

Europe's Stagflation Is Different in Kind and Much Harder to Remedy

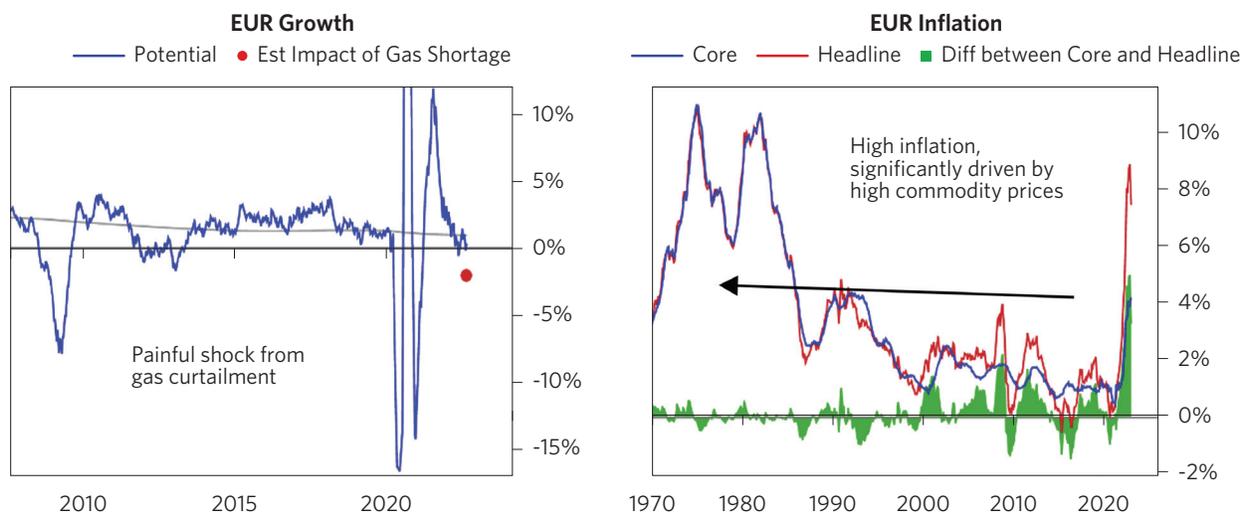
Europe's energy supply shock is creating a painful stagflation, and policy makers face a difficult set of choices. Looking forward, structurally higher energy prices will be a long-term competitiveness challenge for Europe.

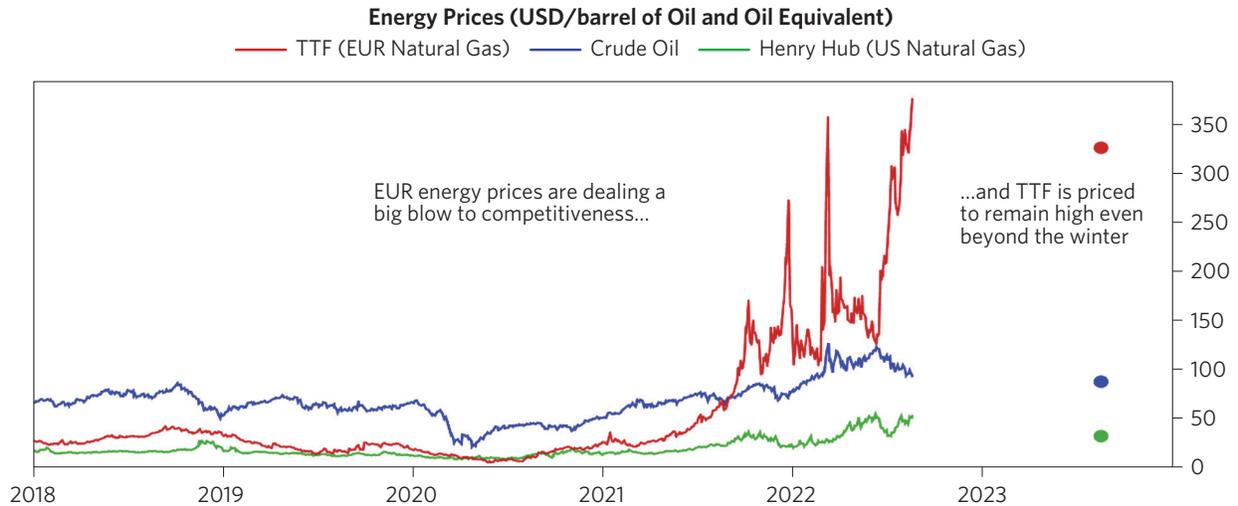
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KEVIN BRENNAN
DANNY DEBOIS

What was once a possibility is now a virtual certainty...Europe will face a major contraction this winter because it will not have enough energy to run its economy. As Europe severs its links to Russian gas, the current energy shortfall is being reflected in sky-high natural gas prices (the equivalent of over \$350-per-barrel oil), one-year electricity prices in Germany and France that are about 10x higher than normal, and in serious actions to curtail demand. This challenge calls for a different policy response. While interest rate hikes are the right tool for dealing with too-strong demand in the US, they are likely an insufficient tool for Europe, where a true supply shock is constraining production. Instead, encouraging rationing and shutting down energy-intensive industries will be needed. Policy makers may also want to reduce the second-order effects of these shutdowns, supporting incomes in order to avoid a self-reinforcing contraction. How much to stimulate fiscally and not tighten monetarily is far from obvious, as inflation will clearly be high even as the economy contracts.

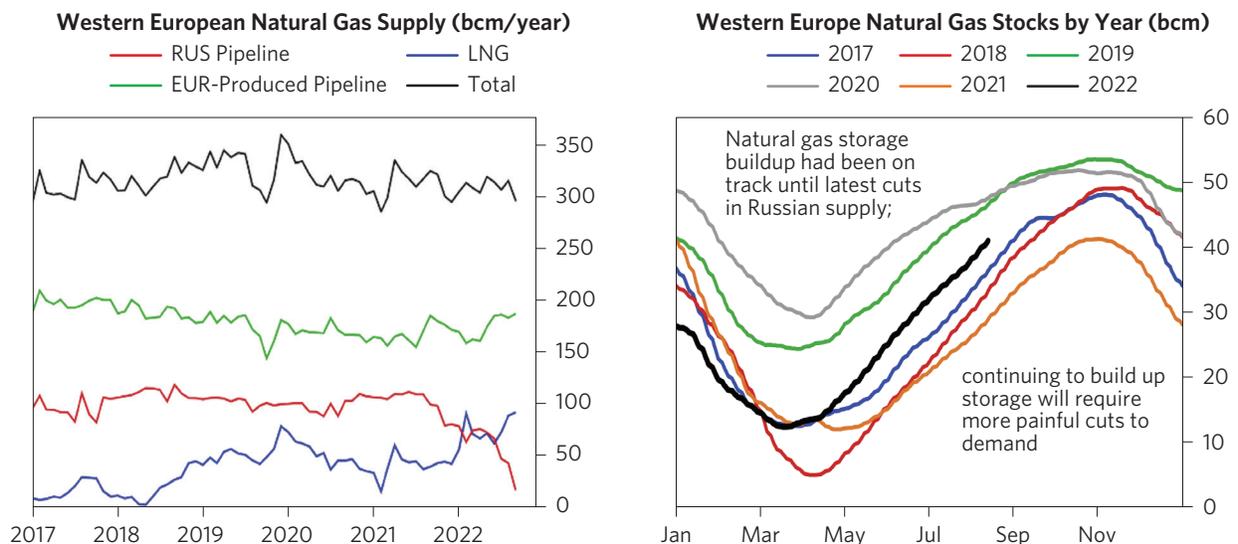
Looking beyond this winter, the effects on the European economy of structurally higher energy prices may also be profound. The German economy, supported for years by its highly competitive, energy-intensive industrial sector, will be acutely strained. Like Brexit, this shock will create weaker secular growth, higher necessary levels of inflation, and a downward pressure on the currency over time.



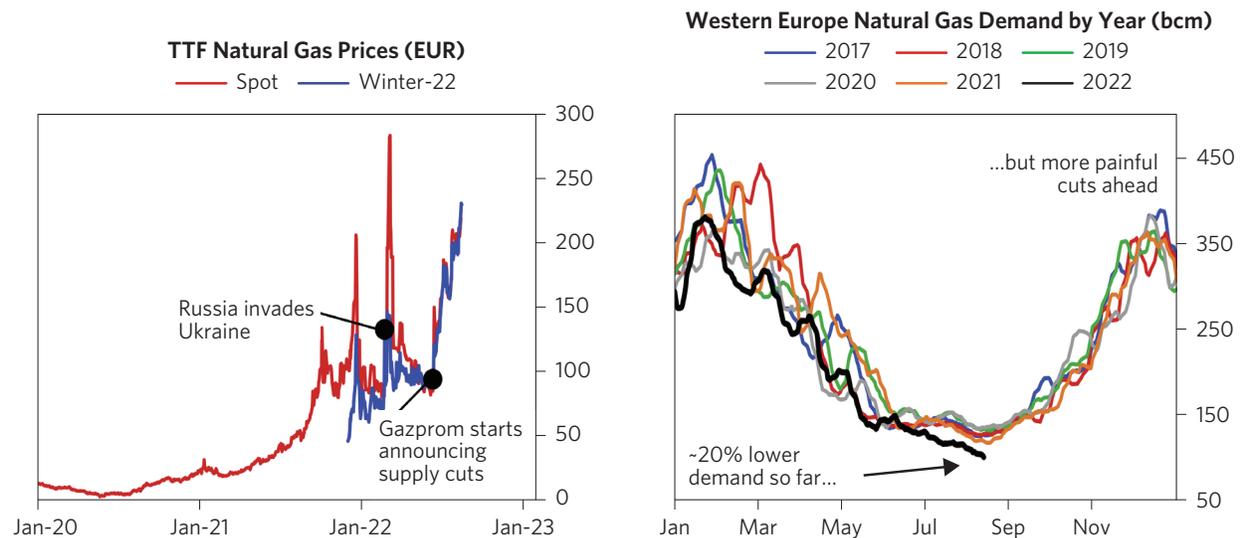


An Update on Europe's Transition Away from Russian Gas

Europe's transition away from Russian gas is already well underway. Prior to the war in Ukraine, Europe typically imported 155 bcm of natural gas from Russia (roughly 40% of total gas imports). Since the invasion, Europe has moved to 1) find new sources of supply, such as LNG and expanded pipeline imports from European producers, and 2) build up gas storage levels to 80-90% of total capacity in order to have enough supply to meet expected demand during the two coldest months of winter. Altogether, even with Russia exporting gas to Europe at 40% of its total pipeline capacity, Europe had been on track to muddle through it and stretch to meet its storage targets in time for winter. But this was only possible because of Europe's willingness to pay sky-high natural gas prices in the process. And starting two months ago, Russia curtailed imports to roughly 20% of capacity. The charts below show our read of current gas supply and demand in the subset of Western European countries where we have the timeliest data.



The most recent reduction in Russian gas flow likely means Europe will not have enough gas to meet its storage targets for the winter unless it curtails consumption from here. Europe has come close to exhausting the levers it had for finding alternative sources of natural gas supply in the short term. While there is potentially some extra juice to squeeze from the LNG market once one or two LNG floating regasification units come online in Germany around December, the market is giving a clear signal to reduce natural gas demand in the form of skyrocketing prices. And while some demand destruction has already occurred and natural gas consumption is down ~20% at this point versus previous years, the majority of the pain will come later this year given the highly seasonal nature of demand. In addition, there are a number of other factors that could cause prices to rise from here and require more painful cuts in natural gas consumption. Europe is competing with the rest of the world for LNG imports, and a resurgence in Chinese demand could make it much more difficult to access supply. Low water levels in the Rhine have made it harder to ship coal to German power plants, and heat waves in France have made it harder to cool down nuclear reactors. A colder winter would lead to higher heating demand, putting increased pressure on prices.



Triangulating across our analysis and external sources, we would pencil in the demand reduction required this winter relative to previous winters to be on the order of 10% if Russian imports stay at the current level, and 15% in the event they fall to zero. This would respectively require a comparable 10-15% reduction in industrial demand, with the rest of the reduction likely to occur via substitution in electricity production and heating demand, per external estimates.

European governments have thus far remained steadfast in their resolve to continue supporting Ukraine, even if it requires enduring economic pain. To achieve the necessary demand reduction and prepare for the possibility of a complete shutoff of natural gas, the European Commission has laid out a high-level approach for member states to reduce gas usage by 15% through March 2023 compared to a long-term, five-year average (a 45 bcm reduction). From least painful to most painful, the tenets of the planned approach are 1) **Continued gas substitution and diversification**, 2) **Voluntary demand reduction**, including price-driven demand destruction and tactics such as public awareness campaigns, 3) **Preparing for the possibility of EU-mandated rationing** as a last resort when the above options are exhausted. Any rationing would prioritize households over industry, and within industry, those with critical products and where temporary shutdowns would risk permanent infrastructure damage would be prioritized. Finally, 4) The European Commission has **clarified conditionality for potential invocation of energy solidarity clauses**, establishing a governance framework to assess whether member states have made “best efforts” to reduce their gas consumption before they can compel other member states to share their natural gas supply.

This only outlines the general approach, and it falls on individual member states in the EU to formulate precise plans for achieving the voluntary demand-reduction targets. We are in the process of seeing those plans materialize. As an example, we show below the announced policies in Germany, where the dependency on Russian gas is the highest and the need to reduce demand is the most acute.

Policies in Germany to Reduce Natural Gas Demand

In Electricity Production and Consumption

Resume operations at coal-fired power plants (Announced in June)

Postpone the retirement of the country's three remaining nuclear plants (Announced this week)

Range of other municipal efforts to reduce electricity consumption (e.g., turning power off at public attractions) (Ongoing)

In Household and Business Heating

Lowering temperatures in public buildings and encouraging corporate offices to do the same (Announced in July)

Allowing tenants to reduce temperatures in flats below the regulatory minimum (Announced in July)

Requiring all owners of gas heating systems to carry out a heating check (Announced in July)

In Industrial Production

Set up auction system to pay companies for unused gas (Announced in June)

We're also starting to get a clearer sense from industry on how companies are already working to reduce gas consumption in response to high prices and voluntary government incentive schemes. Multiple companies have started to announce efforts to substitute gas with oil in their production (e.g., car manufacturer Mercedes-Benz, glass manufacturer Wiegand-Glas, chemical company H&R), while others are moving production of their most energy-intensive products elsewhere (e.g., chemical conglomerate BASF is reducing ammonia production and sourcing ammonia from the US).

The pain Europe is set to face is likely Putin's intention in curtailing the flow of Russian gas down to 20%—keeping Europe from meeting its storage targets without significant economic pain provides Russia with maximum leverage over Europe during the winter. The winter may be the last time Russia has such leverage before Europe can implement longer-term solutions that fully wean it off Russian gas (including nuclear energy and expanded renewables). That said, we see continued Russian gas flow at 20% as a more likely outcome than a full cutoff of Russian gas, given Russia is already exporting gas to Asia at the maximum capacity current pipelines allow, and cutting Europe off now would remove any leverage Russia would have to apply further economic pressure in the winter. But a full cutoff is still a risk, and either way, the long-term challenge is clear in terms of the loss of a significant amount of Russian supply and the cost of alternatives to replace it.

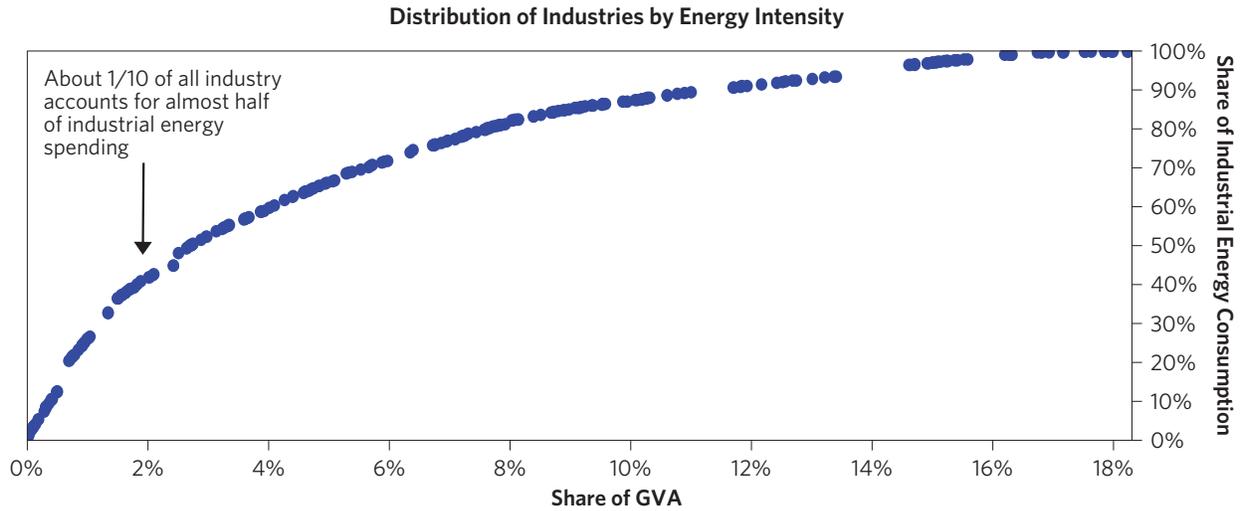
Understanding the Growth Shock of the Shortfall in European Energy

Over the next eight months, Europe will have to swallow the pain of higher prices and reduced energy supply. The most energy-intensive sectors are the most at risk, comprising roughly 3% of total gross value added (GVA) in Europe and 25% of the region's industrial natural gas usage. This effect most likely translates to a roughly 1–2% direct hit to growth, in line with these industries reducing gas consumption by roughly one- to two-thirds to get the total 10–15% necessary reduction in industrial gas demand. Many of the impacted industries are also already very low-margin, making weathering the current high energy costs even more untenable. On top of the hit to industry, we'd expect a further drag from the hit to households facing significantly higher heating and electricity prices, especially in the winter, and cutting spending elsewhere. Finally, there is a further downside risk to growth from the ripple effects of how companies and households respond to the shortfall in gas and higher prices—for example, the most energy-intensive sectors are roughly 4% of total employment, suggesting a further hit to growth if cutbacks in production are not paired with fiscal support to furloughed workers, and reductions in industry production may also cause broader supply chain problems.

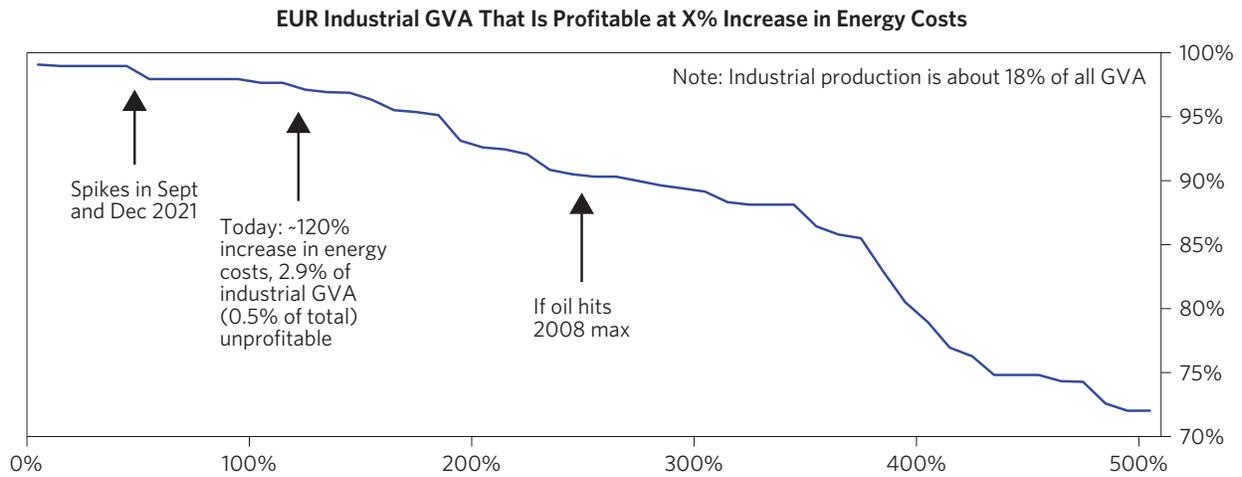
Consumption of Natural Gas and Electricity by Industry

	Industry (% Gross Value Added)	Sector (% of Ind Electricity Used)	Sector (% of Ind NG Use)	Electricity Spend (% Output)	NG Spend (% Output)	Pre-Tax Margin (2019)
Total	-	-	-	1.6%	0.2%	24%
Industry	24%	67%	84%	3.0%	0.5%	16%
Electricity, Gas, Steam, and Air Conditioning	1.5%	38%	48%	27.7%	4.7%	24%
Basic Metals	0.6%	4%	4%	4.5%	0.7%	8%
Other Nonmetallic Minerals Products	0.5%	2%	5%	4.5%	1.4%	15%
Paper and Paper Products	0.3%	2%	3%	4.1%	0.9%	12%
Coke and Refined Petroleum	0.2%	1%	3%	1.6%	0.7%	8%
Chemicals	1.2%	3%	10%	2.6%	1.0%	17%
Mining and Quarrying	0.2%	1%	1%	4.8%	0.4%	28%
Water Collection, Treatment, and Supply	0.2%	1%	0%	6.5%	0.3%	30%
Food, Beverages, and Tobacco	2.0%	3%	4%	1.3%	0.2%	12%
Wood and Wood Products	0.3%	0%	0%	1.8%	0.1%	12%
Rubber and Plastic Products	0.7%	1%	1%	1.7%	0.1%	14%
Textiles and Apparel	0.6%	1%	1%	1.2%	0.2%	16%
Printing and Recording	0.2%	0%	0%	1.4%	0.2%	15%
Fabricated Metals, ex-Machinery	1.4%	1%	1%	1.2%	0.1%	13%
Sewage and Waste Management	0.8%	1%	0%	1.5%	0.1%	22%
Machinery and Equipment	1.7%	1%	1%	0.7%	0.1%	12%
Electrical Equipment	0.7%	1%	0%	0.8%	0.1%	14%
Furniture	0.6%	0%	0%	0.8%	0.0%	15%
Basic Pharmaceuticals	0.7%	0%	1%	0.8%	0.1%	25%
Motor Vehicles	1.7%	1%	1%	0.6%	0.0%	14%
Repair and Installation of Machinery	0.8%	0%	0%	0.8%	0.0%	13%
Other Transport Equipment	0.5%	0%	0%	0.4%	0.0%	11%
Construction	5.5%	2%	1%	0.6%	0.0%	19%
Computer, Electronics, and Optical Products	1.0%	0%	0%	0.5%	0.0%	28%
Agriculture	1.6%	2%	1%	1.5%	0.1%	36%
Fishing	0.1%	0%	0%	1.6%	0.0%	33%
Agriculture and Hunting	1.3%	1%	1%	1.6%	0.1%	35%
Forestry and Logging	0.2%	0%	0%	0.3%	0.0%	41%
Services	74%	32%	15%	0.8%	0.1%	29%

When we look at total energy expenditure, about 10% of industry, translating to about 2% of Europe's GVA, uses almost half of all industrial energy.

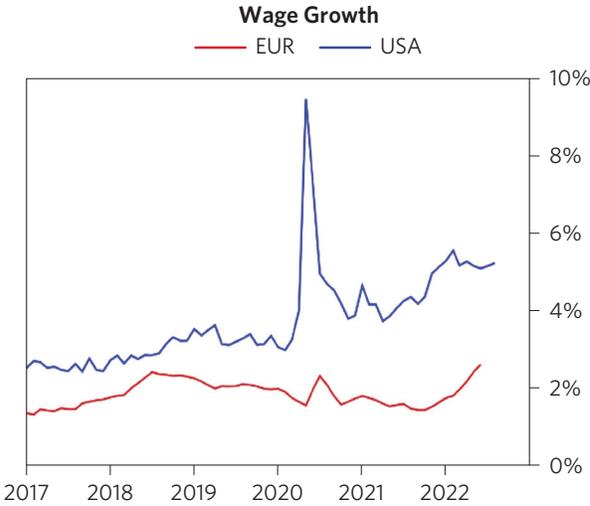
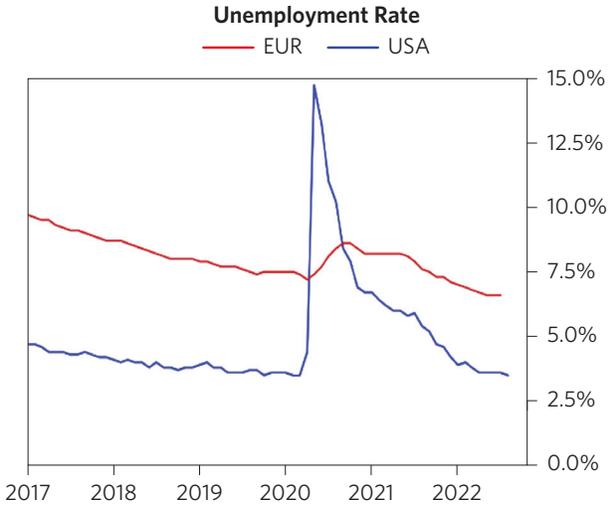
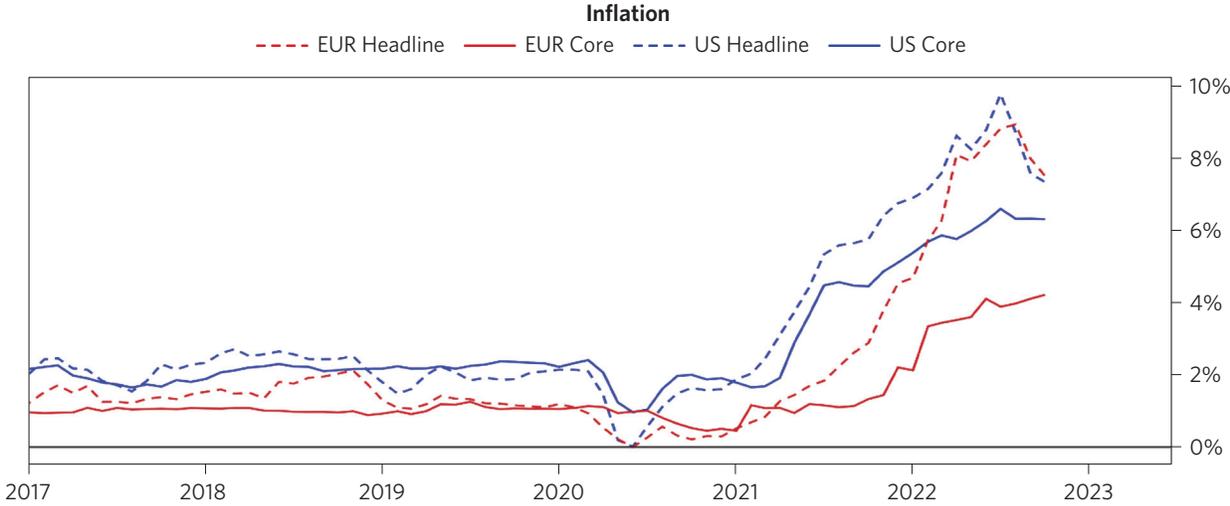


The chart below shows a rough, first-order indication of what share of European industries become unprofitable as energy prices rise—highlighting the blow to competitiveness from higher energy prices.

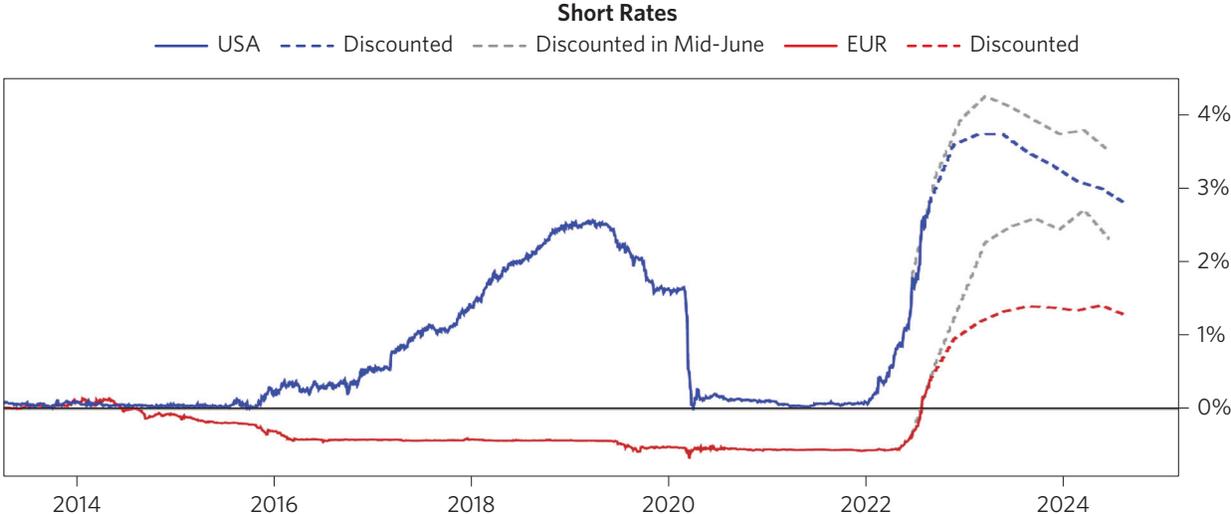


A Difficult Trade-Off for Policy Makers

The inflationary situation in Europe calls for a different policy response compared to the US. While the US is facing an overheating as a result of strong MP3 stimulus and waiting too long to tighten, the European economy is weaker, with inflation much more driven by the energy supply shock. As you can see, while the two economies face similar levels of headline inflation, core inflation in Europe is lower (4% versus 6% in the US), and other indicators of cyclical overheating are much stronger in the US, such as higher wage growth and lower unemployment.



These conditions call for differing policy responses—while there was persistently strong nominal demand in the US that had to be cooled, demand is weaker in Europe and interest rates are unlikely to meaningfully address the problem of high energy prices. Instead, policy makers will want to prevent the growth shock from demand rationing from cascading into a self-reinforcing growth contraction; not necessarily easing, but not a sharp tightening into high inflation and slowing growth. Market pricing generally reflects this different policy approach for the ECB, with much less tightening priced in, both compared to the US today and in terms of how much tightening expectations have fallen in Europe compared to the US as Russia started further curtailing gas flow. But at the same time, the ECB is testing the limits of anchored inflation expectations by staying easy in response to persistent 7-8% levels of inflation, and a choice to stay easy today does increase the potential need for a sharp tightening into a deep economic contraction in the future.



A major element of the European policy response to the energy shortage thus far has been fiscal support to cushion the blow of high energy prices in the form of policies aimed at reducing energy costs (fuel tax cuts, price caps) and direct support to the most vulnerable households and most affected companies. These policies have been a moderate support to GDP, and we expect additional fiscal stimulus to be announced from here, as many of the programs announced are due to expire soon even though energy prices will remain high—for example, German fuel tax credits and public transport subsidies were due to expire at the end of August, though Chancellor Scholz clarified in a recent press conference, “We will bring another relief package on the way to protect citizens...People can rely on us not to leave them alone.”

Announced Fiscal Policies in Response to High Energy Prices (DEU, FRA, ITA, ESP)

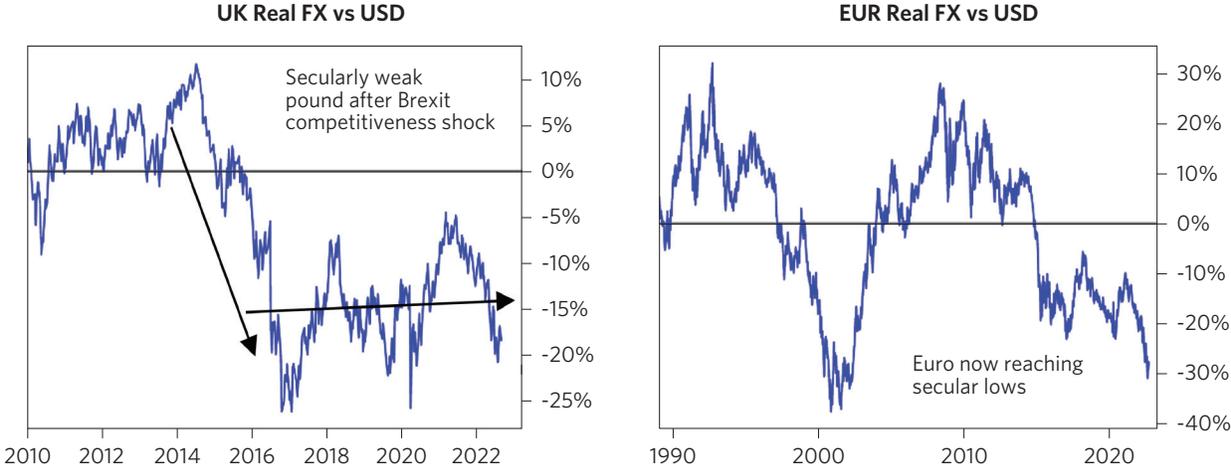
Policy Category	Cost (EUR, Bln)	% GDP
Policies aimed at limiting energy prices (fuel tax cuts, price caps, etc.)	66	0.7%
Policies providing direct support to households (e.g., lump-sum payments)	67	0.7%
Policies providing support to businesses (e.g., tax credits to energy-intensive companies)	22	0.2%
Total	155	1.6%

In addition to the above policies, Germany bailed out energy provider Uniper for €15bln and France announced a €9.7bln takeover of electricity provider EDF.

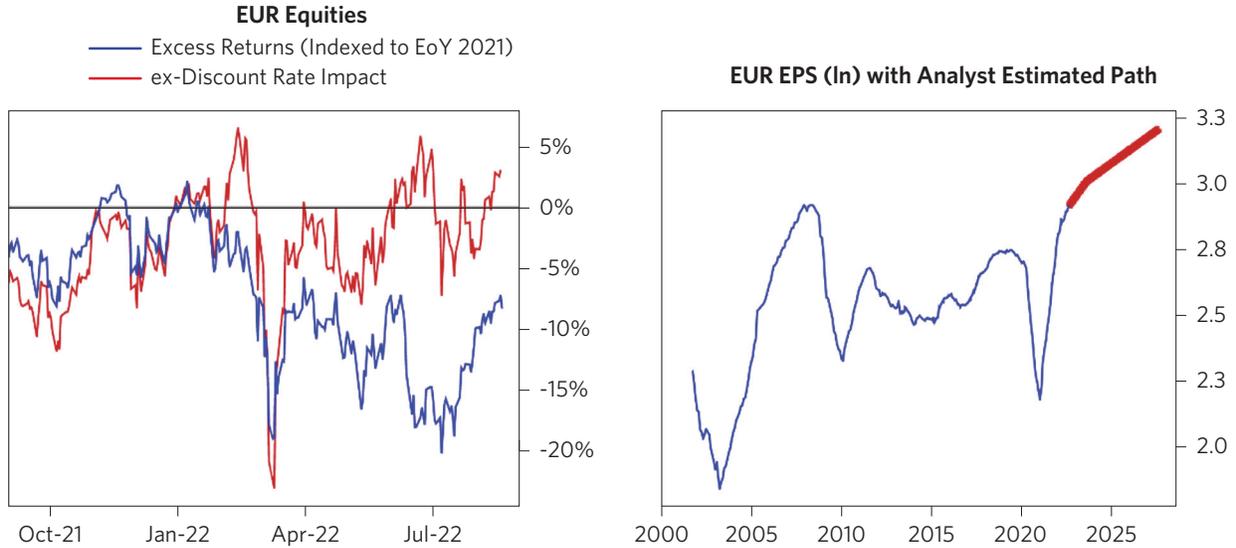
Elevated Energy Prices Pose a Long-Term Threat to German Competitiveness

Looking beyond this winter, Europe will continue to face elevated energy prices in response to reduced supply, dealing a major blow to its competitiveness. Europe has lost a major source of cheap energy, and the alternatives available are either expensive (bidding up the price of LNG to direct it away from Asia) or only short-term solutions (temporarily compromising environmental objectives to increase coal production, delaying the retirement of old nuclear plants). Other factors that have kept a lid on natural gas prices are also likely to fade, such as China’s zero-COVID policies suppressing demand and China ramping up coal production to meet its energy needs, contrary to its environmental objectives. Long-term solutions such as expanded renewable energy and potentially new nuclear plants will require years to come online. TTF futures reflect the difficulty of the path ahead for Europe—through 2024, natural gas is priced to remain roughly 5x more expensive than the 2015–2019 average.

In many ways, the European energy crisis has similarities with the Brexit shock in the UK—a massive blow to productive capacity that will weaken demand and increase prices, leaving the economy in a secularly less-competitive position. There are no easy policy solutions for restoring productive capacity, and Europe will have to muddle through higher energy costs for some time. While competitiveness is far from the only driver of currency pricing, it is notable that the euro is approaching secular lows against the dollar, as an indication of the secular challenges ahead.



European equities stand out to us as a market where the pricing doesn't reflect the scope and intensity of the challenges ahead. Earnings are priced to continue growing at a relatively sanguine rate, but the upcoming winter will require painful demand destruction. There is a decent chance that fiscal policy is able to support companies and limit the hit to earnings over the next few months but doing so risks inflation and a more substantial tightening down the line.



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