



What's in the tails?

Heightened inflation risks in Germany: For real or just the usual paranoia?

The risks of inflation in Germany should no longer be ignored.

Much has been written about inflation already and the consensus view among the economic experts is that the current run-up in inflation is a temporary phenomenon caused by supply bottlenecks, such as a shortage of semi-conductors, and other special factors related to the pandemic, including an excess of savings that is now financing pent-up demand. At this point, few believe that inflation will exceed the ECB's target of 2 % for long. While this sanguine view may turn out to be correct, we strongly believe the risk that an inflation overshoot will be permanent and that it will rise over time to well above the current target is sufficiently large to ring alarm bells. One set of temporary factors pushing up inflation may well be followed by others. Already the corporate sector is beginning to factor inflation into pricing decisions. Simply put, inflation has become a central topic once again. The implication for monetary policy is obvious: A gradual and early monetary pivot toward tighter policy will be far less costly than a pivot forced later by an unexpected inflation overshoot.

To make matters worse, there are many unprecedented and potentially destabilising policies coming together today. The massive expansion in debt-financed deficits, which will shortly push debt-to-GDP ratios in all the G7 countries, except for Germany, above 100% – a level that only a few years ago would have been met with significant fiscal tightening—is today being met with more plans for even greater debt-financed expenditures, such as the NGEU EUR 750bn on top of national deficit spending. Who apart from those with a political agenda truly believe that spending such sums will permanently raise growth rates in recipient countries? Furthermore, between a third and a half of the unprecedented government deficits have been monetised by the major central banks around the world, with the ECB monetising more than half of all government debt issued in the Eurozone. Debt monetisation has been at the heart of all recent inflationary episodes. Perhaps this time is different, perhaps not. For now, the growth in liquidity has not been translated into inflation in consumption goods, but it definitely has found its way into real and financial assets which are trading at historical highs.

One of the most worrying aspects of the current environment is the lack of fear of inflation and an appreciation for the cost of inflation. It has been some decades since we have been exposed to large inflation numbers and many have forgotten how devastating the cost of inflation can be to societies, particularly to the vulnerable segments of society.

Principal author
Stefan Schneider
Chief Economist
+49-69-910-31790

Editorial board
David Folkerts-Landau, Ph.D.
Chief Economist, Global Head of Research
+44-20-754-55502

Peter Hooper, Ph.D.
Global Head of Economic Research
+1-212-250-7352

Jim Reid
Head of Thematic Research
+44-20-754-72943



The recent policy narrative has changed distinctly towards greater tolerance of higher inflation. Like the Fed, the ECB has softened its inflation targeting to allow it to tolerate inflation above its traditional target of 2%. We ask ourselves if inflation were to reach the 4-5% range, with unemployment still being around 7%, would we really see a necessary but painful raising of interest rates, given what that would do to unemployment and fiscal deficits?

Finally, we are concerned about the somewhat naive belief that we understand the dynamics of inflation, capacity utilisation, and debt-financed deficits well enough to fine-tune policy. Caution, instead of confidence in the prevailing dogma, should be the order of the day. We don't understand economies well enough to explain confidently why the historically unprecedented expansion in central bank balance sheets, accompanied by negative interest rates, did not produce greater price pressures. Now that we have added an equally expansionary fiscal policy to the mix how can we be so sure that inflation will stay subdued? The elegant macro economics embodied in our Dynamic Stochastic General Equilibrium Models, that provide the intellectual foundation of current macro policy, is a spent force. Pretty, but useless. A quick look at the inflation and interest rate forecasting experience of the ECB should instill caution even in the most ardent believer in expert knowledge. Instead we might all be well-advised to spend more time listening to corporate CEOs with skin in the game about their experience with recent inflation, and spend less time listening to "experts" who are by and large unaffected by inflation.

David Folkerts-Landau, Ph.D. — DB Chief Economist and Head of Research



Heightened inflation risks in Germany: For real or just the usual paranoia?

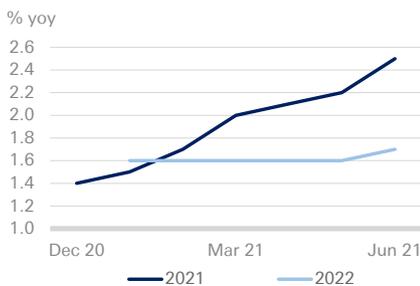
- **An ECB board member recently argued that “years of repeated over-prediction” are a reason for the ECB not to worry too much about the current rise in inflation. In our view, this is quite an alarming argument.** Either central banks' forecasts suffer from systematic errors, questioning their validity, or errors are just larger than thought and serially correlated. The latter interpretation dovetails with past inflation periods. It implies that we might well be at the beginning of several years of upward surprises in inflation. In this article, we analyze the potential drivers of such a scenario taking into account the German economy's idiosyncrasies.
- **Since the start of the year, inflation rates across many sectors and stages of production have come in much higher than expected.** A major part of the increases result (so far) from higher energy prices, base effects and supply problems – which have pushed corporates' price expectations off the scale – and might, hence, taper off once the (global) economy has found its post-COVID-19 equilibrium.
- **But expansionary monetary and fiscal policies in place for several years have created a backdrop which could make the inflation increase more permanent.** These concerns are more pressing in the US than in the EMU, given the way more extreme US policy mix and already higher inflation rates (see [What's in the tails? – Inflation: The defining macro story of this decade](#)).
- **In EMU, where inflation concerns seem to be much smaller overall, Germany stands out.** Pre-COVID-19 the German economy had enjoyed several years of positive output gaps. Moreover, the COVID-19-induced economic shock has been smaller in Germany and cushioned by a large fiscal response.
- **Cyclical and more acute structural labour market tightness could be the missing link for second-round effects.** The OECD predicts the German unemployment rate to fall again below NAIRU by 2022. The shrinking labour force potential will exacerbate already pressing shortages of skilled workers.
- At the same time, the **global demographic sweet spot is slowly turning sour** (Charles Goodhart) and **headwinds to globalization are becoming stronger**. Hence, **global disinflationary factors, which have rendered the German Phillips curve second fiddle for domestic inflation in recent decades, are abating or even reversing**.
- **Germany's more successful policies in fighting the COVID-19 recession have further increased EMU divergence.** Italian and Spanish output gaps as well as the EMU aggregate output gap have fallen further below Germany's compared to 2019 according to the IMF. With higher German inflation rates and the ECB gearing its policy stance towards the EMU average, monetary policy will become increasingly too loose for Germany.
- **In its new strategy, the ECB confirmed its more laid-back approach regarding inflation based on fears about underlying economic weakness and unsustainable debt ratios. This dovish shift will further strengthen German criticism of its monetary policy.** Especially as the ECB's policy as widely seen as the key driver, which has set off the surge in property prices, making home ownership for many middle class households virtually impossible.



Post-COVID-19 rebound poses larger inflation risks for the German economy

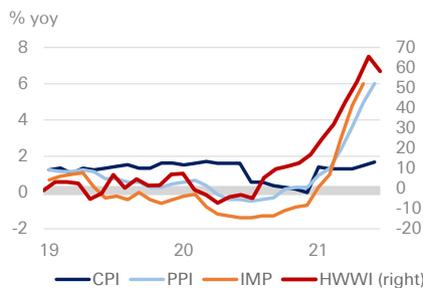
In the June consensus survey, the average forecast for German 2021 inflation reached 2.5%. At the start of the year, a rate of only 1.4% was expected. By now it is widely anticipated that inflation will climb as high as 4% in Q4. A major part of the price surge at the consumer level is coming from energy prices up 10% yoy. But non-energy import and producer prices are also rising with annual rates of around 5% to 6%. Granted, the yoy rates are still being compared to months when economies were depressed by the first round of COVID-19-related lockdowns. German headline inflation, for example, fell by 0.3% during Q2 2020. Moreover, demand shifts triggered by the pandemic and the simultaneous restart of major parts of the global economy have caused substantial disruptions in global supply chains – to which Germany is more exposed than its European partners, resulting in considerable price increases for certain semiconductors, steel and other metals or even wood.

Figure 2: Consensus forecast: CPI Germany



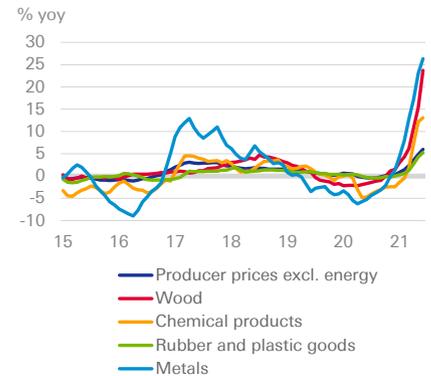
Source: Consensus Economics

Figure 3: Inflation ex energy



Source: Destatis, HWWI

Figure 1: DE: Producer prices



Source: Federal Statistical Office, Deutsche Bank Research

The June PMI survey indicates that price pressure at the corporate level have intensified further, with input and output price indices all marking all-time highs (only the manufacturing input price index eased marginally from its record high posted in May). Particularly noteworthy is the recent surge in service sector's price assessment. This could, of course, be a reopening effect, but might also indicate that companies are taking advantage of the pent-up demand, in order to increase their profit margins and rebuild their depleted capital reserves. In the US, companies already reported record high margins in Q1 reflecting strong operating leverage as sales rebounded strongly. ¹ Some sectors such as the hospitality industry are even complaining about labour shortages as previously-employed mini jobbers, without entitlement for furlough benefits, have moved to other sectors.

German economy more exposed to inflation due to less economic slack

Although the German economy was hard hit by the pandemic in 2020, the resulting output gap of 4.8% of potential GDP (EU AMECO) was much in smaller in magnitude than in the other large EMU countries. Also, German industry was not in formal lockdown in 2020. Its capacity utilisation therefore did not collapse to a similar degree as in other EMU countries. Moreover, given its regional and product

Figure 4: Price assessment in the manufacturing sector



Source: IHS Markit

1 Deutsche Bank Research, What Companies Are Saying: Debating One-Offs And Secular Shifts, May 2021



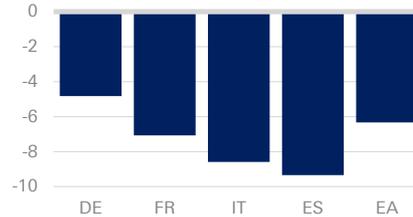
exposure, German industry has enjoyed a stronger rebound in export demand, which can be seen from the strong rise in ifo export expectations, which in June were only 0.6 points shy of their all-time high reached in February 2011.

Figure 8: Germany benefiting from global rebound



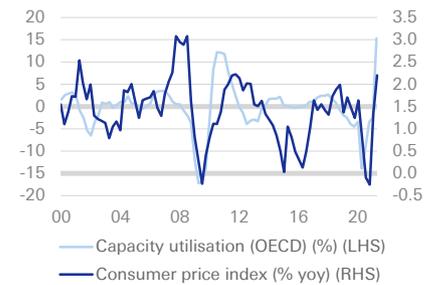
Source : ifo, IHS Markit

Figure 9: Output gaps in 2020



Source : AMECO

Figure 5: Germany: CPI vs. capacity utilisation (quarterly data)



Source : Federal Statistical Office, OECD, WEFA, Deutsche Bank Research

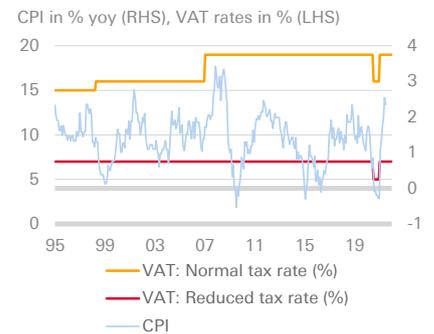
German labour market: Shock resistant

As in 2009/10, the German labour market has proved its resilience during the COVID-19 downturn. Furlough schemes helped a lot, supporting around 6m people or about 18% of employees subject to paying social security contributions in spring 2020. Since then, the number has fallen strongly to 1.5m in June 2021. With the further opening of the service sector, it is set to fall below 1m in the coming months. The increase in German unemployment not only started at a much lower level than in other big EMU countries, the 1.5pp increase was also only about half the rise of other countries. The OECD predicts the German unemployment rate will fall again below NAIRU by 2022. The shrinking labour force potential and exacerbation of shortages of skilled workers might, together with compensation claims for wage restraint exercised during the pandemic, lead to higher wage growth, the ultimate pivot for inflation lift-off. Especially, if people close to retirement, who have either been in home office or lost their job during the pandemic, might decide to leave the labour market for good.

Low “COVID-19 wage settlements” might trigger strong wage drift in 2022

Recent agreements such as that in the metal and electrical industry (3.8 million employees) are still dominated by the impact of the pandemic. Instead of a regular pay increase, industrial partners settled for one-off payments (in February 2022 and 2023), as the agreements centered more on securing jobs by implementing greater working time flexibility. Key negotiations to watch are those for retail trade (started, 2.35m employees, claim 4.5%), construction just started (0.69m, claim 5.3%) and public sector of the Länder (0.936, starts in September). With global demand and the German economy rebounding more rapidly than earlier thought, we could see a substantial positive wage drift, as workers facing only modest collective wage increases might be asking for perks. This could generate substantial positive wage drift. Not only in the manufacturing sector but also in services as, in this atypical recovery, demand for certain services is going to surge given large pent-up demand. All in all, the wage drift in the second half of 2021 and early parts of 2022 could exceed 2 percentage points, effective pay could therefore rise by close to 4%.

Figure 6: CPI inflation rate in the context of the VAT



Source : Federal Statistical Office, Federal Ministry of Finance, Deutsche Bank Research

Figure 7: Strong wage drift ahead



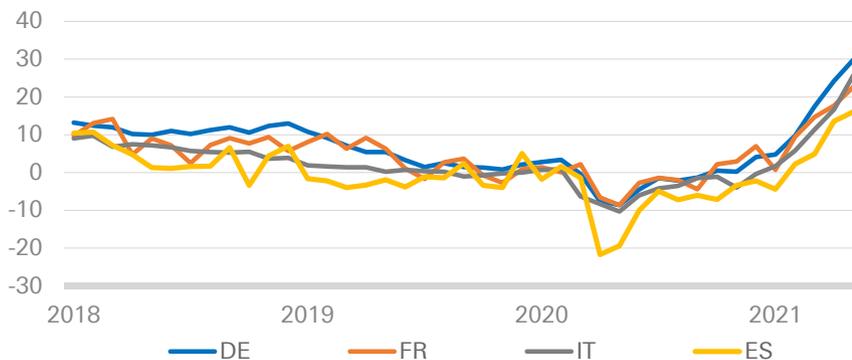
Source : ifo, Deutsche Bundesbank, Deutsche Bank Research



Quicker-than-normal pass-through to reestablish profit margins

In the producing sector, wages account for about 30% of company turnover. The share is slightly higher in services, but given that some of the labour input is imported and that the labour share in energy and rents is rather small, the Bundesbank estimates that the wage share in the German consumer goods basket is also about 30%.² This Bundesbank study finds that since the 1970s the pass-through of higher labour costs into the private consumption deflator has declined to about 35% after four years (unit labour costs) or 22% for hourly wages. Unit labour costs, which were up by 2% yoy in Q1, are also influenced by productivity and profit margins. While (hourly) productivity was stagnant in 2020, profit income (NAS: entrepreneurial and property income) slumped by 8.4% during the 2020 recession. So companies cannot really afford to take higher input costs onto their margins. On the contrary, they might not only pass higher input costs on rather quickly, but can also be expected to increase their shattered profit margins to pay back their increased borrowing (some EUR 52bn in loans were handed out via the KfW alone) and to refill their depleted capital reserves. The overall levels of business sentiment surveys, but even more so record high future output plans, delivery times and record low finished goods inventories should provide sufficient pricing power, as evident in record high selling price expectations.

Figure 13: Industry: Price expectations



Source : EU Commission

But even in sectors which suffered most from long lockdowns such as the hospitality industry, lack of labour supply and labour costs are becoming an issue. According to union sources, 1 in 5 employees in Berlin restaurants, for example, has taken on a job elsewhere during the pandemic.³ This not only suggests potential wage pressure in the hospitality industry, but also underlines the strength of the demand for labour in other sectors even at the height of the pandemic. So, we might see strong non-linearities on top of the likely faster pass-through.

Structural changes could add to a more lasting inflation trend

Besides the peculiarities of this post-pandemic growth surge which are likely to trigger a more substantial rise in inflation, some more structural factors could also contribute to a higher inflation regime in the coming years.

2 Deutsche Bundesbank Monatsbericht September 2019

3 Berliner Kurier, Gewerkschaft schlägt Alarm: Jeder fünfte Kellner oder Koch ist weg: Droht Berlin ein Restaurant-Sterben?, 6.07.2021

Figure 10: Germany: CPI inflation vs. price expectations (EC consumer survey)



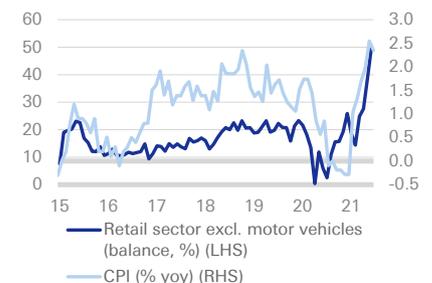
Source : Federal Statistical Office, European Commission, Deutsche Bank Research

Figure 11: Germany: CPI inflation vs. price expectations (GfK consumer climate survey)



Source : Federal Statistical Office, GfK, WEFA, Deutsche Bank Research

Figure 12: Germany: CPI inflation vs. price expectations*in the retail sector (ifo survey)



* Balance of opinion (seasonally adjusted) regarding the expected selling prices over the next three months

Source : Federal Statistical Office, ifo, Deutsche Bank Research



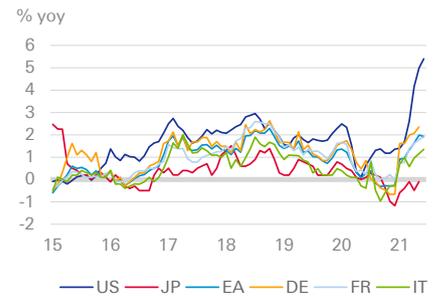
Retarding influence of globalisation

There is no general agreement on the disinflationary impact of globalization. A recent ECB paper even argues that “even when globalisation acts as a disinflationary force, the estimated impact is economically small”.⁴ Of course, it is difficult to pin the secular inflation decline to a singular factor. Central banks, for example, stress the importance of a more stability-oriented monetary policy as one important driver of the so-called great moderation, the period of lower business cycle fluctuations and lower inflation, which started in the mid-1980s.

Germany’s strong integration in GVCs has dampened inflation

Industry feedback from German SMEs, however, provides clear evidence for the disinflationary impact of globalisation on sourcing costs and domestic wage costs. This is backed up by a BIS working paper,⁵ which concludes that global factors can significantly enhance national inflation models. For Germany, BIS estimates even show that German inflation expectations and the global output gap are highly significant, but that the domestic slack (i.e the Phillips curve) does not play any significant role. This might be a somewhat extreme estimate, but actual and potential competition through the participation in global value chains (GVCs) has certainly had a substantial disinflationary impact in Germany and has probably dominated domestic factors during the last three decades. An OECD working paper finds evidence that the deeper integration into GVCs has exerted downward pressure on producer price inflation.⁶ Using disaggregated country and sector data, the authors find that Germany and Switzerland have experienced the largest disinflationary impact from GVC participation.

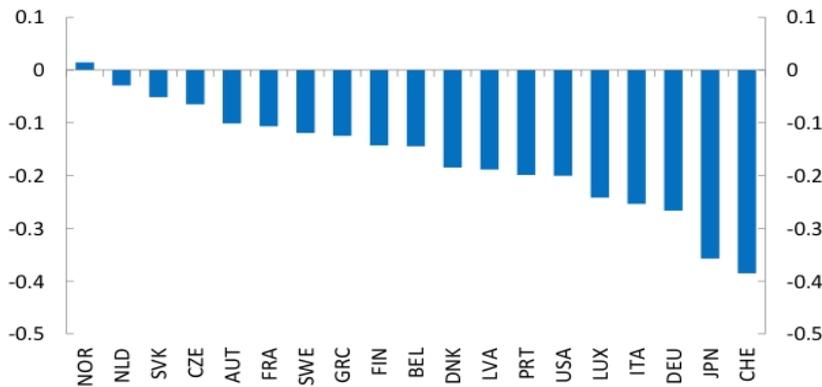
Figure 14: Headline consumer price inflation has surged in the US



Source: WEFA, Haver Analytics, OECD, Eurostat

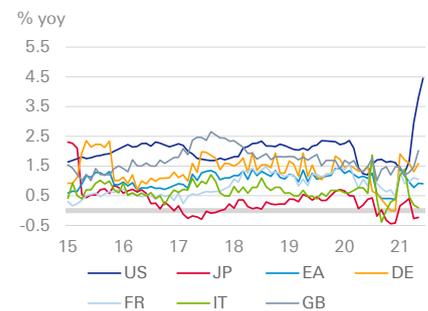
Figure 16: Impact of GVC expansion on inflation over 1996-2008

Estimated contribution of GVCs to average annual producer price inflation, pp



Note: The figure shows the annual change in producer price inflation based on the change in the production deflator that is explained by rising GVCs using the coefficient estimate in column 1 of Table 1. The estimates are the unweighted averages over industries in each country from 1996 to 2008. MEX, POL and SVN not shown as data on GVCs are not available for 1996. Based on calculations using estimation results and the OECD Trade in Value-Added (TiVA) database.
Source: Andrews, D, P Gal, and W Witheridge (2018), A Genie in a Bottle? Globalisation, Competition and Inflation, OECD Economics Department Working Papers, No. 1462

Figure 15: Core consumer price inflation in major economies



Source: WEFA, Haver Analytics, OECD, Eurostat

4 Globalisation and its implications for inflation in advanced economies, ECB Economic Bulletin 4/2021
5 BIS Working Papers No 791, Has globalisation changed the inflation process?, by Kristin F. Forbes, June 0219
6 A GENIE IN A BOTTLE? GLOBALISATION, COMPETITION AND INFLATION ECONOMICS DEPARTMENT WORKING PAPERS No. 1462 By Dan Andrews, Peter Gal, and William Witheridge



Slow-track globalization could put an end to the disinflationary effect of international division of labour

In recent years, the globalization has slowed down substantially or even pulled back, at least on some accounts. Following the GFC, protectionist measures have mushroomed. Brexit, the US-Chinese conflict, which has not really eased following the change in the US administration, have provided substantial headwinds. Both the US and China want to reduce their mutual economic dependency through GVCs and imports, the respective policies run under the slogans of “decoupling” (US) or “dual circulation” (China). For competitive reasons and since the COVID-19 pandemic for the security of supply, many countries have identified strategic industries, which they plan to nurture and protect. Protection and less international distribution of labour driven by comparative advantages result in smaller productivity gains and c.p. higher prices. Due to the openness of its economy, Germany will be affected over-proportionally by this.

Global labour supply: From a deflationary to an inflationary factor

But even if these geo-strategic headwinds are to ease again, demographic developments in China and other EMs will point to higher inflation pressures ahead. Charles Goodhart described the inclusion of Eastern Europe and particularly China into the global economy during the last three decades as the greatest labour supply shock in history.⁷ In his view, the increased weight of Asia and particularly China in global manufacturing has resulted in an erosion of trade unions’ bargain power, a stagnation in real wages and deflationary pressure in the advanced economies.

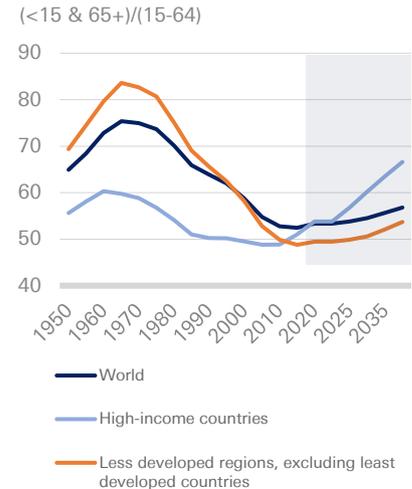
Climate neutrality: Rising energy prices and further investment bottlenecks

This year’s introduction of a CO₂ price for carbon emissions in the German transportation sector and heating market (buildings) is estimated to add about 0.5pp to the German inflation rate in 2021, the parallel reduction of the EEG levy will limit the overall impact to about 0.3%. As the price for CO₂ will increase further (from EUR 25 per ton in 2021 to EUR 55 in 2025) to provide an increasing disincentive for the use of fossil energy, this will continue to push the inflation rate higher, at least as long as the resulting CO₂ reductions remain limited, given the short-run inelastic demand (rigidities in building and vehicle stock).

Price effects of necessary green investments to dwarf CO₂ price impact

Ultimately, price effects from massive investments into energy infrastructure and thermal insulation of the housing stock (including new heating systems or a modernization of windows, roof, or facades) might turn out to be a much bigger factor for medium-term inflation. Available estimates for the costs of the ecological transformation of the German economy are usually confined to the transformation of the energy system, i.e. the technological and infrastructure investments (power generation and grids). Even these partial estimates are largely driven by their underlying assumptions. More encompassing evaluations including the potential impact on GDP growth and employment, let alone the potential external costs and benefits, for example through the impact of climate change on the society as a whole, are driven even more by such assumptions.⁸

Figure 17: Total dependency ratio



Source: UN, Medium Variant

⁷ BIS Working Papers No 656, Demographics will reverse three multi-decade global trends, Charles Goodhart and Manoj Pradhan, 2017

⁸ Was die Energiewende wirklich kosten wird, Karn Pittel, Hans-Martin Hennig (ifo), Gastbeitrag FAZ vom 12.07.2019



A study of the Fraunhofer ISE institute estimates that the cumulative costs for the transformation of the energy system could amount to around EUR 6,500 bn (almost two times annual GDP) in order to reach a 90% CO₂ reduction by 2050.⁹ A reference scenario is presented with 2 % p.a. price increases for fossil energy and gradually increasing prices for CO₂ certificates to reach 100 EUR/t by 2030. The accumulated costs of this scenario (until 2050) are only about 500bn EUR lower than in the 90% reduction scenario – even if financing costs are included.

Another study produced by the Forschungszentrum Jülich estimates the cost of a 95% CO₂ reduction by 2050 at EUR 1,850bn.¹⁰ The researchers reckon that if the costs are spread until 2050 that would p.a. amount to (only) 1.1% of the annual GDP. However, put differently, this would be more than half annual GDP growth even assuming rather optimistic trend growth.

Experience highlights risk of massive cost overrun

The substantial difference between these two estimates highlights the underlying uncertainties. However, without wanting to sound too pessimistic, one should not forget that even much smaller government projects have an inherent tendency to overrun initial cost estimates by a wide margin.

A “Green” commodity super cycle?

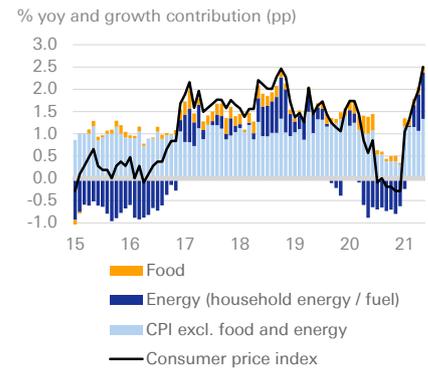
The massive investments will add to inflation, at least in sectors where resources are already fully utilized such as residential construction. If the government subsidizes the energetic refurbishment of buildings, additional demand will meet already constrained capacities. The German Commodity Agency (DERA) recently presented a study produced by two Fraunhofer institutes warning that technological developments with regard to future technologies might trigger substantial price increases for commodities, such as lithium, scandium, iridium, copper, and other metals. Most of these are also key inputs for technologies necessary for the ecological transformation of the Germany economy.

All in all, higher energy and input prices and forced substitutions towards less efficient means of production and transport will, unless fully subsidized by the government, increase production costs, which will also show up in consumer prices. Price effects will also stem from regulatory law (bans, limits, quotas, which have a negative influence on the supply side (higher costs, reduction of supply)). If new technologies are more expensive (at least in the first few years of transformation), inflation will be pushed up. The shift from cars driven by an internal combustion engine to e-mobility is one example since electric cars in the volume car segment are more expensive than their traditional counterparts.

Ageing: Higher wage pressure and protection of vested interests

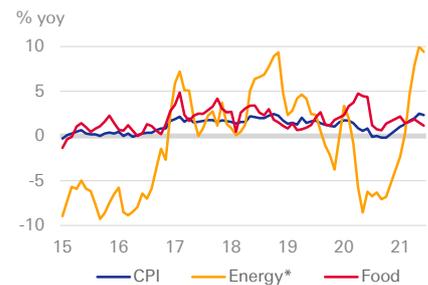
As discussed above, domestic slack has become less of a factor for German inflation during the last three decades. This was in part the result of a sharp increase in global labour supply and corporate Germany’s massive globalisation drive. But the global demographic situation is about to turn, which should give domestic labour supply factors a higher weight again. Even under modest assumptions and assuming an annual net-migration of 221k - the German working age population between 20 and 66 years (51.8 m in 2020) will drop by 4 to 6 million people until 2035 and shrink a cumulated 10m until 2050 according to simulations

Figure 18: German CPI: Rising high



Source : Federal Statistical Office, Deutsche Bank Research

Figure 19: CPI: Energy and food prices



* Household energy and fuels

Source : Federal Statistical Office, Deutsche Bank Research

⁹ Was kostet die Energiewende? Fraunhofer-Institut für solare Energiesysteme ISE, 2015

¹⁰ So teuer wird die Energiewende, <https://www.fz-juelich.de/poratl/DE/Pressemitteilungen/2019/2019-10-energiestudie>, 2019



of the Federal Statistical Office.¹¹ The shrinking labour force share will increase the scarcity of labour, which has already become a problem in recent years, as the ongoing debate about the lack of skilled workers is showing. According to OLS models used to simulate the impact of demographic changes, this factor could add about 12.5pp to wage growth by 2050.¹² Part of this could be a composition affect due to a higher share of college degrees employees, where higher productivity might limit the unit labor cost impact.

Baby boomers more interested in job security

Beyond the purely quantitative effect the behavior of the baby boomer generation, which is moving ever closer to retirement, has probably also contributed to less belligerent wage settlements. With age, people become more risk averse and less open to change. Hence, employees in the final years of their working life, will prefer job security and fewer working hours over wage increases. This is clearly evident in many collective wage settlements during recent years, where wage increases have been cut back in exchange for job guarantees. With this risk-averse group protecting its status quo losing influence in industrial relations and younger cohorts with less interest in lifelong employment provided by the employer taking over, wage negotiations could become less harmonious.

Regulation adding to union's bargaining power

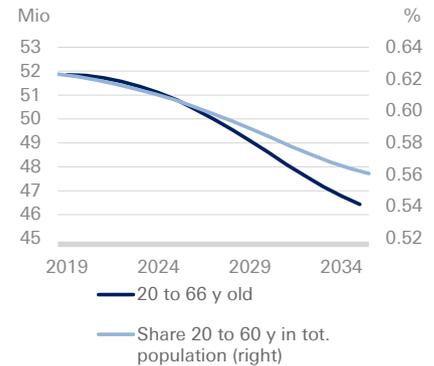
The wage moderation of recent decades was also brought about by a deregulation of the German labour market, referred to as "Hartz reforms". In recent years, the strong improvement in the German labour market has triggered a reregulation by the government and the jurisdiction in some areas of the labour market (introduction of a minimum wage, limited possibilities to use temp or contract workers, minimum wage for foreign care workers, etc.), which should at the margin also add to rising labour costs.

All in all cyclical and structural changes could mean that the tables are turning on the German labour market. A steeper Phillips curve could then be the so far missing link between the current inflation spike and second round effects making it more permanent.

Distribution conflicts might add to higher inflation rates

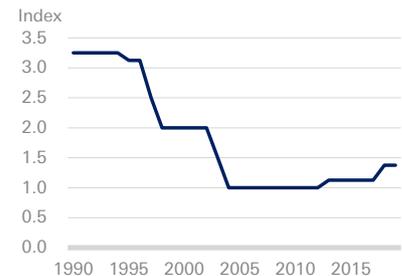
The German sociologist Max Weber extended Marx's conflict theory to multiple conflicts in society, with not only classes but also status groups, regions or other interest groups fighting over the allocation of resources. In a similar way, political economy models of inflation interpret inflation as the result of social conflict.¹³ In more heterogeneous societies these distribution conflicts are more prominent and the political process can lead to higher inflation as a result of politicians' redistribution efforts, especially if populists are in charge. Well-established trends such as digitization, ageing, urbanization and transition to a carbon-neutral economy suggest that groups in the society will be affected differently, meaning that they will fight even harder for their "legitimate" interest and entitlements. The more heterogeneous society is reflected in a more fragmented landscape of political parties, which makes tit-for-tat compromises and financial compensations even more important political tools. The German pension policy of recent years or the exit from coal mining agreed last year (amounting to over EUR 50bn for a sector employing less than 50,000 people) provide ample evidence of the costs involved.

Figure 20: Germany: Shrinking labour force



Source: Destatis Demographic Projections (Variant 2)

Figure 21: Strictness of employment protection – temporary contracts



Source: OECD

Figure 22: German wage growth



Source: Destatis

11 14. Koordinierte Bevölkerungsvorausberechnung, Statistisches Bundesamt, 2019

12 On the distributional implications of demographic change, Christian Geppert, 2015

13 Christopher Crowe, Inflation, Inequality and Social Conflict, CEP discussion paper 567, 2004



Climate policy: Lower production possibility frontier means that welfare losses need to be distributed

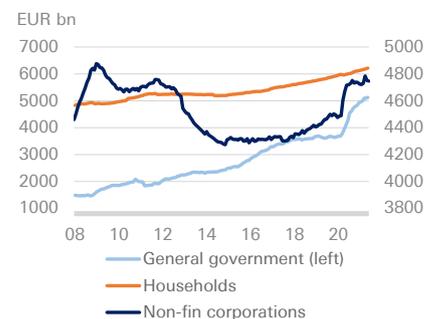
Structural changes such as globalization or, quite likely, digitization are on a macro level wealth enhancing. So winners can be “asked” to give up part of their gains to fund the compensation of those negatively affected, so that – in an ideal world – everybody can be better off. Adverse demographics will stretch this approach, since it is expected to reduce potential growth, i.e. gains available for redistribution will be smaller. The shift to CO₂ neutrality means in the cold logic of national accounts statistics, that the production possibility frontier will be shifted lower, as we utilize less efficient sources of energy.¹⁴ As a result, actual losses will have to be distributed, reducing peoples’ standard of living. From prospect theory we know that losses carry a bigger (absolute) weight in human perception, probably even more so in an ageing society. Losses imposed by climate policies have so far – at least for a large part of the society – been below their pain threshold. In other cases, regions with a small number of people affected have been generously compensated by the government. Governments will try to “protect” their voters in similar ways by tapping credit markets as long as possible. A combination of lower production (due to the reduced production possibility frontier) and incomes artificially stabilized by debt-financed public subsidies have historically been a likely recipe for higher inflation.

Of course, other trends, for example, digitization, cost saving technological innovations in general or fundamental changes in consumer behavior towards more resource-saving consumption patterns, might exert downward pressure on inflation. However, those structural trends, where we have some idea about their inflation impact, do on balance point towards higher inflation. At least, clearly higher than what we have witnessed in the last decade. How much of an impact they will exert depends crucially on the behavior of fiscal and monetary policy.

Monetary and fiscal policy have paved the way for higher inflation

The trends discussed above would, in the neoclassical world, only affect relative prices. For example, when activities involving CO₂ emissions become more expensive, household real incomes would be reduced, resulting in lower demand and prices for other expenditure components (unless demand for these kind of activities falls proportionally). However, experience shows that households and companies will try to escape these losses by claiming a higher share of national income. The third and necessary ingredient for this to spark higher inflation is the availability of liquidity. Higher inflation, i.e. the upward shift in the overall price level, requires the central bank to provide the financial means resulting in higher credit growth. After the GFC, the transmission via higher credit growth failed because private credit demand fell as corporates were deleveraging and loans to the government sector rose rather modestly. By contrast, lending to the public sector rose sharply in 2020/21.

Figure 23: EMU loans to:



Source: ECB

14 This will most likely be the case even if the marginal costs of renewable energy fall to almost zero, due to the massive investment and replacement costs of renewable energy capital stock itself.



Money for nothing ...

With respect to both fiscal and monetary policy, and most importantly with respect to the new interaction of the two, a paradigm shift seems to be taking place. Starting in the aftermath of the GFC, but particularly during the COVID-19 pandemic big government spending has become popular again. The “success” of spending programs to counter the pandemic’s negative effects on income and profits has paved the way for a view that – even after the pandemic losses are overcome – governments should continue to spend substantially more to improve the societies’ longer-term resilience and the economy’s trend growth rate, in particular given the structural challenges countries are facing (global warming, demographics, digitization). Even more so as the usual negative side effects of higher deficit spending, higher bond yields crowding out of private investment and causing higher public interest rate expenditures have not materialized, courtesy of central banks’ “cooperation”.

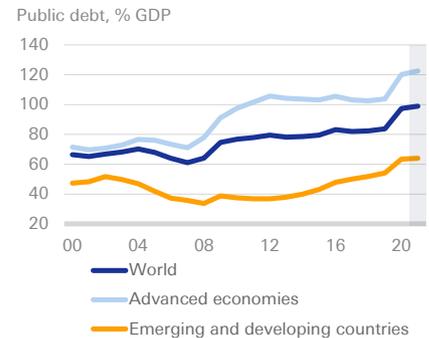
... will be too tempting for governments to resist

The not-so-new argument behind these ambitious spending plans is that the money spent on these “future investment projects” will not only have high multiplier effects by stimulating more private investment, but can also be paid back easily in future, given the resulting boost to medium-term economic growth and hence tax revenues. In the past, such optimistic scenarios hardly ever played out, yet the proponents are playing it really big this time. Above all in the US, where the “building back better” is expected to increase spending programs towards almost USD 10trn or almost 40% of GDP.¹⁵ That being said, on a global level, total fiscal support (including extra spending, foregone revenues or liquidity support such as asset purchases or state guarantees) has reached USD 16trn (or about 19% of global GDP) since the start of the pandemic, according to IMF estimates. The EU Commission has launched the EUR 750bn NGEU program on top of an avalanche of national stimulus programs. In Germany, the public debt ratio has increased by a good 10pp of GDP during the pandemic. While the medium-term financial planning of the outgoing government foresees a return to a balanced budget by 2025 pushing the debt level just to below 70% of GDP, basically all parties are campaigning on the promise of future substantial expenditure programs to make the country fit for the future, providing only scarce hints as to how these should be financed.

USD 9trn increase in G3 central bank balance sheets

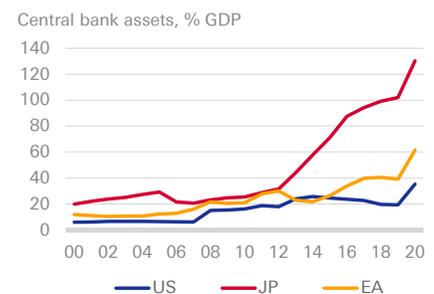
The surge in public spending during the pandemic was made possible by fiscal-monetary coordination hailed by central bankers as a great achievement. G3 central banks boosted their balance sheets by a considerable USD 9trn since the beginning of 2020, mainly through the purchases of financial assets (above all government bonds). This was justified by the need to prevent any tightening of financial conditions. The massive fiscal stimulus programs helped, in the words of ECB President Lagarde, not only to support ailing economies but also to secure the transmission of the ECB’s monetary impulses. Central banks purchased amounts of government debt equivalent to the additional net supply, which in the eyes of many observers is de facto monetary financing of fiscal deficits.

Figure 24: Public debt: Renewed jump



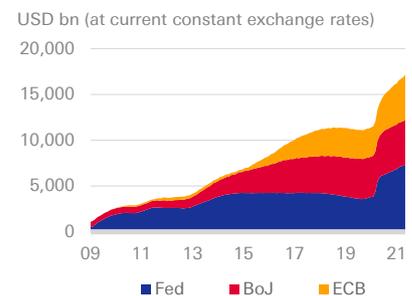
Source : IMF WEO, IMF Fiscal Monitor (April 2021)

Figure 25: Central bank balance sheets



Source : Central banks, IMF, AMECO, WEFA, Haver Analytic, US Treasury, Deutsche Bank Research

Figure 26: Securities purchased by major central banks



Fed: Securities held outright.
BoJ: Japanese government securities.
ECB: Securities held for monetary policy purposes.
Source : Haver Analytics, WEFA, Bloomberg Finance LP, ECB, Deutsche Bank Research

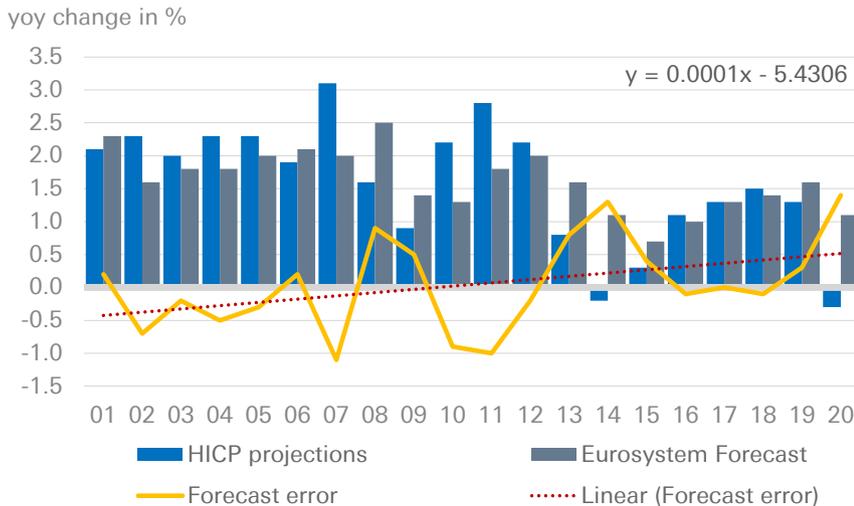
15 Deutsche Bank Research, The return of big government spending: Will this time be different?, June 2021



ECB still more worried about too low inflation, promising more support for other policy goals

The ECB could not bring the inflation rate back to its medium-term target of below but close to 2% during the last 8 years. Council members argue that the systematic undershooting justifies an extension of the wait-and-see period before the bank might start to respond to higher inflation.¹⁶ This is a somewhat less extreme approach than the one taken by the Fed, which has made it clear that under its new average inflation-targeting framework, it wants to see realized progress towards a desired inflation overshoot before acting. As a key outcome of the recent strategy review, the ECB has adopted a symmetric inflation target of 2%, which implicitly lifts the inflation target by 0.2 to 0.4pp. When President Lagarde presented the strategic review in a press conference on July 8th, she explained that an adverse economic shock might require a more permanent and more forceful action, which could lead to transitory periods in which inflation is moderately above target. Some sections of the overview document on the monetary policy strategy could be interpreted as alluding to greater support for other EU objectives.¹⁷ Earlier this year President Lagarde hinted that the ECB is thinking about ways to support the EU's climate change policies,¹⁸ although the ECB's action plan on climate change¹⁹ published together with the results of the strategy review contained no further hints in this respect. Still, such a support could imply that the ECB might respond differently to inflation pressure stemming from, for example, higher CO₂ taxes. In the medium-term the mission creep might make the ECB more forthcoming about "helping" governments to fund the big investments required.

Figure 27: Eurosystem December forecasts for the HICP 2001 - 2020



Source: EU Commission

¹⁶ Isabell Schnabel, Escaping low inflation?, speech at the Petersberger Sommerdialog, July 2021

¹⁷ https://www.ecb.europa.eu/home/search/review/pdf/ecb.strategyreview_monopol_strategy_overview.en.pdf

¹⁸ Christine Lagarde, Climate change and central banking, Keynote speech at the ILF Conference, January 2021

¹⁹ <https://www.ecb.europa.eu/ecb/climate/html/index.en.html>



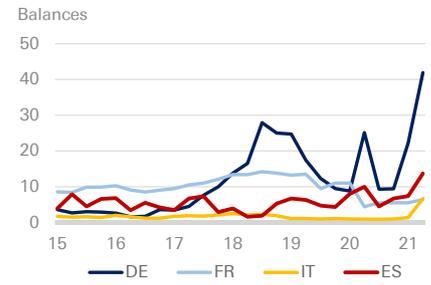
ECB unlikely to respond to higher German inflation ...

The central bank's reaction function to higher inflation might also be more constrained by the surge in government debt ratios following the pandemic, which have, in the most exposed countries such as Italy or Greece, climbed north of 150% of GDP. A monetary policy-induced upward shift of the yield curve could quickly bring the debate about debt sustainability back to the front burner, resulting in nonlinear and heterogeneous effects across the eurozone. Although the ECB denies any such constraints suggesting fiscal dominance, such concerns make it even more unlikely that the ECB will respond to higher German inflation rates, at least as long as the EMU average does not clearly exceed the 2% target for a prolonged period of time.

.... causing frustration among German consumers to rise further

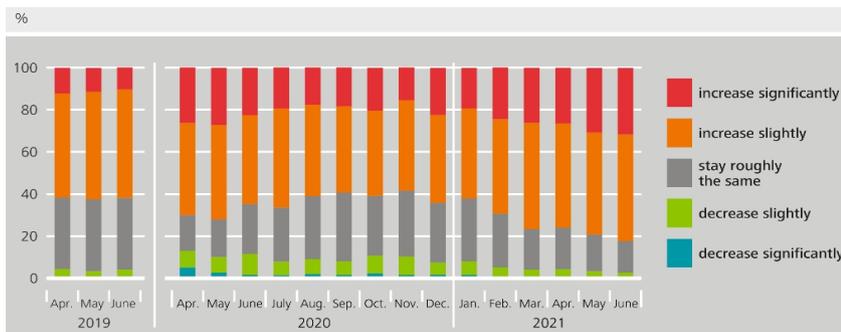
Of course, in the logic of currency union the resulting internal appreciation of the German currency vis-à-vis the rest of the euro area reduces the price competitiveness of German companies, slowing down the economy and hence reducing the inflationary pressure again. But in the meantime, German property prices will continue their surge while demographic aging will make Germans even more inflation averse. The German population's cognitive dissonance with regard to the ECB's policy could reach an extent which, even better communication, promised by the ECB, might not be able to heal.

Figure 28: Factors limiting production



Source : EU Commission

Figure 29: Individuals' expectations about the development of the inflation rate



Source : Deutsche Bundesbank Online Panel Household (BOP-HH)

Summary and outlook

The restart of the global economy after the COVID-19 shock has caused supply shortages in a wide range of sectors reaching from oil to lumber to computer chips. Logistics are stretched, resulting in surging transport costs. Manufacturing companies are not only confident about passing on these higher input costs but also about expanding profit margins given the strong demand backdrop. In the services sector, which is enjoying an almost contemporaneous rebound, the situation is not much different. Pent-up demand financed by involuntary savings during lockdowns meets a thinned out supply side as not all companies have made it through the crisis.

Both sectors are experiencing strong price pressures, which at the current stage could still be a temporary phenomenon, disappearing once the clockwork of the global economy runs smoothly again. However, on top of this very unusual cyclical rebound, there are also a number of structural factors such as headwinds to



globalization, demographically induced labour supply bottlenecks as well as the quest for CO₂ neutrality. Taken together, all these trends are likely to spur (or fuel) inflation in the longer term, especially in Germany. Not least, since all of them have the potential to fuel distribution conflicts in the ageing German society.

The third ingredient necessary for these cyclical and structural factors to ignite a renewed inflation cycle, ending the period of great moderation and the ECB's undershooting of its inflation target, is economic policy. The super expansionary course of fiscal and monetary policy during the last decade has certainly provided the necessary backdrop, especially given the paradigm shift with regards to the new close cooperation of the two policy areas. Policymakers are unlikely to resist the temptation to extend this new approach, which has helped us to overcome the COVID-19 shock, to cushion societies from the structural headwinds listed above.

Germany has weathered the COVID-19 crisis better than most other EMU partners. With a much smaller output gap it is more prone to experience higher inflation, in fact, it already has. Given the ECB will aim its policy at the EMU average inflation, German inflation could exceed the 2% mark for several years, without triggering an ECB policy response. The ECB's new strategy with the increased 2% symmetric inflation target – implying the acceptance of inflation overshoots – and its announced preparedness to wait until it is fully convinced that its policy has worked before adjusting its policy, make such a scenario even more likely.



Appendix 1

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It should be noted that the decision to incorporate ESG factors into any investment strategy may inhibit the ability to participate in certain investment opportunities that otherwise would be consistent with your investment objective and other principal investment strategies. The returns on a portfolio consisting primarily of sustainable investments may be lower or higher than portfolios where ESG factors, exclusions, or other sustainability issues are not considered, and the investment opportunities available to such portfolios may differ. Companies may not necessarily meet high performance standards on all aspects of ESG or sustainable investing issues; there is also no guarantee that any company will meet expectations in connection with corporate responsibility, sustainability, and/or impact performance.

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David Folkerts-Landau

Group Chief Economist and Global Head of Research

Pam Finelli
Global Chief Operating
Officer Research

Steve Pollard
Global Head of Company
Research and Sales

Anthony Klarman
Global Head of
Debt Research

Michael Spencer
Head of APAC
Research

Andreas Neubauer
Head of Germany
Research

Gerry Gallagher
Head of European
Company Research

Matthew Barnard
Head of Americas
Company Research

Tim Rokossa
Head of German
Company Research

Peter Milliken
Head of APAC
Company Research

Jim Reid
Global Head of
Thematic Research

Francis Yared
Global Head of Rates Research

George Saravelos
Global Head of FX Research

Peter Hooper
Global Head of
Economic Research

International Production Locations

Deutsche Bank AG

Deutsche Bank Place
Level 16
Corner of Hunter & Phillip Streets
Sydney, NSW 2000
Australia
Tel: (61) 2 8258 1234

Deutsche Bank AG

Equity Research
Mainzer Landstrasse 11-17
60329 Frankfurt am Main
Germany
Tel: (49) 69 910 00

Deutsche Bank AG

Filiale Hongkong
International Commerce Centre,
1 Austin Road West, Kowloon,
Hong Kong
Tel: (852) 2203 8888

Deutsche Securities Inc.

2-11-1 Nagatacho
Sanno Park Tower
Chiyoda-ku, Tokyo 100-6171
Japan
Tel: (81) 3 5156 6000

Deutsche Bank AG

1 Great Winchester Street
London EC2N 2EQ
United Kingdom
Tel: (44) 20 7545 8000

Deutsche Bank Securities Inc.

60 Wall Street
New York, NY 10005
United States of America
Tel: (1) 212 250 2500
