

B INFLATION, INTEREST RATES AND THEIR CONSEQUENCES ON COMPANIES' INVESTMENT DECISIONS

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Abstract

Inflation has returned – and alongside we are currently witnessing a reversal in monetary policy of central banks around the world. In this issue of *Roland Berger Quarterly*, we take a closer look at the impact of current monetary policy, paying special attention to corporate investment decisions. In this way, we not only want to discuss the impact of inflation but are giving insights regarding the connection between macroeconomic data and the actual behavior of market players.

In the *first* chapter, we take the current situation as a starting point for our analysis of the main drivers of inflation both in Europe and in the US. We then set this analysis into a broader historical perspective by discussing common and differing traits of the period of stagflation caused by the oil crises in the 1970s and the current situation. In the *second* chapter, we analyze the responses of the Fed and the ECB to the rise of inflation rates and discuss the opportunities as well as the risks of various strategies to combat inflation. In the *third* chapter, we analyze how corporates might respond to this new interest rate environment and show that such an environment does not necessarily have a negative impact on investment behavior. At the end of our analysis, we discuss various internal and external factors influencing companies' investment decisions.

From these facts, observations and analyses we draw three conclusions:

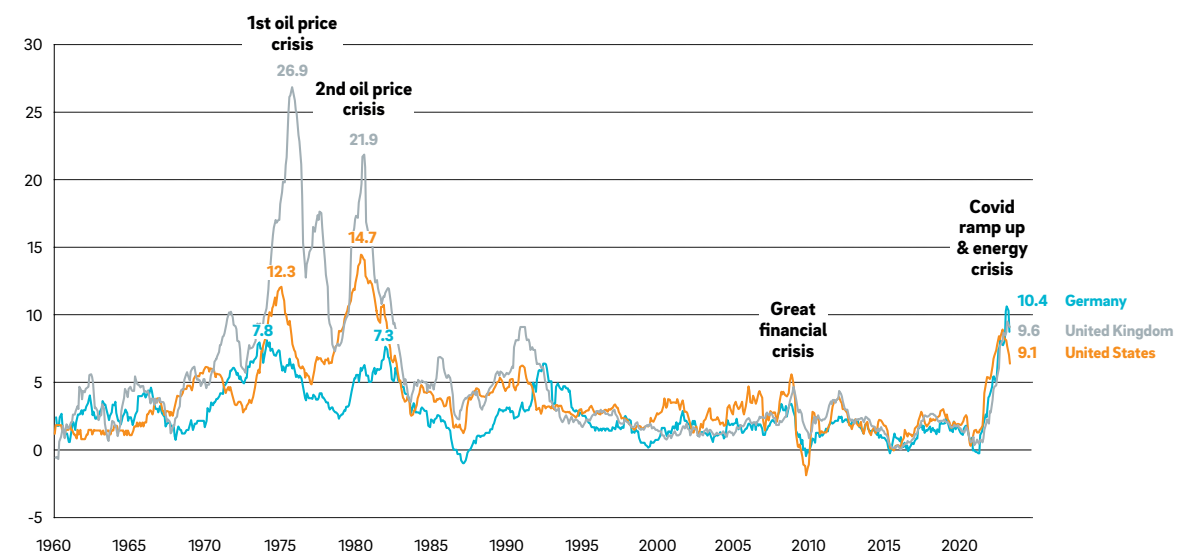
1. a scenario of stagflation as an immediate consequence of a longer period of inflation, as seen in the 1970s, is rather unlikely.
2. Due to elevated levels of debt, central banks are limited in their actions, so that real interest rates are likely to remain low for a longer period, and
3. despite rising interest rates, companies are likely to continue investing.

- **The return of inflation**

After a long period of low inflation, fears of rising prices have returned. In March 2021, consumer prices in the US surpassed the 2% inflation target that most central banks aim to achieve. A month later, the EU also exceeded this threshold. Since then, prices have continued to rise at a pace not seen in decades and were further exacerbated by the energy crisis that followed Russia's invasion of Ukraine in early 2022.

In the US, inflation peaked at a rate of 9.1% in June 2022, while in Europe, inflation rates continued to rise until October, reaching a peak of 11.5% in the European Union and 9.6% in the United Kingdom. These high inflation rates have affected not only western economies but also many other countries around the world. → Figure 1

Figure 1: Inflation rates in major economies over time [%]



Most recent data as of Dec. 2022

Source OECD

Roland
Berger

The initial optimism that inflation is only going to be a temporary phenomenon has disappeared. Or to put it in Christine Lagarde's own words, "Inflation remains far too high and will stay above our target for an extended period."¹

"Black swans" and "quantitative easing":

Main drivers of the current increase of inflation

When trying to figure out the drivers behind the current rise in inflation rates, one needs to distinguish between different periods following the high tide of the pandemic as well as several different triggers for the current development of inflation:

After the pandemic-related recessions in 2020, Western economies experienced a rebound in 2021. This recovery was fueled by households' excess savings, which

¹ ECB, Monetary policy decisions, Sept 8, 2022, <https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp220908-c1b6839378.en.html>

accumulated during lockdown measures in 2020, and further boosted by economic stimulus packages and other financial measures implemented by governments to support businesses and households. Both excess savings and government stimuli led to an increase in aggregate demand. However, global supply remained limited as many countries, particularly in emerging markets, were not yet in the process of ramping up their economies. Thus, the inflationn surge seen in 2021 was mostly driven by an excess of demand over supply.

The strain on global supply chains eased during 2022, in particular due to China's slow but steady re-opening. The Russian invasion of Ukraine and corresponding sanctions then triggered an energy price shock. European economies were hit hardest due to their higher dependence on Russian energy resources at that time. In search of alternative energy sources on the world market, such as LNG, energy prices in non-EU countries have also increased sharply. This intensified price pressures even further, leading to elevated consumer prices across the globe and inflation rates not seen since the end of the oil crisis of the 1970s.

A very important factor contributing to the extraordinarily high inflation rates, especially in the US and Europe, is the oversupply of money due to central banks' quantitative easing to foster economic growth and prevent deflation in the previous decade. The ECB's Asset Purchase Programs already introduced from 2014, swept billions of euros into the markets and inflated the ECB's balance sheet. The Pandemic Emergency Purchasing Program, initiated to counter risks to the outlook of the euro area due to COVID-19, went even further. Inflated by asset purchases, the ECB's total assets have increased by approximatively 83% between 2019 and 2021. The Fed even went one step further – its balance sheet increased by 110% in said period, to, amongst other reasons, finance government stimuli directly paid to consumers in three rounds.

A historical perspective: How realistic is a repetition of the stagflationary scenario of the 1970s?

To get a deeper understanding of the current phenomenon of high inflation, it is helpful to set the current situation into a broader historical perspective. One of the most significant episodes of inflation occurred in the 1970s. During this period, there were two oil price shocks, in 1973 and 1979, which led to a surge in oil prices. In the first oil crisis in 1973, the Organization of Arab Petroleum Exporting Countries (OAPEC), a cartel of Arabian oil-producing countries, had imposed an oil embargo on the United States and other Western countries as a response to their support for Israel during the Yom Kippur War. The second oil crisis was triggered by the Islamic Revolution in Iran and the first Gulf War.

The resulting shortage of oil in each case led to a sharp increase in oil prices, which had a ripple effect on the global economy. The rise in oil prices led to an increase in the cost of production for many firms, which, in turn, led to an increase in the prices of goods and services. This surge in prices was amplified by the fact that many countries had fixed exchange rates, meaning that they could not devalue their currencies to offset the increase in import prices. The result was a period of high inflation, which was compounded by a global recession. This period is also labeled as the infamous phase of "stagflation" – an economic cycle characterized by slow growth and with both high unemployment and inflation rates.

Governments and central banks responded to this stagflationary episode in a variety of ways. One response was to adopt a policy of wage and price controls. In the United States, for example, President Nixon imposed a freeze on wages and prices in an effort to control inflation. However, this policy proved to be ineffective, as firms simply shifted their focus to other areas where prices were not controlled, such as quality or quantity.

Another response was to adopt a policy of monetary tightening. This involved increasing interest rates and reducing the money supply in an effort to reduce demand and lower inflation. The Federal Reserve raised interest rates sharply during the 1970s. It was down to the hawkish actions of Federal Reserve president Paul Volcker, who took office in 1979 and broke the stagflationary cycle of the 1970s by raising interest rates to close to 20%. However, this policy had the side effect of causing a recession, which led to rising unemployment and political discontent.

The current situation and the energy crisis of the 1970s have a number of things in common. Both are closely connected to a war. Both inflationary periods were triggered by supply shocks after prolonged monetary policy accommodation. Energy and food shortages have been prevalent in both periods as well. In both cases, energy shortages and skyrocketing prices caused many Western governments to decide on drastic policies and implement them quickly without significant backlash. Also, in both crises, governments implored citizens to adjust their behavior to the new situation. Both periods also saw vast government spending and an increase in money supply. This raises the question whether today's inflation is somehow reminiscent of the 1970s stagflation and can therefore be fought off with the same methods.

However, there are also a number of differences between the situation in the 1970s and the present. While the OPEC controlled about 56% of global oil exports in 1973, Russia only accounted for 32% of global gas supply in 2021. Back in the 1970s, oil was also the most important resource in the global energy mix, accounting for 46%. In comparison, natural gas accounts for "only" 22% of today's energy mix. Furthermore, the energy intensity of the global economy has decreased in the meantime: whereas in 1990 an average of 164 kg of oil equivalent were needed to generate USD 1,000 GDP, only 120 kg are needed today.

Moreover, monetary policy frameworks have become increasingly focused on price stability over time. In the 1970s, central banks often faced competing objectives – aiming for both high output and employment, as well as for price stability. In contrast, central banks in advanced economies and many emerging economies now have clear mandates regarding price stability, typically expressed as an explicit inflation target.

Taking further into account that labor markets in major economies are still very tight, it is unlikely that we will see stagflation making a reappearance. However, we will continue to see elevated inflation rates. With the reopening of the Chinese economy, global energy demand is expected to increase, thereby likely increasing global energy costs. On the other hand, the reopening of the Chinese economy has the potential to finally end supply chain bottlenecks and associated costs. The transition to a decarbonized economy continues to require huge investments, driving up inflation rates at least in the short and medium term². The increasing threat of globalization unwinding due to

² Also check out the web article on the impact of the [Inflation Reduction Act on inflation](#)

rising tensions between China and the West is also likely to prove inflationary in the future due to more expensive imports of intermediate goods and end products. In addition, many Western societies are aging – as is China – which further increases inflationary pressures by reducing the supply of labor.

- **Central Banks reaction on rising inflation – The end of cheap money?**

Many central banks around the world have made it their main task to keep prices under control and thus enable households and companies to plan for the future with some certainty regarding the price of goods and services. For example, Article 127 of the Treaty on the Functioning of the EU states that the primary objective of the European System of Central Banks is to maintain price stability.³ The Federal Reserve Act also commits the US Fed to the goal of stable price levels, although the Fed is also supposed to pursue the goals of full employment and moderate long-term interest rates in addition to this goal.⁴

In order to pursue their target of price stability, both central banks – the ECB and the US Fed – aim at inflation rates close to but below 2% p.a.

It is conventional central banking practice to increase the nominal interest rate target when inflation rates are exceeding the inflation goal and to decrease the interest rate target when inflation is lower than the inflation goal. The rationale behind this practice is that raising interest rates reduces spending, thereby "cooling" the economy and reducing inflation, while reducing interest rates increases spending, "heating up" the economy and increasing inflation.⁵

In 1979, during the second oil crisis, when inflation rose to nearly 15%, the US administration appointed Paul Volcker as Fed Chairman, which was seen as strong endorsement of using more aggressive monetary policy to break inflation's stranglehold on the US economy. Volcker and the Fed's Federal Open Market Committee (FOMC) made taming inflation their top priority, even if it came to the detriment of economic growth and employment. Volcker raised the federal funds rate from 11% at the time he took office to a peak of 19% in 1981, thereby bringing real interest rates⁶ into positive territory again. The policies ultimately proved successful in breaking the cycle of stagflation, as inflation rates decreased from a peak of 14.5% to 4% by end of 1982.

Although the Fed's resolve under Volcker was effective in containing inflation, the monetary contraction – along with the effects of the oil price shock – plunged the economy into the worst recession since the Great Depression of the 1930s and provoked strong and widespread opposition.

Interest rate hikes also spurred on a recession during other episodes of history. In the US, for example, six of the last nine periods of rising interest rates since 1970 have been followed by a recession. → Figure 2

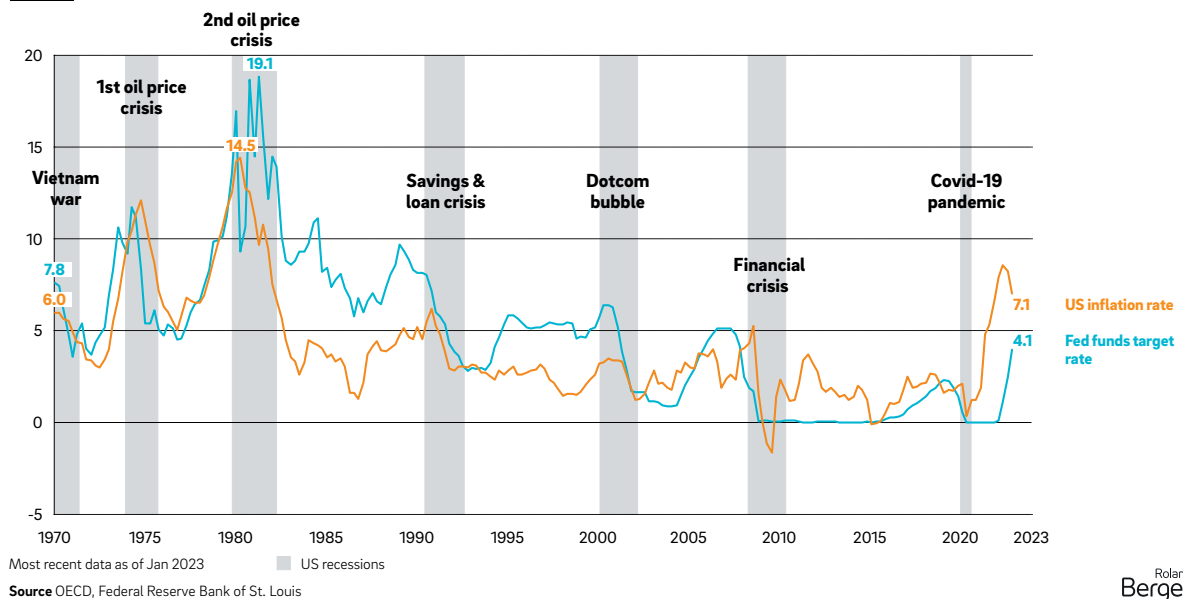
³ ECB, <https://eur-lex.europa.eu/legalcontent/EN/TXT/HTML/?uri=CELEX:12012E/TXT&from=DE>

⁴ Federal Reserve Act, <https://www.federalreserve.gov/aboutthefed/section2a.htm>

⁵ St. Louis Fed, <https://www.stlouisfed.org/on-theeconomy/2016/november/how-central-banks-typically-controlinflation>

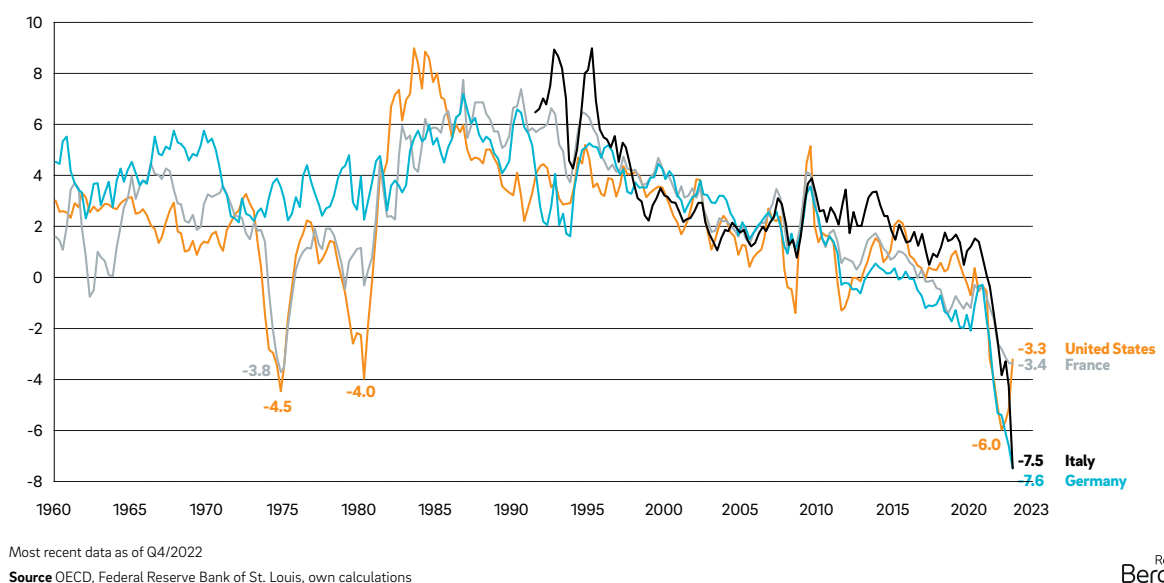
⁶ In the sense of a rough approximation, real interest rates can be defined as interest rates minus inflation.

Figure 2: Relationship between benchmark rates and inflation over time, using the US as an example [%]



However, the risk associated with interest rate hikes has risen significantly in recent years. As a result of years of low interest rates and further unconventional measures taken by central banks, such as asset purchases, private and public sector debt have risen considerably worldwide, and the risk of potential financial distress has increased sharply as a result.

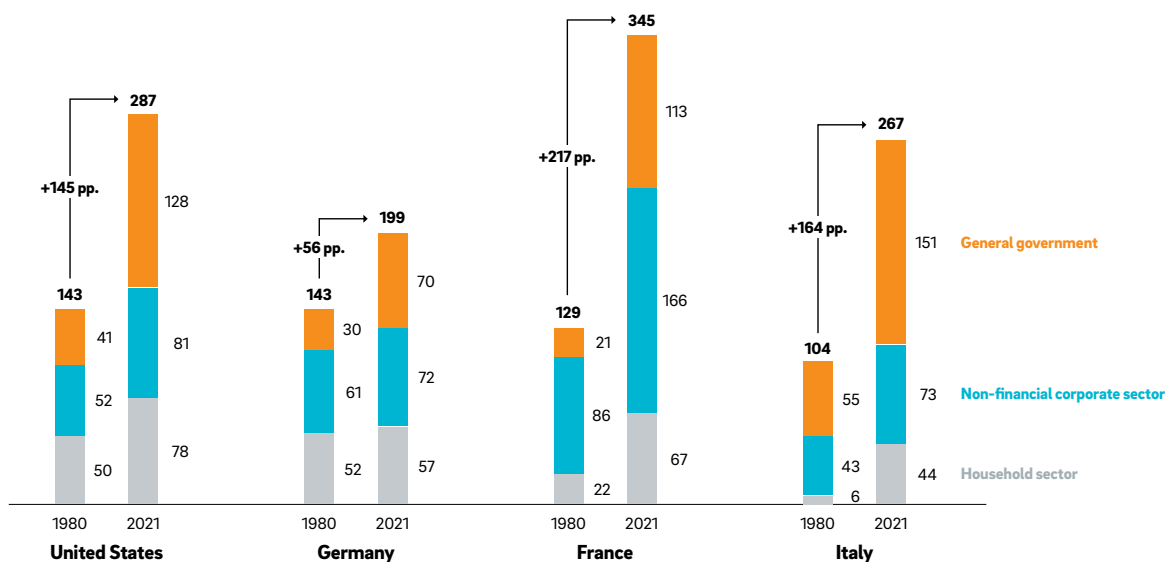
Figure 3: Real interest rate in selected economies [quarterly, %]



In addition to the risk of weakening the economy, which was already fragile at the time, the increased debt levels of both state entities and the private sector are often cited as the reason for the initially very muted responses of major central banks to rising inflation. Thus, after a year of rising inflation rates, real interest rates are still far from moving into positive territory. → Figure 3

While the total sum of US general government debt, household debt and non-financial sector debt stood only at 143% of GDP in 1980, this figure had doubled to 287% of GDP in 2021. In European countries the sum of public and private debt has risen markedly, too. In Germany, the sum of public and private debt increased from 142% in 1980 to 199% in 2021. In France and Italy, debt levels have also significantly increased, reaching 345% of GDP in France and 267% in Italy over the same period. The debt composition in these countries, however, varies widely. While in Germany and France most debt is amassed by the non-financial corporate sector, it is general government that carries the highest debt load in Italy and the US. → Figure 4

Figure 4: Debt level by economic sector [% of GDP]



Source IMF Global debt database

Despite the initial hesitation, most major central banks have now increased interest rates. In the US, the federal funds rate rose from 0.25% to 5.00% within 12 months, marking the fastest US rate hike cycle in history. The ECB rate also rose from 0% to 3.5% over a period of 9 months after initial reluctance.

Apart from their macroeconomic consequences, rising central bank interest rates also impact companies' financing conditions, which raises the question of the extent to which the changed interest rate environment is affecting corporate investments.

- **Consequences of high interest rates on companies' investment decisions**

Corporate investment and its drivers are a central component of most macroeconomic theories. Apart from corporates' expectations of future economic developments, interest rates also play an important role in companies' investment decisions.

What does economic theory say?

In investment theory, as well as in everyday corporate financial decision making, the level of (expected) real interest rate plays an important role in firms' investment decisions, as the financing costs of an investment and thus its profitability – or even its feasibility – is influenced by it. Regarding debt-financed investments, the interest rate represents a direct cost factor of the investment project, while regarding equity financed investments, the level of interest rate represents a form of opportunity cost.

In working practice, the expected profitability of an investment can be calculated by its net present value. For this purpose, the sum of the periodic cash inflows expected from the investment is compared to the acquisition cost of the investment. The expected future cash flows of the project must be made comparable with the acquisition costs already taking place in the present by means of discounting. Therefore, this determines how much money one would have to invest today at a given interest rate in order to obtain the same value of the cash inflow at the time of the potential cash inflow. The sum of the discounted cash flows is referred to as the present value. The acquisition costs of the project are deducted from the present value in order to calculate the net present value (NPV). If the NPV is positive, an investment is worthwhile from an economic point of view; if it is negative, the investment involves a financial loss.

Let us illustrate these rather abstract considerations by assuming that the acquisition cost of a machine would be EUR 10,000 and that its use would generate annual cash surpluses of EUR 5,200 over its life of two years. Assuming a real interest rate of 10%, the net present value of the investment would then be:

NPV = – Initial investment + Present value

$$NPV = -10,000 \text{ EUR} + 5,200 \text{ EUR} + \frac{5,200 \text{ EUR}}{1.10^1} \quad NPV = -72.73 \text{ EUR}$$

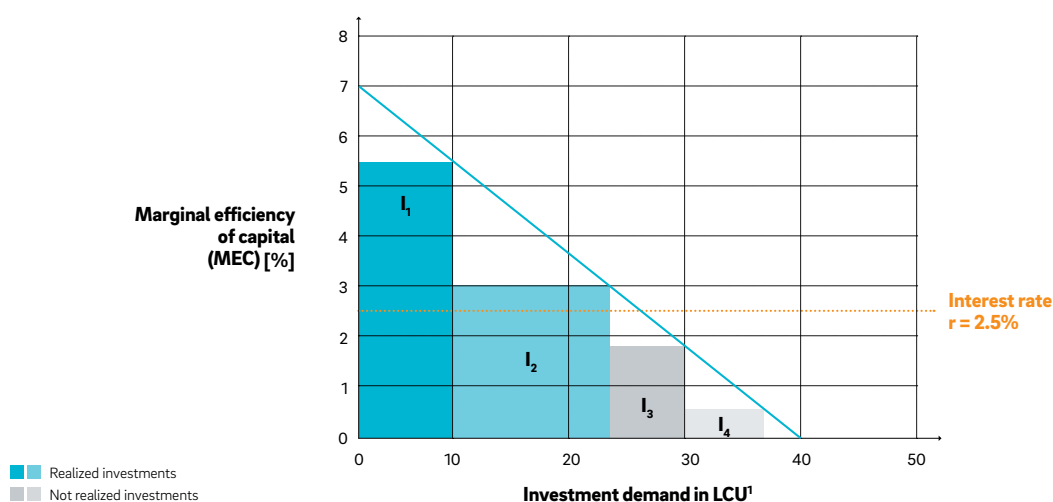
An investment in this machine would therefore be loss-making at an interest rate of 10% and should, from the economic point of view, not be pursued.

Since the present value of the cash inflows depends on the interest rate assumed, the NPV of the investment also depends on the interest rate. Calculating the theoretical interest rate at which an investment assumes a net present value of exactly zero corresponds to the interest rate at which the project is exactly on the threshold of profitability. This theoretical interest rate was called the Marginal Efficiency of Capital (MEC) by Keynes.

In Keynesian theory, the propensity of firms to invest is based on the relation between the marginal efficiency of capital (MEC) and the underlying interest rate. If the interest rate charged to finance the investment exceeds the MEC of the project, the investment is loss-making and should not be undertaken by a profit-seeking company.

If different investment projects are put in order according to their MEC, and if we assume that the projects with the highest MEC are realized first, we obtain a falling curve of the MEC as the investments increase. → Figure 5

Figure 5: Relation between marginal efficiency of capital, interest rate and investment demand



¹ LCU refers to local currency units
Source Roland Berger Institute

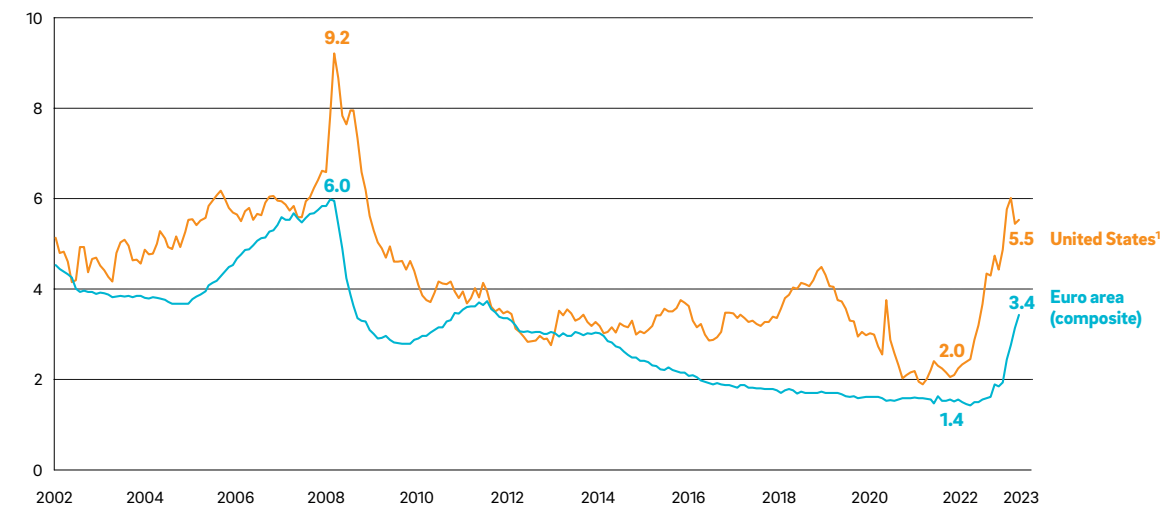


Under these conditions, a rising real interest rate will thus have a negative effect on investment demand, while a falling real interest rate should have a positive effect.

Further economic theories also conclude that higher interest payments have a negative impact on investment. Under the neoclassical theory, for example, a higher interest rate reduces demand for capital by decreasing the cost-minimizing capital labor ratio of production processes. Other theories suggest that higher interest rates burden companies' retained earnings with higher financing costs and thus reduce companies' own financial resources available for investment.

Indeed, increases in key interest rates are already visible in the cost of financing for companies and households. The composite cost of borrowing for non-financial corporates in the euro area has more than doubled on average, now reaching 3.1%, up from 1.4% at the beginning of 2022. In the United States, cost of borrowing has more than doubled as well. → Figure 6

Figure 6: Composite cost of borrowing for nonfinancial corporations [%]



Most recent data as of Dec. 2022

¹ ICE BofA US Corporate Index Effective Yield

Source ECB, Federal Reserve Bank of St. Louis



What does empirical reality say?

The rise in financing costs raises the question of the extent to which companies are still willing to make investments in the current high interest level environment at all – especially given the fact that many sectors are in the midst of an economic transformation towards increased digitization and net-zero emissions, making investment an urgent necessity. In the following, we will analyze how companies will most likely respond to the new interest rate environment.

To answer this question, one needs to evaluate the current financial situation of companies. For this purpose, we have examined the extent of interest expense as a proportion of EBIT in the past fiscal year and assessed the effect of a potential doubling of 50% of last year's interest expense on EBIT using a broad sample of nearly 4,000 companies from countries in Europe and the US with sales of at least USD 10 million.

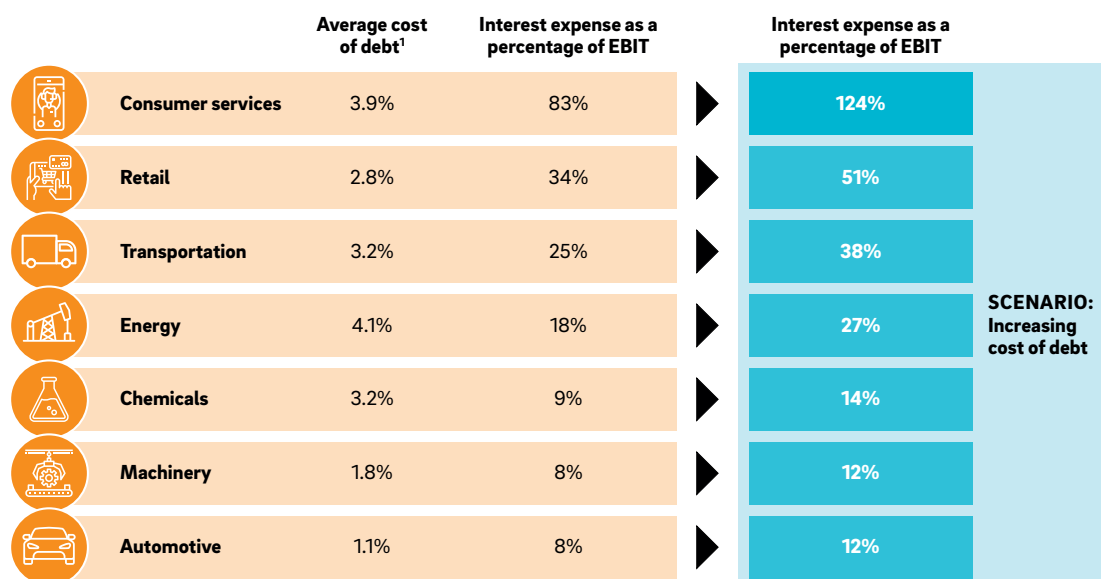
The assumption of a doubling of half of the interest expense represents a necessary simplification, as the financing structures of the companies differ and have varying maturities. Nevertheless, for the multitude of companies considered, approximately half of the debt will have to be rolled over in the coming two years, so that the resulting increase in interest expense can be expected accordingly.⁷

The results show that the assumed increase in interest expense will significantly decrease the companies' net income. → Figure 7

Whereas for the average company the share of interest expense as a proportion of EBIT was 22%, in the scenario of increased interest expense that share would increase by ten percentage points to 32%.

⁷ Companies' financial information has been retrieved from data provider Capital IQ.

Figure 7: Scenario analysis of a higher interest environment



¹ Calculated as share of interest expenses of total debt

Source Capital IQ, Roland Berger Institute



Companies in the consumer services sector would face severe trouble, with interest expense reaching more than 100% of EBIT, thereby eroding corporate profits. All other sectors considered would also see the share of interest expense increase, but not by the same magnitude. With the increase in interest expense, the basis for financing investments, either equity or debt-financed, will in any case be weakened. So, while higher interest rates put a strain on companies' margins, they do not render further investment impossible.

In the chart below, quarterly data from 1960 to 2022 has been examined for various industrial countries. Considering the correlation between 10-year government bond yields as a proxy for long term interest rates and growth rates in Gross Fixed Capital Formation⁸, it quickly becomes apparent that no significant relation is discernible. → Figure 8

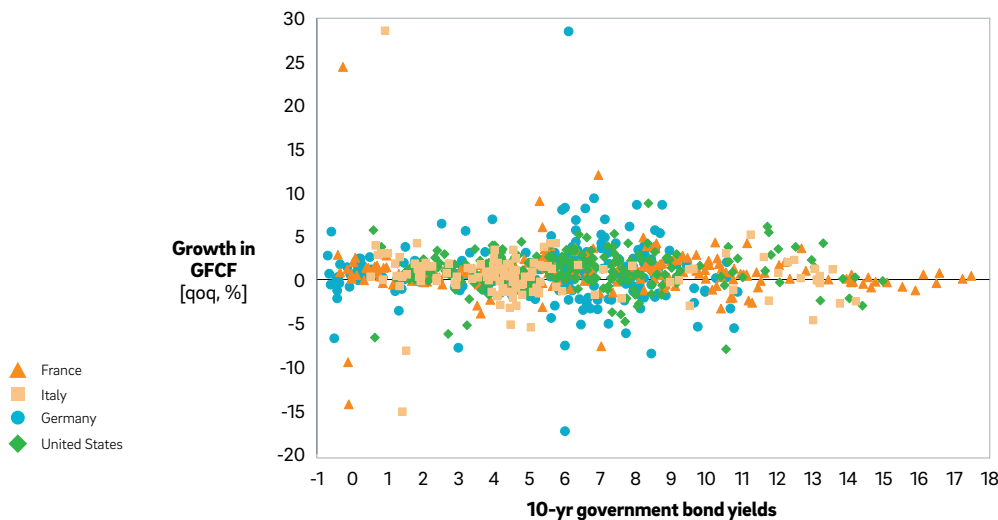
Although subject to academic debate, this finding is confirmed by various studies. Among others, Lee and Werner (2022)⁹ point out that a number of conditions must be met for the beforementioned "capital budgeting process" to yield macroeconomic insights about the relationship between interest rates and economic activity.

Among other things, theoretical models assume that all planned investments must become actual investments, which requires a world without frictions, i.e., without credit rationing, illiquidity, imperfect/asymmetric information concerning borrowers, etc. Furthermore, there must be no impediment to the aggregation of the individual investment demand schedules into one aggregated investment schedule.

⁸ Gross fixed capital formation, abbreviated as GFCF, consists of resident producers' investments, deducting disposals, in fixed assets during a given period.

⁹ Lee & Werner in International Journal of Finance & Economics, as of June 03, 2022, <https://onlinelibrary.wiley.com/doi/full/10.1002/ijfe.2630>

Figure 8: Correlation of long-term interest rates and growth in gross fixed capital formation (GFCF)¹ [%]



¹ Quarter over quarter growth rates, observations ranging from Q2/1960 to Q3/2022

Source OECD, Federal Reserve bank of St. Louis, Roland Berger Institute



To get to the point, theories are always abstractions of reality and cannot account for all possible factors. Therefore, a clear link between interest rates and the aggregate levels of investments cannot be established empirically as the macroeconomic theory only reflects part of the actual corporate investment process.

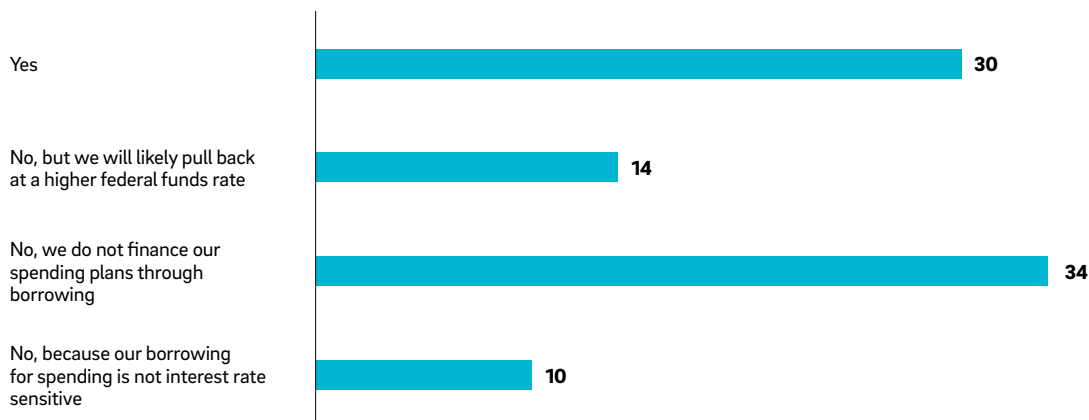
What do managers say?

Surveys among CFOs also confirm the thesis that a higher interest rate environment does not necessarily have a negative impact on investment behavior. For example, Duke University, together with the Federal Reserve Bank of Richmond, conducted a survey of more than 300 companies in December 2022, asking them about the impact of the current elevated interest rate environment on their spending plans. Two thirds of the surveyed CFOs responded that the current level of interest rates is not causing them to pull back on spending plans. → Figure 9

Reasons for this are manifold according to the survey: many of the firms indicated that they are not financing their investments through borrowing, or that their plans are not interest rate sensitive. They were further asked at what interest rate they would pull back on their investment plans. On average, the Fed funds rate that would cause these firms to back away from capital spending was 6.4% (median: 6%).¹⁰

¹⁰ Richmond Fed, https://www.richmondfed.org/research/national_economy/cfo_survey/research_and_commentary/2022/20221221_research_commentary

Figure 9: Is the current level of interest rates causing you to pull back on capital spending plans?



■ Capital spending (n = 312)

Note: Date of survey: November 14, 2022 – December 2, 2022

Source: Duke University, FRB Richmond, FRB Atlanta



Which factors determine investments?

So, if it is not the interest rate environment, what other factors besides financing costs play an important role in investment decisions?

Investment decisions are made based on a variety of internal and external determinants – and their respective importance varies from project to project and from decision maker to decision maker. External factors, for example, include business environmental factors and government policy. Government policies such as fiscal or trade policies will affect companies' returns and thus influence their investment decision. Furthermore, business environment factors such as developments in science and technology, culture, society and/or health related issues, such as the COVID-19 pandemic, but also economic expectations, demography or competition are also impacting corporate investment decision making. Internal factors include behavioral factors, company's performance and the risk of investment decisions.

A study of the Bank of England has analyzed obstacles for firms affecting their investment behavior. Among companies that judged they had underinvested, real economic obstacles were cited more often as a reason for their underinvestment than financial obstacles. Thus, it was primarily the availability of internal funds rather than the cost of financing that deterred companies from investing. Only 46% of companies surveyed stated that cost of finance was an obstacle for their underinvesting, whereas 72% listed the availability of internal funds as an obstacle (availability of external funds: 52%). Indeed, the most cited reason for underinvestment was uncertainty about future economy development (85%).¹¹

¹¹ Bank of England, Q1 2017: The financial system and productive investment, <https://www.bankofengland.co.uk/quarterly-bulletin/2017/q1/the-financial-system-and-productiveinvestment-new-survey-evidence>

Companies were further asked about their expected rate of return for investment projects as well as the actual realized rate of return of investment projects for the past five years. The largest share of companies (19.4%) reported that they require an expected rate of return between 10% and 15% – and that this also reflects the range of realized returns.

Given this finding, there is little danger of corporate investment flows drying up. This interpretation is also shared by the majority of analysts at financial firms. They expect business investments in the USA to grow by 1.5% in the current year and by 0.6% in the coming year. For the euro zone, growth of 0.8% is expected for the current year, and growth of 1.7% is anticipated for the coming year.¹²

Conclusion

1 A stagflation scenario as in the 1970s is rather unlikely

Our analysis of the main drivers of the current increase in inflation raises several issues. Firstly, is high inflation a fleeting phenomenon or will high inflation shape the world economy for at least a number of years, if not more permanently? Due to demographic and macroeconomic factors – aging populations in the world's leading economies, high levels of private and public sector debt in all major economies, a substantial need for green transformation, all of which will require continued, considerable expenditure – we expect high inflation rates not to disappear in the near future.

However, a scenario of stagflation seems rather unlikely. Our comparative approach showed not only common traits, but also important differences between the current situation and the stagflation of the 1970s. Due to the diversification of energy markets and energy resources, tight labor markets and central banks' now more concerted focus on one goal – price stability – stagflation seems rather unlikely. The decision by the Fed and the ECB to continue to raise interest rates despite the recent banking turmoil reinforces this view.

2

Central banks are limited in their actions due to elevated levels of debt, so that real interest rates are likely to remain low for a longer period

Before central banks' monetary turnaround in 2021, interest rates had stagnated at a low, historically unique level for many years – both in the European Union and the US. Given the high level of public and private sector debt, it is unlikely that the Fed and the ECB will increase interest rates to levels even close to those seen in the 1970s. Benchmark rates will presumably remain below the rate of inflation. This will have consequences for real interest rates as well, which will remain very low or even negative for the foreseeable future.

3 Despite rising interest rates, companies are likely to continue investing – especially in view of upcoming transformations

Higher interest rates do not necessarily have a negative impact on companies' investment behavior. Investment decisions are founded on a variety of internal and external influencing factors. Their respective importance varies from project to project and from decision maker to decision maker. Empirical data and survey results confirm the view that there is, at present, only a minor danger that corporate investments flows will dry up, especially in light of the wide-ranging transformation that many economic sectors are currently undergoing.

¹² Consensus Economics, Survey of international economic forecasts, February 2022

Further reading

- ➔ [WHAT IF – THE ECB RAISES THE KEY INTEREST RATES?](#)
- ➔ [INFRASTRUCTURE INVESTMENT OUTLOOK 2023](#)
- ➔ [CREATING VALUE THROUGH AND IN DIGITAL](#)

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