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GLOBAL MACRO RESEARCH — WHERE NOW GERMANY?

HOW THE ENERGY CRISIS THREATENS GERMANY'S PROSPERITY

FEBRUARY 2023



EXECUTIVE SUMMARY

The energy crisis reveals the weaknesses of Germany as an industrial location and the mistakes of German energy policy, threatening losses in prosperity and years of crisis. In this two-part paper, we look at the current situation and outline possible scenarios for the future.

PART 1: PERSPECTIVES FOR THE GERMAN ECONOMY – THE IFO INSTITUTE'S OUTLOOK

In its outlook, the ifo Institute looks at how the crisis is affecting the business climate in Germany and why German industry is particularly affected by rising gas prices.

- A mild recession seems unavoidable // 3
- Inflation is unlikely to peak until mid-2023, and longer-term inflation risks are growing // 4
- The gap between German and US energy costs is a serious problem that will impact industry for years ahead // 5

PART 2: EXPERT ANALYSIS

In the second part of the paper, we call upon three experts to analyse Germany's energy strategy and the dangers of tighter monetary policy in the eurozone. They also explain how Germany and Europe can get out of the crisis. // 7

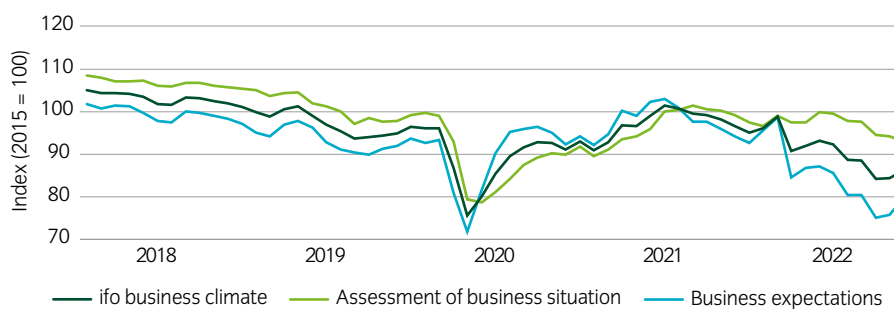
THE CURRENT ECONOMIC BACKDROP

CORPORATES REMAIN PESSIMISTIC

In 2022, the ifo Business Climate Index fell sharply, similar to the move seen at the beginning of the corona pandemic. However, unlike in March 2020, the current business development and business expectations components have diverged significantly: This suggests that the current business environment is better than during the pandemic, but that businesses are deeply pessimistic about the future.

This pessimism has a direct impact on the economy because companies that expect their business situation to deteriorate are reluctant to invest and instead prioritise their liquidity. Expectations have recently stabilised somewhat, probably because a gas shortage has become less likely this winter.

Figure 1: ifo German business climate index, seasonally adjusted¹

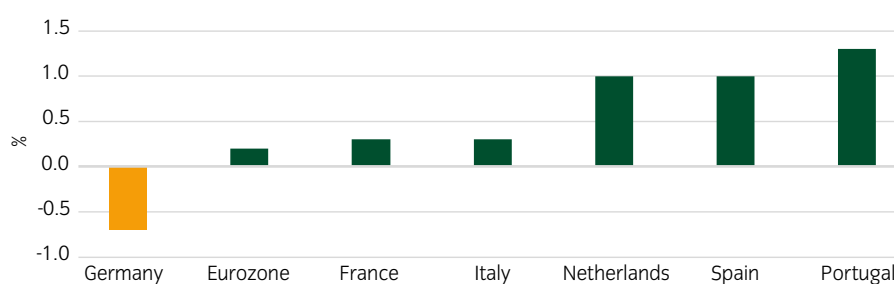


A MILD RECESSION SEEMS UNAVOIDABLE

In this volatile environment, forecasts are difficult, but a mild recession seems unavoidable. The ifo Institute expects German economic output to decline by 0.4% in 2023, slightly above the forecasts of the European Commission, which expects Germany to have the lowest growth rate within the European Union (EU) at -0.6%. However, neither the European Commission nor the ifo Institute expect a gas shortage this winter, which would have significantly exacerbated the crisis.

In the short term, the current tense situation is unlikely to change much, especially since Europe will not be able to replenish its gas storage facilities with gas from Russia in the summer of 2023. The starting position for future winters will therefore be significantly less favourable, meaning future volatility in electricity and gas prices is high likely.

Figure 2: Projected economic growth in 2023²



¹ Manufacturing industry, service sector, trade and construction.
Source: ifo Business Survey, November 2022.

² Source: ifo Business Survey, November 2022.



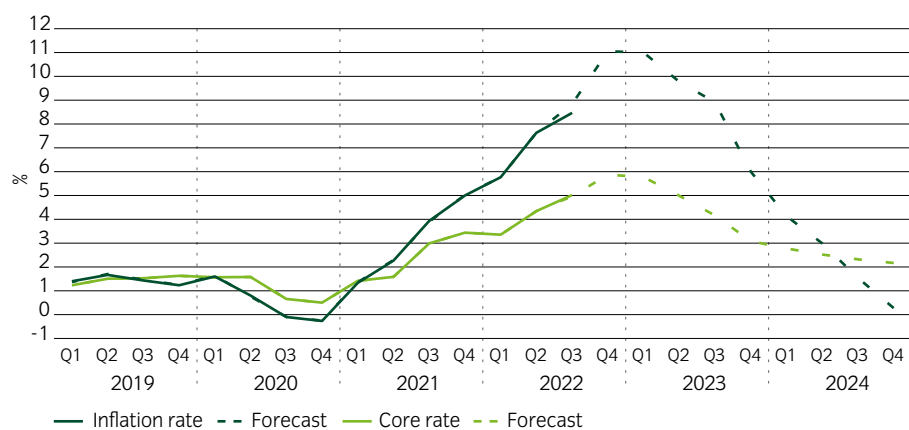
INFLATION AND MONETARY POLICY

NO PEAK IN INFLATION UNTIL LATER IN 2023

The current inflation trend is extraordinary, Germany last experienced such an explosive increase in inflation in the fifties. Even previous oil price shocks are not comparable in magnitude to the energy crisis of 2022.

However, the worst may be yet to come – the ifo Institute expects the peak in inflation to be around 10% at the beginning of 2023 followed by a gradual decline, as energy prices are unlikely to rise as significantly as in the past year.

Figure 3: Inflation in Germany³



THE MEDIUM-TERM INFLATION TREND IS ALSO CONCERNING

As a glance at the effective interest rate on nominal and inflation-linked German government bonds reveals, financial markets expect the European Central Bank to reduce inflation back to around 2% by 2030. The ifo Institute, on the other hand, anticipates that inflation risks will grow over the medium term.

In addition to demographic change and a shortage of labour, frictions in foreign trade suggest a period of higher inflation beyond the current crisis, leading to higher costs and falling supply. In addition, energy is likely to become scarcer and more expensive in the future, partly due to the decarbonisation of the economy. At the same time, the change in the geopolitical backdrop, climate protection and rising social benefits are increasing pressure on public budgets. Fighting inflation is also extremely unpopular in the EU. Only productivity gains can prevent rising inflation rates; however, it is questionable whether higher productivity alone can outweigh these other factors.

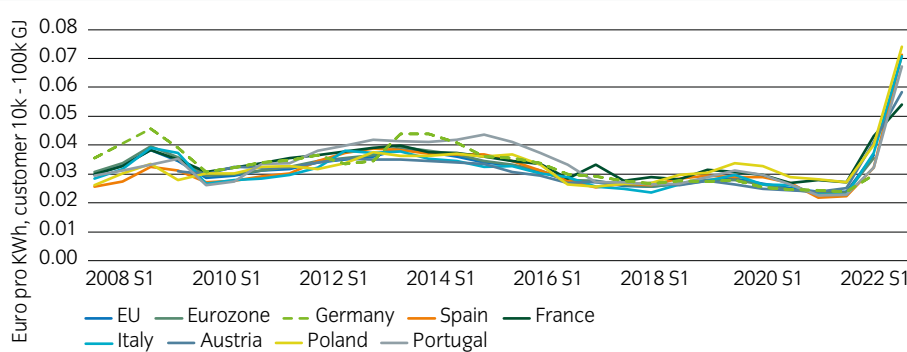
³ Source: ifo institute

ENERGY CRISIS AND GERMANY AS AN INDUSTRIAL LOCATION

ELEVATED GAS PRICES WILL BE A PROBLEM FOR YEARS TO COME

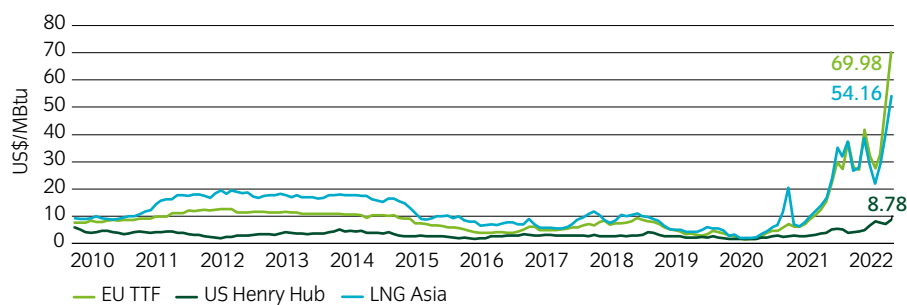
Germany is often regarded as the biggest beneficiary of cheap gas from Russia. This is, however, incorrect because in fact the integrated gas market has if anything harmonised prices in north-western Europe, as a look at the gas price development between 2007 and 2021 confirms. The good news for Germany is that although they have no price advantage, the German economy cannot suffer any price disadvantages.

Figure 4: Industrial gas prices in the EU between 2007 and 2021⁴



A global comparison of gas prices, on the other hand, paints a different picture: a veritable chasm is opening up between the USA on the one hand and Asia and Europe on the other. Since the end of Russian gas supplies, Europe has been buying larger quantities of liquefied natural gas on the world market, which is why prices are also rising in Asia. The cheap Russian gas also gave European companies a competitive advantage over Asian competitors, which the rapid rise in gas prices turns into a competitive disadvantage vis-à-vis Asia and especially the USA.

Figure 5: The difference between European and US gas prices has become huge⁵



⁴ Source: International Monetary Fund 2022

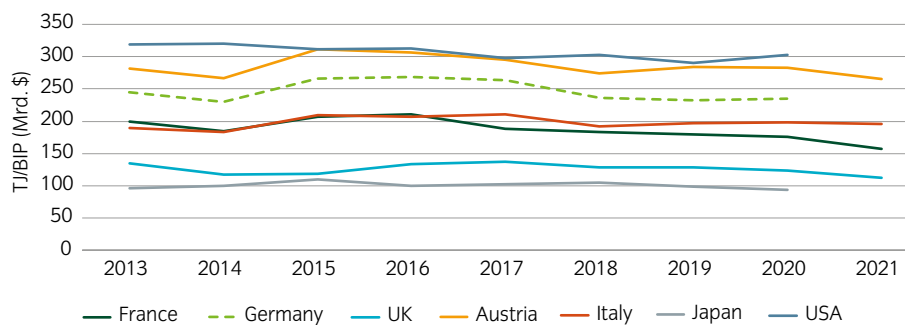
⁵ Source: International Monetary Fund 2022



GERMAN INDUSTRY IS PARTICULARLY IMPACTED GIVEN ITS HIGH GAS INTENSITY

However, an assessment of the effects of the energy crisis on Germany as an industrial location depends not only on gas prices, but also on gas intensity, and here the German economy with its high share of industrial value added is at a disadvantage compared to most other industrialised countries. In particular, German core industries such as the chemical and metalworking industries are energy-intensive and have so far benefited from cheap gas. Since Russia will probably not supply gas to Europe in the medium term, Germany as an industrial location is likely to come under pressure in international competition.

Figure 6: Energy intensity of the industrial sector⁶



In addition, Germany wants to become climate-neutral by 2045 – in industrial and energy production as well as in transport. In particular, the decarbonisation of transport is expected to lead to a significant increase in electricity demand, by 25% by 2030, according to conservative estimates. In 2021, nuclear power and coal accounted for about 40% of Germany's electricity supply, but so far Germany is sticking to its plan to phase out both energy sources.

THERE ARE NO SHORT TERM SOLUTIONS

In the long term, hydrogen and renewable energy sources are intended to secure Germany's energy supply. But hydrogen is still a long way off and the expansion of renewable energies is progressing only slowly. In addition, as an industrial location, Germany is dependent on controllable electricity production. In the medium term, Germany planned to fill this energy gap with a massive expansion of gas-fired power plants. The Russian attack on Ukraine makes this plan extremely problematic.

Germany does not yet have an answer to the current situation, and the resulting uncertainty is perhaps the biggest burden on the German economy. The future of the industrial location will therefore also and above all depend on whether it is possible to develop a sound energy policy strategy and to guarantee the energy supply at competitive costs.



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⁶ Source: OECD 2022; World Bank 2022.

PART 2

EXPERT ANALYSIS

PASCAL BAZZAZI

Pascal Bazzazi is Publisher and Editor-in-Chief of Leiter-bAV and Tactical Advantage.



GERRIT JAN VAN DEN BRINK

Gerrit Jan van den Brink is a lecturer at the House of Finance at the University of Frankfurt and founder of Risk Sigma GmbH.



IN
CONVERSATION



CLEMENS FUEST

Clemens Fuest is a German economist, he was the President of the Ifo Institute for Economic Research and director of the Centre for Economic Studies at the University of Munich since 2016. Since 2015, he has been serving as a scientific adviser to the Commission on the Minimum Wage at the Federal Ministry of Labour and Social Affairs.

ALEX VEROUDE, CFA

Alex Veroude is Insight's Chief Investment Officer, Fixed Income. He joined Insight's Fixed Income team in 2007.

QUO VADIS, GERMANY?

PASCAL BAZZAZI, PUBLISHER AND EDITOR-IN-CHIEF OF LEITER-BAV AND TACTICAL ADVANTAGE, IN CONVERSATION WITH PROF. DR. CLEMENS FUEST, PRESIDENT, IFO INSTITUTE FOR ECONOMIC RESEARCH, DR. GERRIT JAN VAN DEN BRINK, LECTURER AT THE HOUSE OF FINANCE AT THE UNIVERSITY OF FRANKFURT AND ALEX VEROUDE, CIO FIXED INCOME, INSIGHT INVESTMENT.

Germany is facing numerous problems: inflation, war in Europe, an ever-weaker currency, energy crisis, deindustrialisation, population aging, climate catastrophe. Are the already gloomy scenarios of many economists perhaps still too optimistic?

Prof. Dr. Clemens Fuest: In fact, a lot is coming together at the moment, which is why we may even underestimate the problems. One could also cite the digital transformation, where Germany also does not look very good. Looking at the valuations of the German car industry, the heart of the German economy, the financial markets seem to assume that companies like Google are taking over the topic of mobility and that German car manufacturers will only play the role of 'sheet metal benders'. One can ask oneself what still speaks for Germany as a business location.

Can you think of anything?

Fuest: The adaptability of German companies, which we last observed during the pandemic, gives me hope. In particular, German SMEs, the many family businesses, are very good at finding new solutions and opening up new markets. However, we are also dependent on a few positive impulses from politics, for example in energy and trade policy, otherwise it will be difficult.

What concrete demands would you make of politicians?

Fuest: We have seen a deterioration or at least no improvement in our education system for years. Speaking of the digitalisation of schools, other countries have come through the pandemic better. The same applies to the digitisation of health authorities. There are efforts here and there, but overall far too little is happening.

Or take the issue of citizens' money: The ifo Institute has repeatedly pointed out a design flaw in citizens' money, and this has less to do with sanctions or standard rates, but with the crediting rules. Anyone who goes from a part-time job to a full-time job hardly gets anything out of it. A well-thought-out reform of citizens' money would cost the state nothing, increase supply on the labour market and strengthen lower incomes. You can't really be against it, but the government has only managed to reach a minimal compromise.

What went wrong with the energy transition?

Fuest: We're big at switching things off. But we don't turn anything on and refuse new technologies, such as carbon dioxide capture. In Germany, some fear the phase-out of coal, should this technology be used – that is irrational.

Dr. Gerrit Jan van den Brink: Crises reveal harmful dependencies. Germany has relied too heavily on gas, even though EU members had actually agreed on an upper limit of 30% per primary energy source. Germany has gone to 45%; some even calculate that the share of gas in the German energy mix is even higher.

When making long-term decisions, you should always weigh up effectiveness, efficiency and risks. If you exaggerate in one place, you create problems in the other two places. That is exactly what has happened in energy policy: we have become dependent on natural gas. Gas was cheap and comparatively low-emission, so that's what they did. My hope for the future is that we do not repeat the mistakes of the past and do not become too dependent on a single energy source. We need a mix, and we need resilience. From time to time you have to let a dogma be a dogma. One country after another is planning new nuclear power plants. Can it really be that they are all stupid and that we have leased the wisdom for ourselves?

In recent years, Germany has phased out and re-entered nuclear energy several times, and the deadlines for a final phase-out were already ambitious in peacetime. Meanwhile, war is raging in Europe. Should we not seriously consider extending the maturities?

Fuest: If the framework conditions change fundamentally, then of course you also have to adapt your strategy. But this is exactly what politics finds very difficult, because parties tend to absolutism. The Greens have demonized nuclear power. In my opinion, they grossly exaggerated certain risks and simply ignored balancing problems that actually speak in favour of a diversified energy mix. In addition, modern reactor technology is very safe and Germany is a particularly suitable location for nuclear power: We have almost no earthquakes and no tsunamis, as well as high

compliance and functioning authorities. In addition to safety concerns, ideological hurdles stand in the way of the use of nuclear power in Germany. The climate and anti-nuclear movements are so imbued with ideology that they can push aside all rational arguments and no longer react to changing conditions. In doing so, they pave the way for major economic difficulties.

On the other hand, we see in France in particular that nuclear power is not a panacea either. In addition, the world has already experienced two very serious nuclear disasters, Chernobyl and Fukushima. Can new technologies really make nuclear power plants safer and more reliable?

Van den Brink: New reactors also use new technologies – you can work with them. However, it must be said quite clearly: no energy technology is without risk, but the risks are not always comparable. Burning coal, for example, produces fly ash that makes people sick, and even solar energy is associated with risks. In the case of nuclear energy, final disposal is actually the biggest problem. Now we are observing that the Swiss are building their final repositories on the German border. If the geological conditions in the German border area are so good from the point of view of the Swiss, then one can of course ask oneself whether we should not do the same. You can also learn a lot about final disposal from Finland. And of course, we must not forget: Most nuclear power plants are located in France – near the German border. We are happy to buy French nuclear power, and if there is a reactor accident there, we will be significantly affected anyway.

Is Economics Minister Habeck the right man to realign German energy policy in this situation?

Fuest: It's less about competence than about having the right consultants around you. I think it is a clear mistake to shut down safe nuclear power plants in this period of extreme uncertainty. Habeck is ideologically bound by his party, and he was probably simply ill-advised to withdraw the gas levy. Nevertheless, I do not see the problems in the person.

Inflation: Has the European Central Bank underestimated the problem of inflation?

Van den Brink: At the end of 2021, a member of the ECB's Executive Board described inflation as a temporary phenomenon. At the beginning of 2022, however, it was already clear that inflation would probably accompany us in the longer term. I was very surprised, because we could have known that, also with a view to the energy transition. Take the example of hydrogen: To produce hydrogen, Germany would need 40% of the world's reserves of certain raw materials – just to cover its own energy needs. This technical solution cannot therefore immediately reduce inflation.

Milton Friedman once said that inflation is always and everywhere a monetary phenomenon. Professor Sinn has also repeatedly referred to the problem of the expansion of the money supply in the euro area. The Federal Reserve has drastically tightened the reins, while the European Central Bank continues to buy bonds. Is the worst yet to come for Europe?

Fuest: Of course, the supply of money has an influence, but less than is often claimed. The demand for goods is decisive for inflation. If the ECB buys a bond from an investor with an effective interest rate of zero, then the money supply increases, but nothing happens. Interest rate policy is more important. To curb inflation, the ECB needs to raise interest rates and thus reduce demand. So, the question is whether the ECB is prepared to raise interest rates. It started very late, and we don't know how far it will go. Current inflation is supply-driven, so it depends on whether the ECB is willing to counter it. In my opinion, the money supply argument is not decisive.

On the one hand, many European countries depend on cheap money, on the other hand, the European Central Bank has to raise interest rates to curb inflation. How long does this balancing act go well?

Fuest: It is true that the ECB has taken on fiscal policy tasks. The question of whether it has a mandate for this at all regularly occupies the Federal Constitutional Court – which has already described the ECB's policy in the past as borderline. The dispute over a possible overrun of the mandate will remain, but for politicians this division of tasks is unfortunately very convenient, as it is spared controversial debates about the high debt in parts of the euro area. This can go well for a while, but if inflation continues to rise, the ECB will have to dig deeper and deeper into its bag of tricks. For example, the anti-fragmentation program has now been invented. Unlike during the euro crisis, the ECB can now buy government bonds with virtually no conditions. For the countries concerned, this is tantamount to a blank cheque, which is highly problematic. We have serious governance problems in the eurozone that are likely to catch up with us at some point.

How will Germany and Europe emerge from the crisis?

Alex Veroude: Europe is facing major problems and Germany is facing very big problems. To get out of the crisis, Germany must build new nuclear power plants – and fast. That is the only solution. Whether this is enforceable domestically is very questionable. Germany could therefore be heading for a decades-long crisis. For large companies, there is actually only one truly reliable production location in the coming decades: the USA, especially the southeast of the USA. BMW and other companies are already moving their production to states such as Virginia and South Carolina.

If the US is the big beneficiary of the crisis, should pension funds invest in dollar assets?

Alex Veroude: Yes, I think so. The USA is attracting capital, especially in production sites. In Europe, production is too expensive, especially because of energy prices, and geopolitical considerations speak against Asia – the probability of a conflict between Western countries and China is quite high. As against Russia, the West could also impose embargoes on China in the event of a conflict. And when capital flows into the U.S., so does demand for the U.S. dollar. Interest rates also speak in favour of the greenback. Moreover, unlike the markets, I do not expect inflation to fall quickly and central banks to cut interest rates again anytime soon.

Do you think a EUR/USD exchange rate of 2:1 is conceivable in the long term?

Veroude: In the long run, we are all dead. But even before that, I think an exchange rate of 2:1 is exaggerated. The Germans are quite creative – I wouldn't bet against Germany. In the next 10 to 15 years, however, I expect a strong US dollar.

Many European countries are highly dependent on the EU and monetary union. What will happen to Europe if Germany really moves towards a prolonged crisis?

Fuest: The countries of the EU are indeed highly dependent on each other and especially on Germany. If Germany, Europe's largest country and industrial core, weakens, then this will also have an impact on other countries. In addition, Germany is the stability anchor of the European currency, the current weakness of the euro is primarily due to the weakness of Germany. It is therefore unlikely that the rest of Europe will flourish while Germany falls behind. Conversely, of course, the same applies – after all, we conduct a large part of our foreign trade with the eurozone. Hans-Dietrich Genscher once described the EU as a community with a shared destiny. I agree with this assessment.



The Germans are quite creative – I wouldn't bet against Germany.



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