

24 January 2023

04The huge energy-price shock is coming for European corporates in 2023

06Europe's energy price gap with the US is not a game-changer for competitiveness

The energy crisis
has not led to a
trade diversion of
manufacturing goods
from Europe to the US

The shock from energy gap to weigh on European corporates' profitability and investment

Allianz Research

No, the energy shock in Europe does not mean de-industrialization

Executive Summary



Maxime Darmet Senior Economist for France and US maxime.darmet@allianz-trade.com



Research Assistant research@allianz-trade.com



Françoise Huang Senior Economist for Asia Pacific francoise.huana@allianz-trade.com



Ano Kuhanathan Head of Corporate Research ano.kuhanathan@allianz-trade.com

- Nikhil Sebasdtian Sector Analyst nikhil.sebastian@allianz-trade.com

- The large energy-price shock still lies ahead for European corporates. In 2022, increases in corporate utility bills were contained, thanks to government interventions and the long pass-through from wholesale energy prices to retail contracts, which are for the most part not fully indexed. But we expect utility prices to accelerate in 2023 as more contracts are rolled over, with power prices set to increase by less than +40% in Germany, compared to 2021, against +90% in Italy and Spain.
- However, this is not a game-changer for the price competitiveness of European industry relative to that of the US. Energy consumption generally makes up around 1-1.5% of production in the manufacturing sector. Price competitiveness is much more sensitive to changes in labor costs and the exchange rate. We find that the power-price gap that has opened up between the US and Europe would lead to generally modest losses in manufacturing employment and output, though Spain appears weaker.
- Yet, there are signs that Europe has started to lose market share against other partners. Exporters visibly losing market share in EU15 imports are almost exclusively found in Europe (in agrifood, machinery and electrical equipment, metals and transportation) – but not to the benefit of the US. Rather, the countries benefitting are found in Asia, the Middle East and Africa (and a few in Europe).
- The main direct channel of the energy crisis is through its impact on corporate profitability and investment. We find that the current energy shock would dampen corporate profitability by around -1pp to -1.5pp, and the investment rate by -1pp to -2pp. This would represent EUR40bn in investment losses in France and GBP25bn in the UK.



Allianz Research



The huge energy-price shock is coming for European corporates in 2023

Recent drops in wholesale gas prices have raised hopes that the worst of the energy crisis in Europe is now behind us. But these hopes are misplaced. Unlike an oil shock, a gas (and electricity) shock does not feed through rapidly to the real economy because household and corporate utility bills are, for the most part, based on fixed-price and/or government-controlled contracts, rather than being partially indexed to wholesale gas and electricity prices. What's more, gas prices have trended lower in recent weeks due to an unusually mild winter, but we expect prices to rise ahead of winter 2023 as Europe faces mounting competition for energy supplies from China.

A recent business survey carried out by France's national statistics institute Insee¹ has shown that more than 50% of French corporates (weighted by the turnover) operating

¹ Les entreprises face à la hausse des prix de l'énergie : des situations et des réactions contrastées, Note de conjoncture, Insee, 15 December 2022.

in the services sector and 25% in industry reported that they did not face energy-price hikes in 2022. In fact, 45% of French corporates operating in the services sector have an electricity contract based on a government-controlled price ('tarif réglementé'), according to the survey.

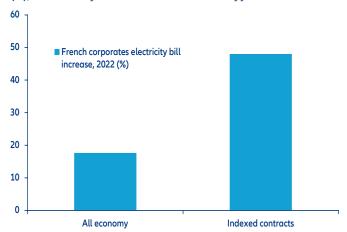
Moreover, the survey shows that in 2022 electricity utility bills increased by around +15% in the services sector and +50% in industry, i.e. by less than +20% for the whole economy² (see Figure 2): This is a very modest increase compared to the skyrocketing power prices seen in wholesale markets. On the other hand, Eurostat reports increases in electricity utility bills for indexed contracts only, which rose much more sharply by over +60% in 2022 (Figure 2).

 $^{\rm 2}$ The industrial sector in France makes up less than 10% of domestic production.

Figure 1: European wholesale gas price (EUR/MWh), Dutch TTF first future day



Figure 2: Increase in French corporates' electricity bill in 2022 (%), all economy and indexed contracts onlyy

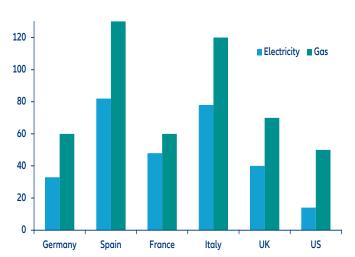


Sources: Insee, Eurostat, Allianz Research

Sources: Refinitiv, Allianz Research

Utility bills are set to rise more sharply this year as fixed contracts are being rolled over, better reflecting prices on the wholesale markets. French firms in the services sector expect a further +30% increase in 2023 and industry firms expect an increase of +65%. Thus, electricity bills would have risen by roughly 115% in industry and 45% in services between 2021 (pre Ukraine-Russia war) and 2023 – a truly massive shock that is hard to overstate. Figure 3 shows our expectations of increases in corporate utility bills in the largest European countries and in the US between 2021 and 2023 for all sectors. We build our forecasts based on Eurostat data for EU countries, the Department for Business, Energy & Industrial Strategy for the UK and the EIA for the US, with all of these datasets reporting increases in indexed contracts in 2022. Utility bills for the industrial sector are expected to have increased much more (see below).

Figure 3: Forecast for increase in retail corporate utility bills since the crisis, all sectors (2023 vs 2021), %



Sources: Eurostat, EIA, DBEIS, Refinitiv, Allianz Research

European corporates face very different utility bill hikes depending on the degree of fiscal intervention to stem power prices

hikes. We assume that the bulk of power contracts will have been rolled over in 2023, and that 2023 power prices will be set to the level of 2022 indexed contracts (i.e. we expect no further increases nor decreases). However, government interventions can be substantial, helping to reduce energy bills considerably through subsidies, tax cuts or capped prices, even for indexed contracts. We expect corporate gas utility bills to increase by over +100% in 2023, compared to 2021, in Italy and Spain, for instance, against around +60-70% in Germany, France and the UK. Electricity bills are expected to rise by around +35% in Germany but +80% In Italy and Spain.



Europe's energy price gap with the US is not a gamechanger for competitiveness

The European manufacturing sector has generally fared well, except for the aluminum and steel sectors. European

manufacturing has grown at a decent clip through the end of 2022 (see Figure 4, left panel). Even sectors with high energy consumption and those sensitive to foreign competition, such as Italian electronics, have held up remarkedly well. The exceptions are the production of aluminum and steel (see Figure 4, right panel). Aluminum production has held up in North America and Gulf countries but has slipped in Western & Central Europe, where high regional power costs have led to smelter closures. Steel production is also declining severely in Europe, more than in other large producers. expected⁵, given the gradual ending of (Covid-19 related) temporary support measures. The growing liquidity needs as a consequence of inflated working capital requirements, coupled with less fiscal support, have been visible in the first half of 2022 as loans to corporates have increased by more than +20% y/y since the start of the year in the

Eurozone. Secondly, the spillover effects of the war in Ukraine, mainly through the spike in commodity prices, and the various episodes of lockdowns in China, have kept pressures on input prices high.

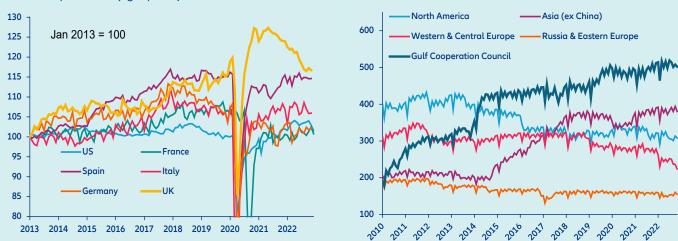
The energy price gap between the US and Europe has increased substantially, particularly in the industrial sector. As a

large producer of gas, the US is much more insulated against rising power prices than Europe. Since the Ukraine-Russia war, the European wholesale benchmark gas price has doubled relative to its US equivalent (see Figure 5).

But the share of energy consumption in manufacturing production is generally

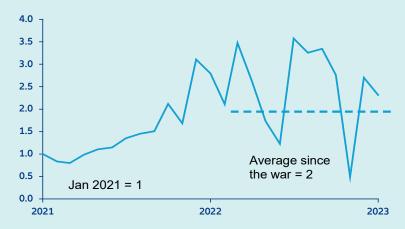
modest. European corporates have a higher share of energy consumption relative to their production (see Figure 6) but at around 0.8-1% this is still modest. Energy consumption is nevertheless much higher relative to the US in electronics, metals, wood & paper and chemicals.

Figure 4: Manufacturing production index (left panel); Primary aluminium production, thousand metric tonnes per month (right panel)



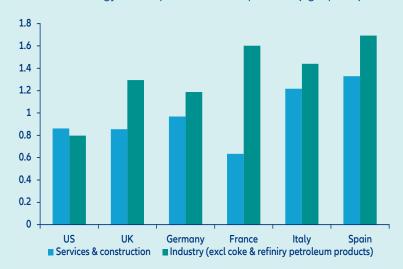
Sources: Refinitiv, International Aluminum Institute, Allianz Research

Figure 5: Ratio of TTF price (Europe benchmark) to Henry Hub (US benchmark) gas price (left panel);



Sources: Refintiv, OECD, Allianz Research

Figure 6: Share of energy consumption in turnover pre-crisis (right panel)



Sources: Refintiv, OECD, Allianz Research

The exchange rate and labor costs are more important drivers of price competitiveness. ORelative price competitiveness

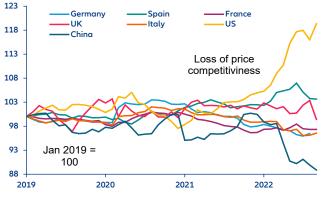
– a key determinant of manufacturing output and employment – is determined by the evolution of the exchange rate and production prices. Production prices are mostly determined by labor costs, profit margins and the consumption of inputs (including energy). To gauge Europe's price competitiveness, we look at the Bank of Italy's Price Competitiveness Index (PCI), which is akin to a real exchange rate index but more comprehensive in capturing relative price competitiveness. Indeed, it accounts for differences in price competitiveness between two countries within each other's domestic markets (eg. German corporates competing with US corporates both in Germany and in the US), but also in third markets (eg. German and US corporates competing in the Chinese market).

The PCI shows a marked deterioration for the US (relative to all partners) since 2021 (see Figure 7, left panel), owing essentially to the sharp appreciation of the USD against most currencies. In contrast, the price competitiveness of European countries has remained relatively flat and

China's has improved dramatically. Production prices have increased at the same pace in the US, Germany and Italy since the beginning of the Ukraine-Russia war (see Figure 7, right panel). But they have increased more rapidly in the UK and Spain, which explains why the PCI of the UK and Spain have improved less than that of Germany and Italy.

European production prices have not increased more than in the US – or not substantially more – because unit labor costs, the biggest determinants of production prices, have increased less than in the US³ (see Figure 8, left panel). Since 2019, they have risen the most in the US (+13%) and the least in Italy (only +6%). The rise in unit labor costs in other European countries is nevertheless not lagging far behind the US (eg. +11% in France and Spain). At the same time, the margin rate in the manufacturing sector (which we proxy by looking at the ratio of the price of the value added over the unit labor cost) has improved in European countries since the war, barring Italy (see Figure 8, right panel).

Figure 7: Price competitiveness indicator (left panel); manufacturing production price index (right panel)





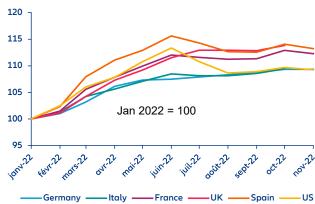
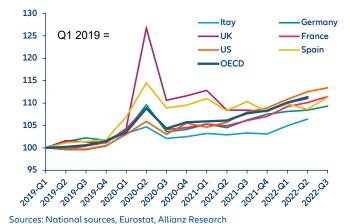
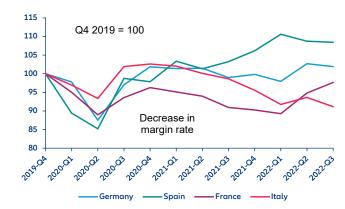


Figure 8: Total economy unit labor costs (left panel); manufacturing sector margin rate proxy, indexed (right panel)





³ We look at total economy unit labor costs since the manufacturing sector uses a lot of intermediate consumption from the other sectors of the economy (essentially services). Hence changes in labor costs from the other sectors directly affect the manufacturing sector's price competitiveness.

Our estimations confirm that the power price gap that has opened up between the US and Europe would have modest effects (see Box 1). The availability of energy supply is certainly a more important factor in driving competitiveness.

Box 1: The energy price shock, a modest blow to European competitiveness

For illustrative purposes, we look at the impact of the energy shock, when fully fed through, on European manufacturing output and employment at the sectoral level. Our estimations do not aim to come up with forecasts, not least because we consider the energy-induced competitiveness shock relative only to the US. Arguably, this is a very simplified assessment. On the one hand, other manufacturing hubs than the US have built an energy-competitive edge against Europe – most importantly, China. We would then underestimate the whole competitiveness loss of Europe. On the other hand, we do not account either for the change of relative energy competitiveness within Europe, where power prices vary substantially, as we have shown. We also abstract from potential swings in the nominal exchange rate, which would complicate the analysis further, as well as potential energy-consumption savings. Nevertheless, we believe that our estimates can shed some light on the potential impact of the energy crisis on European manufacturing, if sustained. For each European country (the UK, Germany, France, Italy, Spain) we run quarterly estimations (sample from 1992 to 2022) of manufacturing production and employment, by sector, on the Bank of Italy's PCI – our measure of energy price competitiveness. We add a couple of control variables (the national unemployment rate as a measure of domestic slack, and world GDP as a measure of world demand).

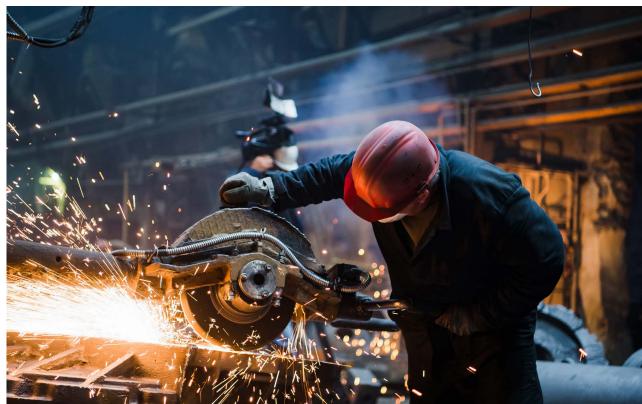
We shock the PCI by our forecasted increase of the industrial power-price gap between the US and each European country between 2021 and 2023, weighted by the share of energy consumption in production. We assume a rise in industrial power prices of around +75% in Germany, +90-100% in the UK and France and +170-180% in Spain and Italy. In the US, we assume a rise of +40%.

Table 1 shows our results. For some sectors, in some countries, the econometric estimation did not yield statistically significant results: we assign a 'N/A' when this is the case. In most cases, the impact on output and employment is found to be modest, except for Spain and to a lesser extent Italy.

Table 1: Potential production and employment effect of the Europe energy competitiveness shock versus the US, % change from pre-crisis baseline

		Food	Textile	Paper, wood	Chemicals	Pharma	Rubber, plastic	Other metals	Electronics	Electrical	Machinery & eqp	Transportation eqp	Other manufacturing
France	Production	-0.1	-0.5	N/A	-1.4	N/A	-0.1	-0.4	-0.1	-0.2	N/A	N/A	N/A
	Employment	-0.2	-0.3	-0.3	-0.7	-0.4	-0.1	-0.9	-0.4	-0.2	-0.2	-0.1	-0.3
Germany	Production	-0.1	N/A	-0.2	N/A	N/A	N/A	-0.4	-0.3	-0.2	-0.2	N/A	N/A
	Employment	-0.2	N/A	-0.2	N/A	N/A	N/A	N/A	N/A	-0.2	N/A	-0.1	N/A
Italy	Production	-0.1	-2.2	-1.0	0.0	-0.3	-0.7	-1.0	-2.0	-0.3	-1.0	N/A	-0.2
	Employment	-0.3).3 -0.3 N	N/A	-0.6	N/A	N/A	N/A	N/A	N/A	N/A	-0.1	N/A
Spain	Production	-0.1	-2.7	-0.2	-0.8	-0.2	-1.1	-0.7	-0.8	-0.3	-2.1	-0.6	-0.5
	Employment	-0.5	-1.3	-1.9	-2.5	-0.5	-2.8	-6.9	-1.3	-1.2	-4.5	-0.9	-1.7
UK	Production	N/A	N/A	-0.2	-0.7	-0.4	N/A	N/A	-0.2	N/A	N/A	N/A	-0.2
	Employment	N/A	-0.7	N/A	N/A	N/A	N/A	N/A	-0.2	-0.3	-0.2	N/A	N/A

Sources: Refinitiv, Allianz Research



The energy crisis has not led to a trade diversion of manufacturing goods from Europe to the US

The US has gained export market share in Europe, in part on the back of shipments in the energy sector. Looking at the distribution of EU15 imports, we find that the US and Qatar are among the very few exporters that managed to visibly increase their market shares over the course of 2022, thus exceeding prepandemic levels. The overall US market share rose to 6.8% by Q3 2022, compared with the Q1 and pre-pandemic average of 6.4%. Conversely, exporters that saw their market share slip below both the Q1 level and the prepandemic average include Germany (-1pp in Q3 vs. Q1), Spain (-0.4pp), Italy (-0.3pp) and France (-0.2pp). When excluding shipments of energy commodities, most major European exporters remain among those losing market share, but the US does not improve as significantly and stays clearly below its pre-pandemic level (see Figure 9). A few European exporters managed to increase their market shares in 2022 further above the pre-pandemic level (e.g. Ireland and Poland), along with some Asian exporters (e.g. China, Vietnam, India and Taiwan). It is thus not simply a story of European manufacturing losing competitiveness to the US.

Poland Kazakhsteir 0.3 Exporters that agined market share after the Difference between Q3 2022 and pre-pandemic averag Brazil energy crisis, exceeding 0.1 Turkey • the pre-pandemic level **Exporters that lost market** share after the energy crisis ch Republic -0.3 Japan • -0.5 US -0.9 UK orters that lost market share after both the energy crisis and the -1.1 -1.3 -0.5 -0.4 -0.3 -0.2 -0.1 0 0.1 0.2 0.3 0.4 0.5 Difference between Q3 2022 and Q1 2022

Figure 9: Change in market shares, excluding energy, top 30 exporters to EU15 (pp)

(*) Germany is also among this group, with market share in Q3 2022 declining by -0.6pp compared to Q1 and

-1.7pp compared to the pre-pandemic average Sources: ITC, Allianz Research

Exporters visibly losing market share in EU15 imports are almost exclusively found in Europe (in agrifood, machinery and electrical equipment, metals and transportation) – but not to the benefit of the US. The detailed breakdown by products (across more than 1200 categories, as per the HS4 classification) shows that the origin of EU15 imports has somewhat changed for selected goods in the agrifood, metals, machinery and electrical equipment and transportation sectors. We investigate further into these

goods to find out which exporters are gaining and losing market shares. In particular, exporters that saw visible change through 2022, ending up above or below the prepandemic average, are listed in Table 2. In the agrifood sector, there seems to be mostly a redistribution of imports provenance within Europe, with Peru also gaining. In the other three sectors considered, exporters losing market share are almost all found in Europe, to the benefit of a varied list of exporters in Asia, the Middle East and Africa (and a few in Europe) – but the US does not feature in it.

Table 2: Gains and losses in market shares by sectors

	Gaining market share and above pre- pandemic average (as of Q3)	Losing market share in 2022 and below pre-pandemic average (as of Q3)			
	Netherlands (+3.1pp in Q3 2022 vs. Q1)				
A south and	Peru (+0.8pp)	Spain (-6.8pp)			
Agrifood	Poland (+0.7pp)				
	France (+0.2pp)				
Machinery and	Taiwan (+0.4pp)	Netherlands (-0.3pp)			
electrical	Israel (+0.1pp)	Czech Republic (-0.3pp)			
equipment	Thailand (+0.1pp)	Vietnam (-0.2pp)			
Metals	South Africa (+0.5pp)	Belgium (-2.3pp)			
Metats	Iceland (+0.4pp)	Denmark (-0.1pp)			
Tunnanautatian	Poland (+0.5pp)	Germany (-0.7pp)			
Transportation	China (+0.2pp)	UK (-0.7pp)			

Note: Selected goods in each sector.

- Agrifood: vegetables and fruits, wheat, olive oil, wine
- Machinery and electrical equipment: gas turbines, printing machinery, automatic data-processing machines, machines for the manufacture of semiconductors, telephone sets, electronic integrated circuits
- Metals: platinum, scrap of precious metals, some types of iron, steel and aluminum
- Transportation: tractors, motor vehicles (for transport of persons or of goods) and parts, powered aircrafts

Sources: ITC, Allianz Research



The shock from energy gap to weigh on European corporates' profitability and investment

We calculate that the maximum rise that firmsWhat does the energy crisis in Europe mean for corporate profitability? We run a panel estimation on firm-level data to find out. As we did not find the statistical significance of

energy prices, we proxied the energy shock by the energy gap, i.e. the difference between world aggregate energy supply and demand (see Box below)

Box 2: Assessing the impact of energy shocks on European firms' profitability

Using annual financial data from the Stoxx 600 (i.e. the 600 largest listed European corporates) from 2009 to 2021, we estimate a panel regression to analyze how a number of factors impact profitability, measured by the return on assets (ROA). Namely, we include the global oil supply gap, total assets, labor costs, long-term interest rates, the EURUSD exchange rate and the Index of Global Real Economic Activity (IGREA) provided by the Dallas Fed. We do not include oil/natural gas prices as higher oil prices do not necessarily indicate supply tensions but can also reflect strong economic momentum.

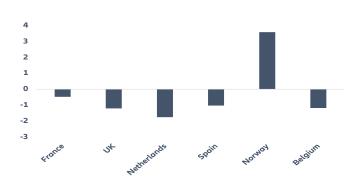
 $ROAt = \beta 1\Delta \log(oil\ supply\ gap) + \beta 2\Delta \log(assets) + \beta 3 \log(eURUSD) + \beta 5\Delta \log(long\ term\ interest\ rate) + \beta 6 IGREA + \alpha i + \epsilon it$

We run regressions on the full sample as well as at the sector level. Our estimates of profitability impact assume that a natural gas supply gap is comparable to an oil supply gap since there are no previous episodes of a natural gas supply gap to build an analysis upon.

According to our analysis, if our scenario of a 2pps energy gap (estimated for 2022 and 2023) remains persistent for the foreseeable future, it would imply a loss of -1.3pp of profitability for large European corporates. L(see Figure 10). From a sector perspective, industrial firms could lose up to -1.7pp. From a country perspective, French corporates could see their return on assets (ROA) slashed by -1pp, UK firms' profitability would take a -2.4pps hit while Dutch ones would lose -3.4pps in profitability. Our estimates suggest no significant impact on large German and Italian firms' profitability. This probably stems from the relatively lower energy intensity of large firms versus smaller firms.

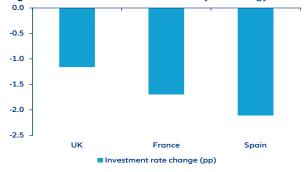
As there are growing wage pressures in Europe, we also examine how labor costs impact profitability. We find that overall, a +1% increase in wages results in a decrease in the ROA of about 30bps for European corporates. Within the region, Norway seems to be most sensitive to labor costs, with an elasticity higher than 1 (i.e. when wages increase by +1%, ROA decreases by more than 1pp). The second most sensitive country to labor cost increases is Germany, where a +1% increase leads to -0.8pp decrease in profitability. From a sector perspective, unsurprisingly, services-related ones have the highest elasticity (close to 1) while it is closer to -0.4 in industrial sectors.

Figure 10: Corporates' ROA elasticities to energy supply gap



Sources: Refinitiv, Allianz Research

Figure 12: Investment losses caused by the energy shock



Sources: Eurostat, Allianz Research

Lower prospective corporate profitability darkens the prospects for business investment in Europe. The investment are affected in the contract of the first point.

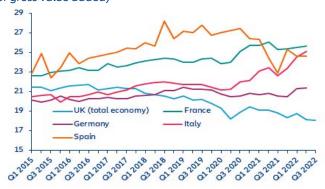
in Europe. The investment rate of non-financial corporations (as a percentage of gross value added) has so far not shown any cracks in Eurozone countries – quite the contrary (see Figure 11). The Italian investment rate in particular has picked up sharply since the pandemic. Conversely, the UK investment rate has been on a clear downward trend since 2018.

We assess the 2023-24 impact of our previously estimated loss in corporate profitability on the investment rate of French, Spanish and British corporates by running a panel estimation, by country. We run the investment rate (embedding all sectors of the economy) on corporate profitability⁴, controlling for changes in the turnover. Our estimation runs from the late 2000s to 2020, using annual data.

We find that the shock to corporate profitability will translate into a -1.2pp decline of the investment rate in the UK, -1.7pp in France, and -2.1pps in Spain. In currency terms, this would amount to an annual loss of investment close to EUR40bn in France, EUR25bn in Spain and GBP25bn in the UK (see Figure 12).

⁴ We use the gross operating rate (ratio of the gross operating surplus to turnover) as the macroeconomic proxy of the ROA. These two financial indicators of business profitability generally move in tandem.

Figure 11: Gross investment rate of non-financial corporations (% of gross value added)



Sources: Eurostat, Allianz Research



Chief Economist Allianz SE



Ludovic Subran ludovic.subran@allianz.com

Head of **Economic Research Allianz Trade**



Ana Boata ana.boata@allianz-trade.com

Head of Macro and Capital Markets Research Allianz SE



Andreas Jobst andreas.jobst@allianz.com

Head of Insurance, Wealth and Trends Research **Allianz SE**



Arne Holzhausen arne.holzhausen@allianz.com

Macroeconomic Research



Maxime Darmet-Cucchiarini Senior Economist for US and France maxime.darmet@allianz-trade.com



SeniorEconomist for Ibero-Latin America roberta.fortes@allianz-trade.com



Senior Economist for Asia Pacific francoise.huang@allianz-trade.com



Maddalena Martini Economist for Italy & Greece maddalena.martini@allianz.com



Senior Economist for Africa and Middle East Senior Economist for Middle East and <u>luca.moneta@allianz-trade.com</u>



Manfred Stamer **Emerging Europe** manfred.stamer@allianz-trade.com

Corporate Research



Ano Kuhanathan Head of Corporate Research ano.kuhanathan@allianz-trade.com



Aurélien Duthoit Senior Sector Advisor aurelien.duthoit@allianz-trade.com



Maria Latorre Sector Advisor maria.latorre@allianz-trade.com



Maxime Lemerle Lead Analyst for Insolvency Research maxime.lemerle@allianz-trade.com

Capital Markets Research



Fric Barthalon Head of Capital Markets Research eric.barthalon@allianz.com



Jordi Basco-Carrera Lead Investment Strategist jordi.basco carrera@allianz.com



Pablo Espinosa Uriel Capital Market Research Analyst pablo.espinosa-uriel@allianz.com

Insurance, Wealth and Trends Research



Michaela Grimm Senior Expert demographics michaela.grimm@allianz.com



Patricia Pelayo-Romero **Expert Insurance** patricia.pelayo-romero@allianz.com



Expert Wealth kathrin.stoffel@allianz.com



Markus Zimmer Senior Expert ESG markus.zimmer@allianz.com

Recent Publications

```
20/01/2023 | Eurozone: quantitative tightening and sovereign debt servicing cost
30/08/2023 | Allianz Risk Barometer 2023: Cyber and business interruption top threats as economic and energy risks rise
13/01/2023 | Pension reform in France: Bonjour tristesse
10/01/2023 | Wealth without pensions in Asia
15/12/2022 | Economic Outlook 23-24: Keep calm and carry on
09/12/2022 | The economics of war, (and its aftermath)
08/12/2022 | Old lessons for a new world
01/12/2022 | House of cards? Perspectives on European housing
30/11/2022 | <u>ESG – from confusion to action</u>
24/11/2022 | Europe: How big will the interest rate shock be in 2023?
23/11/2022 | Black Friday for consumers, bleak Friday for retailers?
18/11/2022 | Financial globalization: moving towards a polarized system?
15/11/2022 | Africa's journey to net zero: USD7trn just for energy
10/11/2022 | Fixed income is back
09/11/2022 | EUS midterms: Republicans are back, (fiscal) policy impasses too
04/11/2022 | EU fiscal rules – quo vadis?
03/11/2022 | Picking up contagion in equity and commodity markets
28/10/2022 | Brazilian elections: The calm before the storm?
27/10/2022 | Energy crisis, interest rates shock and untampered recession could trigger a wave of bankruptcies
21/10/2022 | Market Volatility and Corporate Bonds: Collateral Damage
20/10/2022 | Can the booming battery sector help Europe with its energy crisis?
14/10/2022 | 'Whatever it takes' reloaded?
12/10/2022 | Allianz Global Wealth Report 2022: The last hurrah
05/10/2022 | Globalization 2.0: Can the US and EU really "friendshore" away from China?
04/10/2022 | Gilt market meltdown – A first post mortem and key takeaways
30/09/2022 | Eurozone public debt: The interest rates reality check
29/09/2022 | Reverse currency war puts emerging markets at risk
22/09/2022 | US housing market: The first victim of the Fed
20/09/2022 | Shipping: liners swimming in money but supply chains sinking
15/09/2022 | Lights out! Energy crisis, policy mistakes and uncertainty
13/09/2022 | Missing chips cost EUR100bn to the European auto sector
09/09/2022 | Italy's elections: snapping back?
07/09/2022 | Double trouble? Inflation means less cash and more debt for companies
```

Discover all our publications on our websites: Allianz Research and Allianz Trade Economic Research

Director of Publications

Ludovic Subran, Chief Economist Allianz Research Phone +49 89 3800 7859

Allianz Group Economic Research

https://www.allianz.com/en/economic_research http://www.allianz-trade.com/economic-research Königinstraße 28 | 80802 Munich | Germany allianz.research@allianz.com



@allianz



in allianz

Allianz Trade Economic Research

http://www.allianz-trade.com/economic-research 1 Place des Saisons | 92048 Paris-La-Défense Cedex | France research@allianz-trade.com



@allianz-trade



allianz-trade

About Allianz Research

Allianz Research encompasses Allianz Group Economic Research and the Economic Research department of Allianz Trade.

Forward looking statements

The statements contained herein may include prospects, statements of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties. Actual results, performance or events may differ materially from those expressed or implied in such forward-looking statements. Such deviations may arise due to, without limitation, (i) changes of the general economic conditions and competitive situ-ation, particularly in the Allianz Group's core business and core markets, (ii) performance of financial markets (particularly market volatility, liquidity and credit events), (iii) frequency and severity of insured loss events, including from natural catastrophes, and the development of loss expenses, (iv) mortality and morbidity levels and trends, (v) per-sistency levels, (vi) particularly in the banking business, the extent of credit defaults, (vii) interest rate levels, (viii) currency exchange rates including the EUR/USD exchange rate, (ix) changes in laws and regulations, including tax regulations, (x) the impact of acquisitions, including related integration issues, and reorganization measures, and (xi) general compet-itive factors, in each case on a local, regional, national and/or global basis.

No duty to update

Many of these factors

The company assumes no obligation to update any information or forward-looking statement contained herein, save for any information required to be disclosed by law. may be more likely to occur, or more pronounced, as a result of terrorist activities and their consequences.

Allianz Trade is the trademark used to designate a range of services provided by Euler Hermes