacerbate the low interest rate problem and is therefore not desirable. In fact, the savings ratio in Germany has already increased from 9 percent to 11 percent since the end of 2012. However, in light of the investment malaise, it is questionable whether this trend will continue and be sufficient to close the pension gap. This process has recently stagnated.

However, if the fully-funded pension schemes are not rapidly adapted to the changes in interest rates, there is a risk that broad sections of the population may be facing a widening pension gap. As a result, more and more pensioners might have to rely on supplementary earned income. The State, which has so far been the main beneficiary of the negative interest rate environment, will probably be faced with significantly growing pressure to distribute higher benefits. Pension expenditure in Germany currently amounts to approx. 10 percent of GDP, which is significantly below the 15-percent level in France and Italy, for instance. The continuing period of low interest rates – combined with demographic change – will pose major problems not only for the coming generations of pensioners; the extreme interest rate period, combined with insufficient provisions for old age, could also prove to be a boomerang for the public purse.

Higher savings rate were necessary to secure standard of living

Economic and financial policies: facing major challenges

The ultra-expansionary monetary policy pursued by the European Central Bank in recent years has created positive economic stimuli. Unconventional measures implemented by central banks – such as negative interest rates, funding programmes for banks, purchasing programmes for assets such as bonds, and forward guidance in monetary policy – have helped to calm the situation following the outbreak of the financial crisis and in the aftermath of the euro debt crisis. National economies were stimulated, and risks of deflation were reduced.

A tangible outcome to which monetary policy has contributed is that lending rates – and hence, the cost of financing investments – have decreased significantly. This also applies to mortgage rates. While mortgage rates were still at 5 percent for German mortgage loans with maturities of between 5 and 10 years before the economic and financial crisis at the end of 2007, the rate that currently needs to be paid amounts to only 1.2 percent. Similar developments have been observed in other countries of the Monetary Union. Although investment activity does not solely depend on the financing costs for loans, monetary policy has played a part in the increase in equipment and construction investments in the Monetary Union.

In addition, the positve effect that low capital market interest rates have on public budgets should not be underestimated. Lower interest expenses have fostered this development. In Germany, for instance, government interest expenditure as a percentage of tax revenue decreased from 11.2 percent in 2011 to 4 percent in 2018. By 2021, the ratio will have probably dropped to approx. 3 percent. Similar trends can be observed in other countries. In the wake of the economic and financial crisis and with the introduction of the necessary economic policy measures, the government deficit in the euro area increased significantly, from 0.7 percent in 2007 to 6.2 percent in 2010; in the subsequent years, the deficit fell steadily, also due to the monetary policy pursued. In 2018, the deficit had fallen to only 0.5 percent of the gross domestic product. In the past few years, government debt has increased somewhat – albeit only gradually. Currently, it is just over 85 percent for the entire euro area, which is in excess of the 60-percent level permitted under the Treaty of Maastricht.

An even more expansionary monetary policy will do little to encourage more growth. At the current low level, financing costs do not constitute an obstacle to investments. Hence, monetary policy is approaching its limits. Uncertainties in trade policy, "Brexit", and the extremely slow expansion of digital networks and public infrastructure have a slowing-down effect. In addition, there is a shortage of skilled labour, which will be further exacerbated in the next few years due to demographic reasons.

So what should be done? First of all, a stronger focus should be put on structural policy instead of monetary policy. Secondly, the negative effects of the continuing period of low interest rates need to be mitigated.

Economic policy is needed to stimulate growth in the euro area. However, what is necessary above all is not stimulus programmes (as requested time and again), but longer-term structural measures. Without a business-friendly and stable trade policy environment, the restraint on global investments will probably not be eased. Within Europe, finding a solution to the "Brexit problem" will be a top priority. An expansion of infrastructure is not a reason for implementing a short-term stimulus programme. Capacity utilisation continues to be extremely high in the construction sector, in particular in Germany. It therefore does not appear possible to ramp up construction activities within a short period of time. What is needed is a medium-term investment initiative and the acceleration of licensing procedures, which will require the provision of more staff.

The construction sector will expand its capacity; however, overnight miracles cannot be expected. The demographic challenges, which will be reflected in a considerable reduction of the production potential as of the middle of the decade, can probably only be resolved by means of a longer working life and managed immigration of professionals. However, the development of productivity will be crucial for growth in the euro area. More efficiency can only be achieved by stepping up educational efforts, in particular in Southern European countries, by increasing expenditure on research and development, and by accelerating digitalisation in important areas. Monetary policy can therefore do very little to stimulate economic growth, which in turn is an important precondition for higher inflation rates. A more expansionary monetary policy would aggravate negative effects without achieving the intended objectives.

The negative effects of a period of low interest rates are clear to see: An expansionary monetary policy that is too protracted can weaken the incentives for the private and the public sector to reduce debt. In countries like France, private sector debt already amounts to more than 100 percent of the gross domestic product. In the United States, it has reached only about 75 percent of GDP, but has been growing in recent years. In addition, it cannot be ruled out that both aggregate demand and capital investment will shift towards interest-sensitive sectors. The

In addition, it is difficult for small investors to seize the opportunities available in the capital and real estate markets. They are more exposed to the consequences of the "negative interest rate policy". This exacerbates

longer-term consequences might be overcapacity in the construction

sector and real estate bubbles.

Demographic perspectives call for a mix of meassures

disparities in the distribution. On the other hand, public budgets are the winners in the current interest rate environment. This means that there is certainly room for tax cuts to the benefit of citizens, many of whom are also savers. To enable broad segments of the population to take advantage of the opportunities provided by the capital markets, it would make sense, for instance, to amend Germany's Capital Accumulation Act by increasing the employee savings allowance and by extending the range of eligible persons. In addition, a reduction of land transfer taxes would make it easier for people to build up real estate assets.

Disclaimer

The present position paper of the Chief Economists does not necessarily correspond to the attitude of the DekaBank or the attitude of the respective Landesbanken and Savings Banks or the DSGV.

Published by

Deutscher Sparkassen- und Giroverband Abteilung Volkswirtschaft, Finanzmärkte und Wirtschaftspolitik

Charlottenstraße 47

10117 Berlin

Telefon: 030 20225-5303

DSGV-Volkswirtschaft@DSGV.de

www.DSGV.de

Editorial Deadline

19th November 2019

Layout

Franz Metz, Berlin

Photography

Page 1: pixabay/3D_Maennchen

Management

Pia Jankowski - DSGV

Director

Head of Economics, Financial Markets

and Economic Policy
Pia.Jankowski@DSGV.DE

Dr. Reinhold Rickes - DSGV

Head of Economics

Economics, Financial Markets and Economic Policy

Reinhold.Rickes@DSGV.DE

Remark

You can access this document at

https://www.dsgv.de/en/statements.html

ISSN

2509-3851