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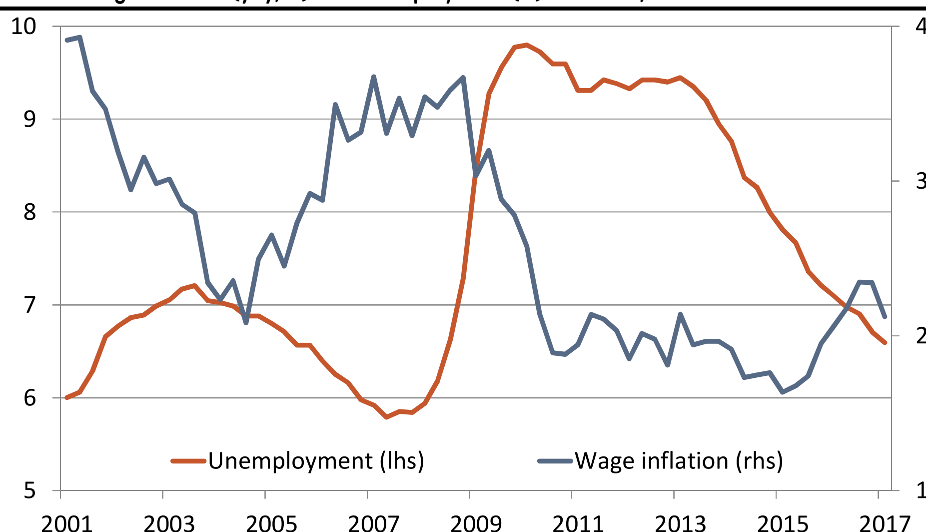
Notes on the inflation puzzle

- **The puzzle:** More than eight years into an economic recovery that started in spring 2009, inflation has not reared its ugly head again in the western world outside the Brexit-stricken UK. In most advanced countries, consumer price inflation remains close to or below the rates that central banks deem desirable. Why this is so – and for how long this unusual state can last – is one of the key questions for the outlook for monetary policy and financial markets.
- **The age of caution:** So far, the moderate economic recovery in advanced countries since 2009 has not degenerated into any significant exuberance, let alone any genuine spending excesses. Even after a decade, companies and governments still shy away from the credit-fuelled excesses of the years to 2007. Chastised by the recent boom-bust experience, they are now living in an age of caution. As a result, we find little evidence yet of a significant demand-driven increase in inflationary pressures in advanced economies.
- **Two major supply-side trends are re-shaping inflation dynamics in the developed world:** 1) global supply chains and other aspects of globalisation enhance productive efficiency through a deeper division of labour across regions; and 2) technological change dampens rises in wages and prices by increasing competition. Automation, robots and the ability to shift production abroad more easily than before can constrain wage gains even in labour markets with full employment.
- **The kettle is not yet hot:** The forces holding down inflation in the developed world are powerful. Inflation rates will likely continue to edge up much more slowly in the current post-Lehman recovery than in previous cyclical upturns. Satisfactory growth at moderate inflation provides a positive backdrop for markets.
- **Goldilocks can stay for a while:** In a synchronised global recovery, firm demand will raise inflation over time. Eventually, central banks will have to reduce the amount of stimulus they provide more determinedly than they are doing – or planning to do – at the moment. But we are not there yet. So far, the US and the Eurozone are still offering a home to Goldilocks, who likes her porridge neither too hot nor too cold. As long as inflationary pressures remain subdued, central banks can continue to withdrawal their stimulus more slowly than in past cycles.

Chart 1: Wage inflation (yoy, %) and unemployment (%) in the US, Eurozone and the UK



Wage inflation: weighted average of hourly earnings for all non-supervisory employees in the US, hourly compensation index in the Eurozone and average total pay for the whole economy in the UK; weights: US 50%, Eurozone 40%, UK = 10%. Quarterly Data. Source: ECB, Eurostat, Bureau of Labor Statistics, ONS, Berenberg

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Holger Schmieding
Chief Economist
+44 20 3207 7889
holger.schmieding@berenberg.com

Kallum Pickering
Senior UK Economist
+44 20 3465 2672
kallum.pickering@berenberg.com

The puzzle

More than eight years into an economic recovery that started in spring 2009, inflation has not reared its ugly head again in the western world outside the Brexit-stricken UK. In almost all major advanced countries, consumer price inflation remains close to or below the rates which central banks deem desirable. Contrary to perceived Phillips-curve wisdom, wage and consumer price inflation has not picked up meaningfully even in countries such as the US, Germany and Japan, which seem to have attained full employment. Why this is so – and for how long this unusual state can last – is among the most important questions for the outlook for monetary policy makers, and in turn, for financial markets.

In major advanced countries, inflation remains close to or below central bank targets

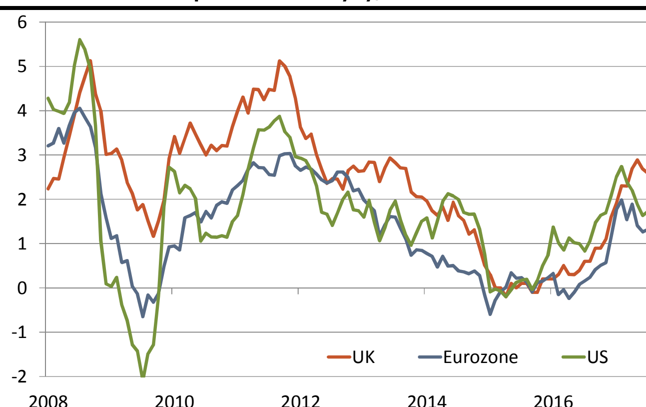
Of course, inflation is not dead. Misguided economic policies can still cause faster increases in prices and erode living standards. Just look at some emerging markets, or at the UK where the sharp drop in sterling after the Brexit vote has pushed inflation above the Bank of England's 2% target this year. But since wage growth in the UK is unlikely to match the rise in import prices, UK inflation will return to a more subdued level once the one-off exchange rate re-pricing and the subsequent erosion of real living standards of UK households have run their course.

Inflation is not dead. Bad economic policies can still cause fast increases in prices

In this report, we discuss some of the key reasons for the subdued rates of inflation in advanced economies. The reasons pertain to both the supply and the demand side: some may be temporary, reflecting the special features of the current economic recovery; others may be more lasting, resulting from broader shifts in technology or the labour market.

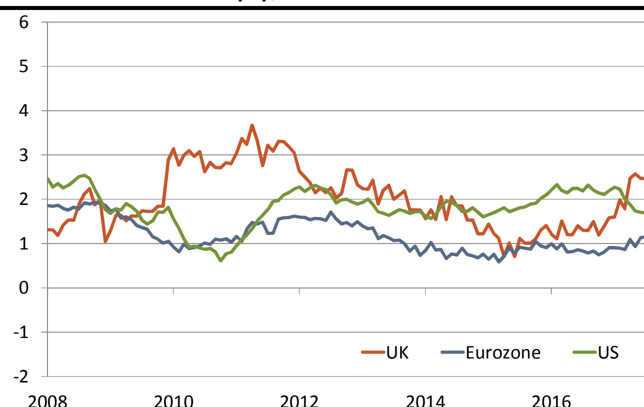
Several factors underpin the low rates of inflation in the advanced world

Chart 2: Consumer price inflation (yoy, %)



Monthly data. Source: Bureau of Labor Statistics, Eurostat, ONS, Berenberg calculations

Chart 3: Core inflation (yoy, %)



Core inflation ex. food and energy. Monthly data. Source: ECB, Bureau of Labor Statistics, ONS, Berenberg calculations

The demand side: no party, no inflation

The age of caution

Prices rise if demand exceeds supply. Exuberance and excess consumption beget demand-driven inflation. So far, the moderate economic recovery in advanced economies since 2009 has not begot any significant exuberance, let alone any genuine spending excesses. Even after a decade, companies and governments still shy away from the credit-fuelled excesses of the years to 2007. Chastised by the recent boom-bust experience, they are living in an age of caution. As a result, we find very little evidence yet of a significant demand-driven increase in inflationary pressures in advanced countries.

So far, no major signs of excess in the advanced world

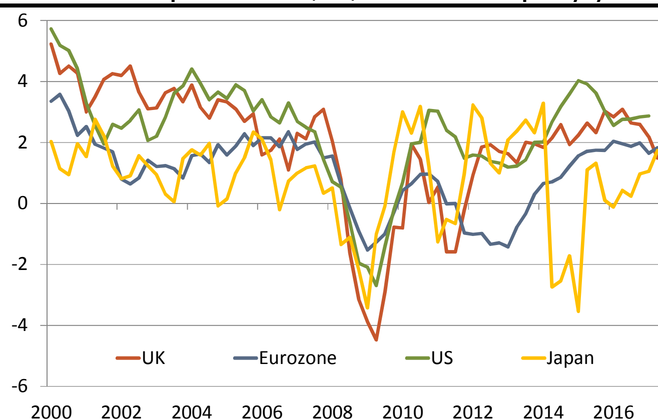
In the past seven years, real private consumption has expanded at an average rate of 2.3% in the US, 1.5% in the UK, 0.8% in Japan and just 0.5% in the Eurozone, where the euro confidence crisis of 2011-12 and determined fiscal repair had dampened consumer spending until early 2014. In nominal terms, consumption growth has also remained subdued by historical standards with average gains of 3.8% in the US, 3.5% in the UK, 0.7% in Japan and 1.6% in the Eurozone. Supported by lower oil prices, rising employment and the end of austerity across almost the entire developed world, consumption growth picked up in 2016 to real rates of 2.7% (and 4.0% in nominal terms) in the US, 2.8% (4.2%) in the UK, 2.0% (2.3%) in the Eurozone and 0.4% (0.0%) in Japan (see chart 4).

Demand growth is not strong enough to cause a surge in prices

No credit-fuelled excesses: consumption gains remain moderate

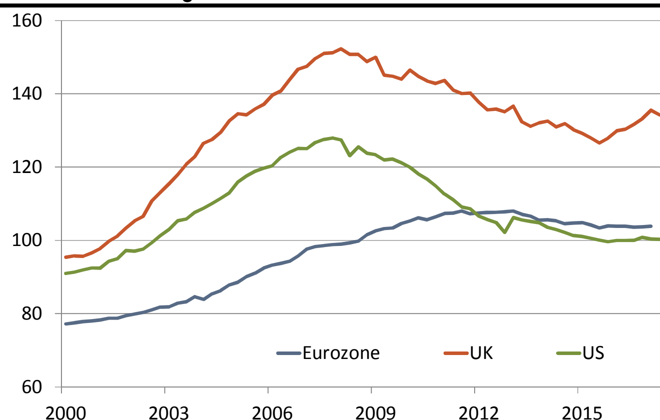
With the exception of Japan and – potentially – the Eurozone, consumption growth apparently slowed down in 2017 as the oil price tailwind has faded and UK consumers take the hit from the Brexit-induced sterling devaluation. Relative to the hot phases of previous upswings with average annual gains in US real private consumption of 5.2% (and 6.9% in nominal terms) from 1998 to 2000 and 3.4% (5.9%) from 2003 to 2006, the current rates of consumption growth remain moderate. They do not suffice to cause a major surge in inflationary pressures. Instead of splashing out, households have tried to repair their balance sheets (see chart 5).

Chart 4: Consumption in the US, UK, Eurozone and Japan (yoy %)



Quarterly data. Source: BEA, CAO, Eurostat, ONS, Berenberg calculations

Chart 5: Correcting the excess: household debt in % of income



Household debt as percentage of disposable income. Quarterly data. Source: Fed, Eurostat, ONS

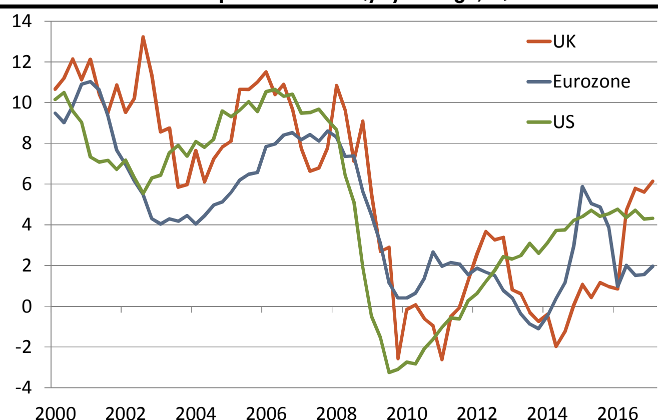
In the age of caution, agents are far more reluctant to take on credit than before

In the age of caution, households and companies are far more reluctant to take on credit than before. In the two years to mid-2017, credit to households and non-financial companies expanded at an average annual rate of 2.7% in the Eurozone, 3.2% in the UK, 4.5% in the US. Relative to the pre-2007 credit boom, these growth rates are modest (see chart 6). Of course, the post-Brexit surge in UK credit growth needs to be watched.

Rates of capacity utilisation are only modestly above their long-term averages

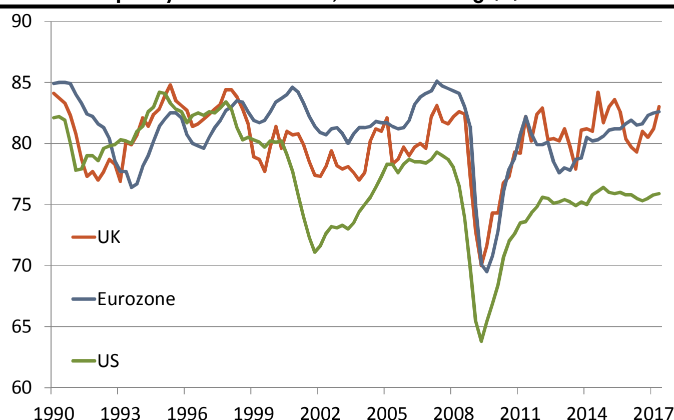
Reflecting the pervasive caution, business investment has contributed significantly less to the post-Lehman rebound in economic activity than in standard cyclical upswings before. Nonetheless, eight years after the end of the post-Lehman financial crisis and four years after the Eurozone started to rebound from the euro crisis, rates of capacity utilisation in the industrial sector are only modestly above their long-term averages in the UK, Japan and the Eurozone, albeit not in the US (chart 7).

Chart 6: Credit to the private sector (yoy change, %)



Adjusted credit by all sectors to the non-financial private sector. Quarterly data. Source: Bank for International Settlements

Chart 7: Capacity utilisation rates, manufacturing (%)



In percent of total capacity. Quarterly data. 20-year average: US 75.8%, UK 80.0%, Eurozone 81.0%. Source: Fed, European Commission

Reflecting stronger demand for liquidity, the money multiplier has fallen sharply

Central banks are the ultimate source of liquidity in fiat monetary systems. To meet the post-Lehman surge in demand for liquidity, central banks had to increase their balance sheets massively, buying assets on the open market with newly created fiat money. Reflecting the increased demand for liquidity, the money multiplier between narrow

money, such as central bank money or M1, and broader less liquid monetary aggregates, such as M3 or M4, has fallen sharply (see chart 8).

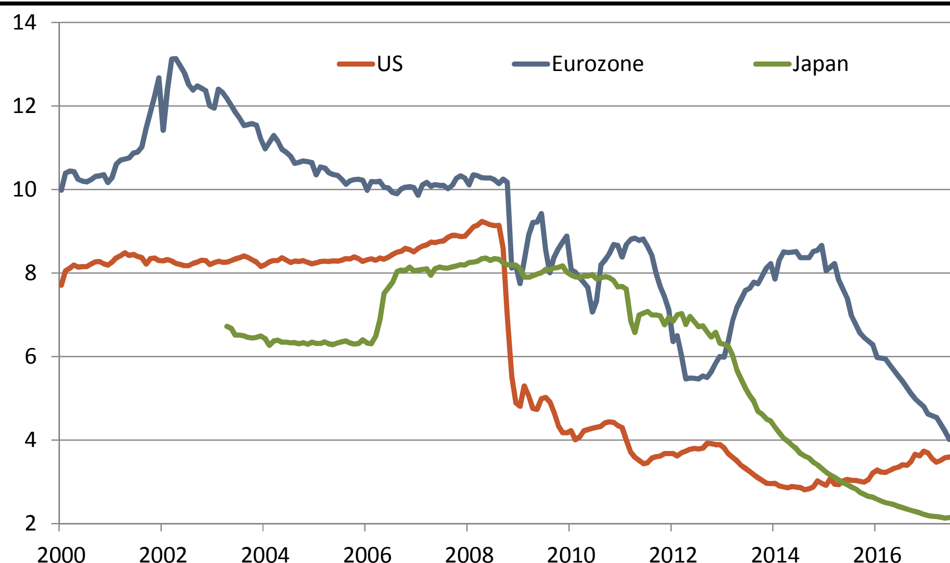
In the age of caution, a much bigger monetary stimulus is required to elicit a response in aggregate demand than before. Cautious financial intermediaries, households and companies as well as many financial investors choose to hold more precautionary balances. In addition, stricter regulation of the financial system also dampens the transmission of monetary policy to the real economy. While exchange rates continue to impact growth and inflation, the credit channel of transmitting a monetary impulse to the real economy is partly constricted as households and companies are far less eager to borrow and spend than before.

It takes a bigger monetary stimulus to elicit a response in demand than before

Nevertheless, monetary policy remains powerful even in the age of caution. ECB president Mario Draghi singlehandedly stopped the irrational market panic known as the "euro crisis" when he vowed to do "whatever it takes" to stop the rot in July 2012. By changing expectations, he de facto delivered a major monetary stimulus, with sentiment surging immediately. In line with the usual lag of a monetary impulse, the Eurozone exited recession some eight months after his speech.

Nevertheless, monetary policy remains powerful even in the age of caution

Chart 8: Money multipliers have fallen sharply since the financial crisis



Broad money aggregates as multiples of narrow money. For US: M2/base money, Eurozone M3/base money, Japan: M2/base money. Monthly data. Source: Federal Reserve, Bank of Japan, European Central Bank, Berenberg calculations

Secular stagnation?

Some observers use the label "secular stagnation" to describe the age of caution[1]. The underlying analysis is partly correct. Consumers and businesses are more inclined to save and less inclined to spend than they were before. As a result, the equilibrium real interest rate that balances the supply of savings with the demand for investible funds is now unusually low. Nonetheless, the label is misleading. We are witnessing less vigorous growth but not stagnation, and we see the deviation from previous patterns of behaviour as temporary rather than permanent.

In the age of caution the equilibrium real interest rate is now unusually low

After the previous great financial crisis of 1929-32, the subsequent period of restrained demand growth lasted for less than a decade. A massive fiscal boost – spending for World War II – ushered in a period of excessive demand growth that needed to be curbed by price controls in many countries. As memories of the 2008-09 financial crisis fade, we expect households and businesses to gradually return to a less risk-averse behaviour over time. The age of caution may last a good decade or so – but probably not a lifetime or a century, as the word "secular" would suggest.

The age of caution may last a good decade or so

[1] See '[The Age of Secular Stagnation](#)', Lawrence H. Summers

The supply side

Supply-side improvements have dampened inflationary pressures

Changes in aggregate supply can affect inflation dynamics in three major ways. First, an increase in supply through the discovery of new resources or through technological progress dampens inflation. Second, if supply becomes more responsive (elastic) to changes in prices, a given increase in demand requires a smaller rise in prices to restore the balance of supply and demand. Third, if barriers to trade between countries or regions are reduced, any regional excess of demand relative to supply can be filled more easily by imports from elsewhere – this limits inflation differentials between countries. In countries with excess demand, inflation will accelerate by less than it would have done otherwise, while other countries will notice a small rise in inflationary pressures.

Broadly speaking, there are two major supply-side trends re-shaping inflation dynamics in the developed world: 1) globalisation; and 2) technological change.

Globalisation

Increasing globalisation has acted as a positive supply shock

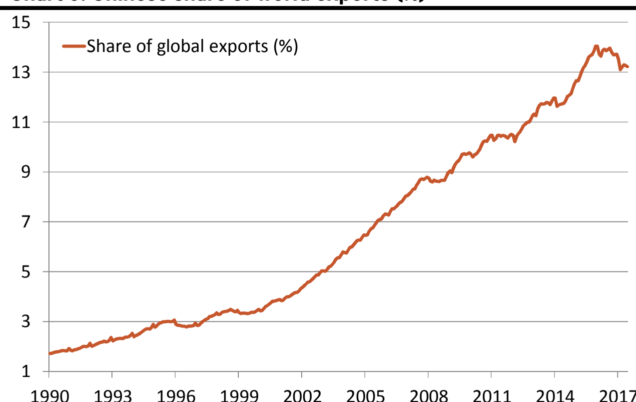
Beyond its impact on labour markets, which we discuss separately below, globalisation has helped to restrain inflationary pressures in the developed world in four major ways.

1. The integration of China and other formerly closed countries, such as those of the erstwhile Soviet bloc, into the global economy since the late 1980s has increased the pool of labour and resources available to the broader global economy. This constitutes a positive supply shock drawn out over a period of at least two decades. Chart 9 illustrates the rising contribution of Chinese production to the global economy.
2. Reduced transport and transaction costs as well as lower barriers to trade have reduced costs for producers and hence prices for consumers.
3. Integrated global supply chains make it easy for companies to shift production to lower-cost regions. A deeper division of labour and supply across regions enhances the efficiency of production. As a result, excess demand in one region can get distributed across the supply chain, causing a small rise in prices in many countries rather than a surge in prices in one region.

A deeper division of labour and supply across regions enhances productive efficiency

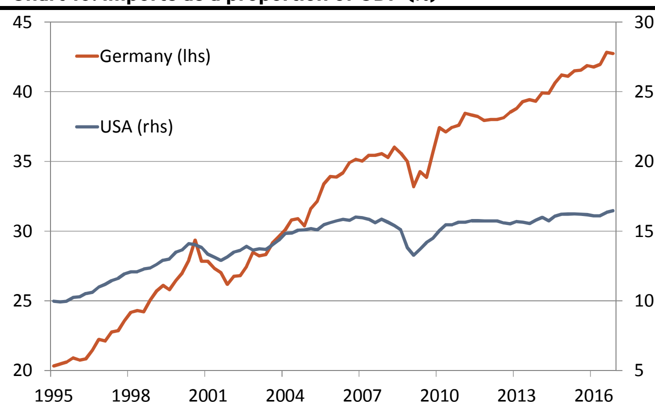
4. A rising share of imports in real GDP has the same impact: it makes supply more responsive to changes in demand for tradable goods and services. As foreign suppliers can step more easily into the breach, a domestic excess of demand over supply will spill over to trading partners to a greater extent than before, instead of showing up in domestic inflation (see chart 10).

Chart 9: Chinese share of world exports (%)



12-month moving average. Monthly data. Source: IMF

Chart 10: Imports as a proportion of GDP (%)



Real imports of goods and services over real GDP. Source: Bureau of Economic Analysis, Federal statistics office

Technological change

Increased competition puts downward pressure on prices

By reducing search costs and increasing transparency for consumers, the internet has made markets more competitive. Fiercer competition puts downward pressure on prices as firms fight for market share. As this is an ongoing process rather than a one-off effect, it reduces the rates of inflation instead of showing up merely as a one-off drop in prices.

Whether the other aspects of the rapid technological change that we observe in the world around us have also helped to augment supply relative to demand is an open question. On the one hand, the paltry rates of measured productivity growth in the developed world over the past 15 years suggest that technological progress is embellishing aggregate supply less than before. On its own, this would add to the risks that demand may outstrip supply, resulting in higher rates of inflation. On the other hand, rapid technological change, including enhanced logistics, has made it easier to ramp up production in response to changes in demand. That tends to dampen inflationary pressures.

Rapid technological change can make it easier to ramp up production quickly

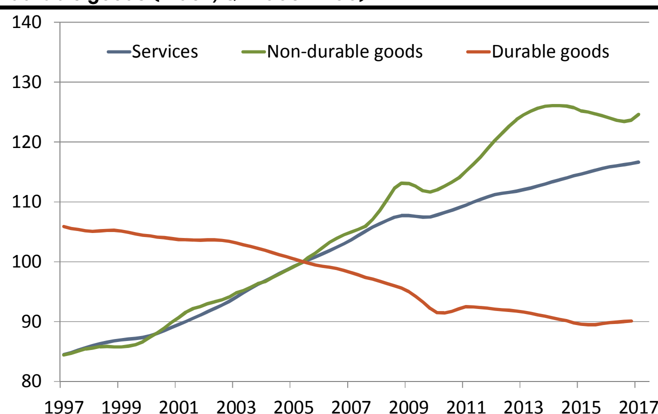
In addition, the exponential rise of computing power, the emergence of new products such as smartphones and the incorporation of new technical features into ever more products has made it very difficult to distinguish between genuine increases in prices for existing products (inflation) and genuine quality improvements that make products more efficient and valuable, and should thus count as growth in real output.

It is difficult to distinguish between price increases and genuine quality improvements

A chart presented by our US colleague Mickey Levy shows a stark contrast between prices for non-durable goods and durable goods. The US Bureau of Economic Analysis (BEA) makes a significant adjustment for improving quality of durable goods upon calculating the deflator for personal consumption expenditure. Eurostat data for durable versus non-durable goods prices in the Eurozone show a less pronounced discrepancy. Assuming that the products do not differ fundamentally between the two sides of the Atlantic, this suggests that Eurostat data may overstate Eurozone inflation slightly relative to US inflation. For example, if prices for durable goods as measured by the PCE deflator for this category had fallen in the Eurozone by as much as they have in the US, the overall PCE deflator in the Eurozone would have risen at an average annual rate of 1.51% instead of 1.57% from early 2001 to the end of 2016.

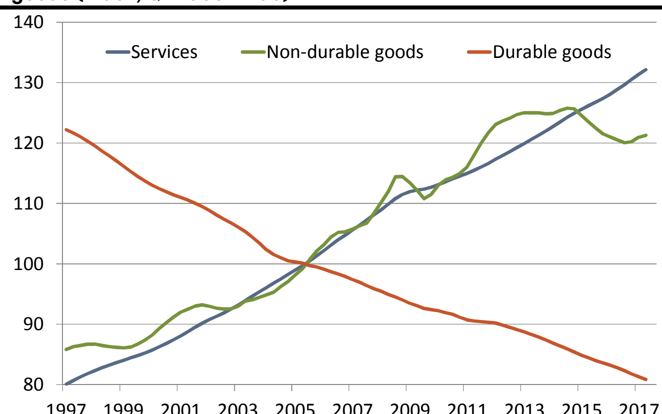
Eurozone inflation could be slightly overstated relative to US inflation

Chart 11: Eurozone PCE deflator for services, non-durables and durable goods (Index, Q1 2005 = 100)



Germany, Estonia, Spain, France, Italy, Luxembourg, Netherlands and Finland make up the Eurozone aggregate. Four-quarter moving average. Source: Eurostat, Haver analytics, Berenberg calculations

Chart 12: US PCE deflator for services, non-durables and durable goods (Index, Q1 2005 = 100)



Four-quarter moving average. Source: Bureau of Economic Analysis, Haver Analytics, Berenberg calculations

Discussing whether or not the US BEA, Eurostat or other agencies may be measuring improvements in product quality and hence in productivity accurately goes beyond the scope of this brief paper. Suffice to say that, if the statistical tools developed mostly to cope with industrial and, to a lesser extent, with services were to underestimate the pace of progress in sectors heavily affected by information technology, the obvious conclusion would be that we would tend to understate real GDP while overstating inflation. While this would be a positive story on its own, it would not help to solve the puzzle of persistently low inflation rates.

Underestimated technological progress would imply even lower inflation

The labour market

Tighter labour markets have not yet triggered a pronounced acceleration in wage growth

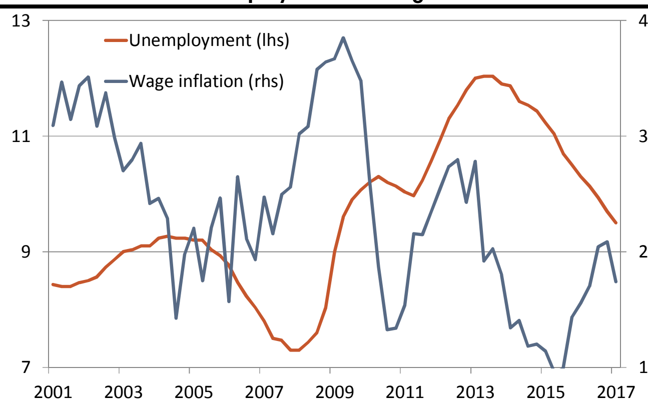
In the US, the UK, Germany and some other countries, unemployment has fallen back to levels consistent with market and central bank estimates of "full employment" (see charts 13 and 14). Contrary to perceived "Phillips curve" wisdom of a clear inverse relationship between unemployment and wage growth, the tightening of the labour market has not gone along with a pronounced acceleration in wage inflation. We see five major reasons for this persistent wage moderation.

The age of caution

Workers seem prepared to accept lower wage growth in exchange for job security

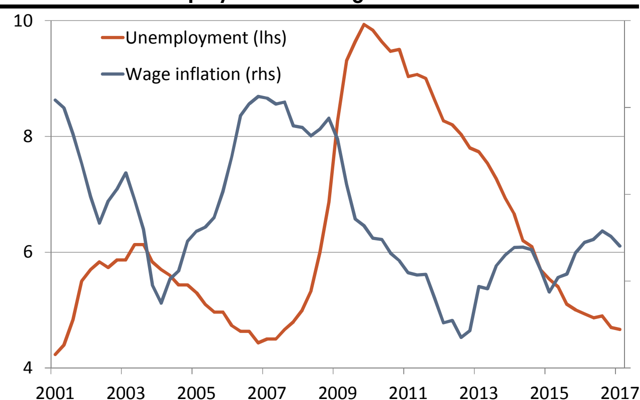
Like households who have become more reluctant to take on credit and like companies who step up investment by less than they did in previous upswings, workers may not dare to press their advantage in tightening labour markets as much as they had done before the great financial crisis of 2008-09. They still remember the shock of the deep post-Lehman recession. Even as inflation has ticked up modestly from the oil-price-driven lows some two years ago, workers seem ready to accept lower wage increases than in the past in return for a higher degree of job security. This may hold especially in Germany. Helped by some government subsidies to keep underemployed workers on the job during the 2008-09 downturn, German companies had held on to almost all their workers despite a 5.6% drop in real GDP in 2009. As their part of the implicit bargain, German workers are now settling for wage increases of c2.5%, which seem to be well below what they could probably secure in the short term if they really wanted to.

Chart 13: Eurozone unemployment and wage inflation



Yoy change in hourly compensation (2010 = 100); right-hand scale. Unemployment rate in %; left-hand scale. Source: Eurostat, ECB

Chart 14: US unemployment and wage inflation



Yoy change in average hourly earnings of production and non-supervisory employees ($/hour). Source: Bureau of Labor Statistics

New jobs are different

The demise of the traditional employment trends has altered wage setting

The demise of the traditional pattern of stable, permanent and full-time employment in heavily unionised industries in favour of more flexible jobs – usually in services – has gone on for more than 40 years. In the wake of the great financial crisis, the shift received another major boost. While some old jobs have vanished for good, including a significant chunk of the excess employment in labour-intensive construction, cautious companies are reluctant to offer permanent jobs with full employment protection in the early stage of a moderate recovery from an unusually deep recession. Instead, they tend to offer more non-traditional forms of employment. In many of these jobs, workers may be underemployed and feel less secure than in traditional full-time jobs with standard dismissal protection.

Global supply chains

National labour markets are less relevant for domestic wage inflation over time

Traditional models assume that the tightness of the domestic labour market determines domestic wage inflation. Workers compete with the unemployed who may potentially replace them and do the job more cheaply. If there are fewer unemployed around, that is if the labour market tightens, wages tend to rise as few workers compete for the remaining jobs. Instead, firms compete for the remaining workers. However, national labour markets are becoming less relevant for domestic wage inflation over time as the global economy becomes more integrated. As companies find it much easier than before to shift parts of production from one location to another, they can enforce wage discipline even in situations of virtual full

employment at home by telling their workers that they would otherwise relocate the jobs abroad. In technical terms, demand for labour has become more price elastic as a result. Moreover, in places like the EU where workers can move freely around a large single market, excess labour supply can shift to regions where labour demand is high, suppressing the usual wage response to low unemployment in that area. Workers compete more with workers abroad rather than just with other actual or potential workers at home.

Rising participation rates

Increasing numbers of older workers raise total labour supply

People are living healthier lives for longer. As a result, many older workers prefer to work longer than in the past, in both part-time and full-time jobs. Many governments have reacted by making retirement rules more flexible and/or by abolishing schemes for early retirement. This augments the pool of workers available to the domestic labour market. For example, the number of people aged 60-65 years who have a job has more than doubled in Germany in the 10 years to 2016, from 1.5m to 3.1m, whereas the overall population in that age group has merely gone up from 4.5m to 5.3m. The employment rate is also rising sharply in the age group above 65 years. As their current workers are willing and able to work longer, companies need not offer higher wages to attract new workers.

Rising female participation also adds to labour supply

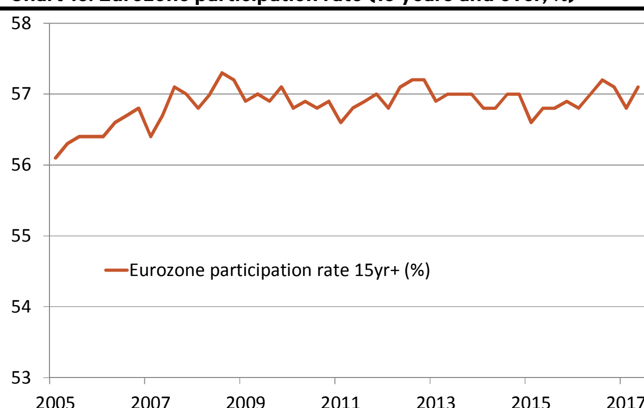
Other changes in employment patterns may play a similar or even bigger role. For example, in countries such as Japan, which traditionally had a low rate of female employment, a rising participation rate of women may augment the supply of labour substantially and thus help to keep a lid on wage inflation.

A rising supply of US workers is likely to put extra downward pressure on wages

These factors may play a significant role in Europe and Japan. In the US, however, labour force participation rates have fallen. In the US, the question is whether the high number of workers who have withdrawn from the labour market is a permanent (hysteresis) or temporary feature of the US labour market that can be explained by cyclical factors. That US participation has been creeping up again since 2014 suggests that the phenomenon is at least partly temporary. The gradually rising supply of US workers is therefore likely to exert an extra layer of downward pressure on wage inflation as modest wage gains may potentially entice non-participating workers to re-join the labour market again.

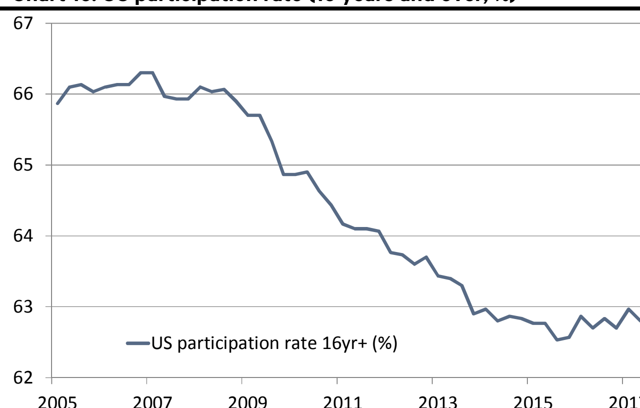
Note that, in the long run, the ageing of societies may even lead to slightly higher inflation. On the demand side, the impact of ageing is not straightforward. Consumption patterns differ between age groups. Whether a greater share of older people in the total population raises demand for services with comparatively high rates of inflation (such as healthcare), relative to demand for products with rapid technological progress, and hence stable or falling prices (think smartphones) to such an extent that it affects the overall rate of inflation, is not clear. However, to the extent that the ageing of a society ultimately reduces the share of economically active people in the overall population, it would tend to constrain the growth of aggregate supply. On its own, this would add to inflation. The ageing of societies is such a long-run process that a thorough discussion of its impact on inflation trends goes beyond the scope of this paper.

Chart 15: Eurozone participation rate (15 years and over, %)



Quarterly data. Not seasonally adjusted. Source: Statistical Office of the European Communities

Chart 16: US participation rate (16 years and over, %)



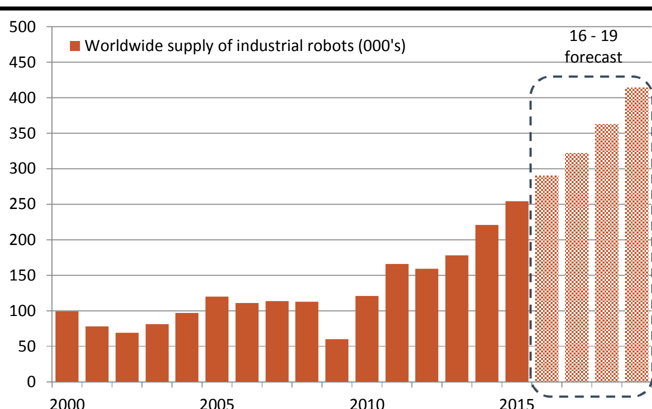
Quarterly data. Seasonally adjusted. Source: Bureau of Labor Statistics

The rise of the robots

Increased competition from new types of capital can weigh on wages

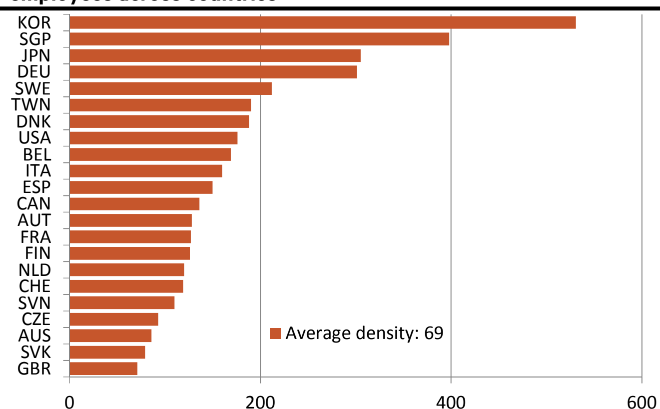
Technological progress is not new. Since the first industrial revolution that started in the UK some 250 years ago, workers have often been replaced by machines, usually to find new and often better paid jobs after some significant adjustment pain. In this sense, robots just continue a trend. However, they may still make a difference in the interim. First, automation seems to affect – or could potentially affect – many parts of the economy, extending well beyond the historical shifts from industry and into services, potentially even into domestic services. Second, employing robots – or upgrading the software of existing machines – often needs less of a capital investment than outfitting a factory with a new set of machines. Even in the age of caution, in which companies shy away more than before from sinking capital into big projects with uncertain returns, the smaller outlays for robots and new software are no major hurdle.[2]

Chart 17: Worldwide supply of robots intended for industrial use



Annual supply of industrial robots. 2016-19 represent IFR forecasts.
Source: IFR "World Robotics Report 2016"

Chart 18: Number of industrial robots per 10,000 manufacturing employees across countries



Source: IFR "World Robotics Report 2016"

If workers fear competition from robots they may bargain less hard for wage rises

Put differently: workers now face potential competition from a new source – robots (see charts 17 and 18). As a result, the tightness of the domestic labour market may not shape their wage demands very much. Skilled workers in, say, the European car industry may not be afraid that their company may replace them with a currently unemployed worker ready to do the job for less. But if they worry that companies may react to an excessive rise in wages by bringing on more robots and accelerating the ongoing process of automation, they could opt for wage moderation, even if the state of the domestic labour market indicates increased bargaining power of workers.

Outlook: Goldilocks can stay for a while

Inflation is not dead. Bad economic policies can still cause hyperinflation

Inflation is more subdued than before. Of course, it is not dead. It never will be. Disastrous economic policies such as those pursued by left-wing radicals in Venezuela can still cause hyperinflation. Any major currency devaluation, such as the slump of the Russian rouble in 2014-15, the Turkish lira in 2015-16 and the much more modest re-pricing of the UK economic outlook through the exchange rate in mid-2016, still show up in inflation. However, the forces holding down inflation in the developed world are powerful.

Inflation will edge up slowly in the post-Lehman upswing as caution fades

Inflation rates will likely continue to edge up much more slowly in the current post-Lehman economic upturn than in previous cyclical recoveries. Some of the factors restraining inflation are temporary. Most importantly, the age of caution will not last forever. As memories of the painful bust after the excessive credit boom before 2008 fade, households, companies and financial intermediaries are likely to return to more normal patterns of behaviour. Households and companies will dare to augment their spending by taking on more credit again, raising demand growth. In the same vein, fading memories of the post-2008 employment crisis can encourage workers to once again press their advantage in tightening labour markets.

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2 See 'The Digital Economy' by Fabian Hungerland, Dr Jörn Quitzau and Christopher Zuber (Berenberg; August 2017)

Trends in price inflation as well as wage inflation are becoming more global

Some factors that have changed inflation dynamics in the developed world are likely to stay with us for a long time. Short of a major surge in protectionism, globalisation will continue to offer efficiency-enhancing opportunities for a deeper division of labour, augmenting global supply. As a result, any imbalance between domestic demand and the domestic supply of goods and services will impact domestic consumer price inflation by less than in the past, as foreign suppliers can step into the breach more easily. The same holds for wage inflation as global supply chains as well as migration integrate the domestic labour market more tightly into a global labour market, leaving less room for a domestic spike in wage inflation. Meanwhile, new patterns of employment and the rise of robots also mean that traditional measures of labour market tightness, such as the rate of domestic unemployment, could have less an impact on wage inflation in any given country than before. To some extent, trends in consumer price inflation as well as wage inflation are becoming more global. And in a similar vein, new technologies that enhance transparency will continue to spread.

Expect central banks to continue to go-slow with any withdrawal of stimulus

To assess the outlook for inflation, we need to watch for signs that the age of caution is coming to an end. While excess and exuberance beget inflation, moderate economic growth at rates of c2% usually does not. Any sustained acceleration in credit growth could indicate that households and companies are starting to behave in a less-restrained way. The same holds for a potential acceleration of wage inflation. To prevent overheating, central banks would then have to reduce the amount of stimulus they provide more determinedly than they are doing – or planning to do – at the moment. So far, the US and the Eurozone are still offering a home to Goldilocks, who likes her porridge neither too hot nor too cold. As a result, expect central banks to continue to go-slow with any withdrawal of stimulus.

The US Fed is more likely than the ECB to eventually kill the Eurozone recovery

Thanks to the pause in growth in 2011 and 2012 caused by the euro crisis, the post-Lehman economic upswing is less mature in the Eurozone than it is in the US and the UK. We would hence expect to see potential signs of excess, exuberance and overheating first in the US or the UK rather than in the Eurozone. The fate of the US – unlike the fate of the much smaller UK – usually has a significant impact on confidence and investment intentions across Europe and the world. Any new US bust after a temporary boom would hit the Eurozone hard. The US Fed is more likely than the ECB to eventually kill the Eurozone recovery as a side-effect of stepping on the brakes to slow the US economy down.

The ECB is probably still two years away from its first hike in the refinancing rate

The ECB is probably still two years away from the first hike in its refinancing rate and may not find a reason to slow down the pace of aggregate demand growth for years thereafter. In the absence of any major political shock on either side of the Atlantic, or of dramatic policy mistakes such as a sudden lurch to massive protectionism, the Eurozone recovery will probably continue at a moderate pace until the Fed takes the punch bowl away in the US. But as even the US cycle has not entered the party stage yet, we do not expect that to happen within the next two or three years.

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Contacts

BERENBERG
PARTNERSHIP SINCE 1590

JOH. BERENBERG, GOSSLER & CO. KG

Internet www.berenberg.com

E-mail: firstname.lastname@berenberg.com

EQUITY RESEARCH

AEROSPACE & DEFENCE
Ryan Booker +44 20 3753 3074
Andrew Gollan +44 20 3207 7891
Charlotte Keyworth +44 20 3753 3013
Ross Law +44 20 3465 2692

AUTOMOTIVES
Cristian Dirpes +44 20 3465 2721
Alexander Haissl +44 20 3465 2749
Paul Kratz +44 20 3465 2678
Fei Teng +44 20 3753 3049

BANKS
Adam Barrass +44 20 3207 7923
Stephanie Carter +44 20 3207 3106
James Chappell +44 20 3207 7844
Andrew Lowe +44 20 3465 2743
Andreas Markou (EM) +44 20 3753 3022
Alex Medhurst +44 20 3753 3047
Eoin Mullany +44 20 3207 7854
Peter Richardson +44 20 3465 2681

BEVERAGES
Javier Gonzalez Lastra +44 20 3465 2719
Batuhan Karabekir (EM) +44 20 3465 2631
Matt Reid +44 20 3753 3075

BUSINESS SERVICES, LEISURE & TRANSPORT
Roberta Ciaccia +44 20 3207 7805
Najet El Kassir +44 20 3207 7836
Stuart Gordon +44 20 3207 7858
Josh Puddle +44 20 3207 7881
Kate Somerville +44 20 3753 3081
Julia Winarso +44 20 3465 2627

CAPITAL GOODS
Nicholas Housden +44 20 3753 3050
Sebastian Kuenne +44 20 3207 7856
Philippe Lorrain +44 20 3207 7823
Rizk Maidi +44 20 3207 7806
Horace Tam +44 20 3465 2726
Simon Toennessen +44 20 3207 7819

CHEMICALS
Sebastian Bray +44 20 3753 3011
Rikin Patel +44 20 3753 3080
Andrew Heap +44 20 3207 7918

CONSTRUCTION
Saravana Bala +44 20 3753 3043
Lush Mahendrarajah +44 20 3207 7896
Robert Muir +44 20 3207 7860
Olivia Peters +44 20 3465 2646

ENERGY
Yuriy Kukhtanych (EM) +44 20 3465 2675

FOOD MANUFACTURING AND H&PC
Rosie Edwards +44 20 3207 7880
Yordana Mavrodieva +44 20 3207 7817
Philip Patricha +44 20 3753 3039
Fintan Ryan +44 20 3465 2748
James Targett +44 20 3207 7873

FOOD RETAIL
Batuhan Karabekir (EM) +44 20 3465 2631
Dusan Milosavljevic +44 20 3753 3123

GENERAL MID CAP - DACH
Gunnar Cohrs +44 20 3207 7894
Martin Comtesse +44 20 3207 7878
Thomas Eble +44 20 3753 3014
Charlotte Friedrichs +44 20 3753 3077
Gerhard Orgonas +44 20 3465 2635
Benjamin Pfannes-Varrow +44 20 3465 2620
Julia Scheufler +44 20 3753 3016

GENERAL MID CAP - EU core
Flavien Hias +44 20 3465 2693
Aymeric Lang +44 20 3753 3037
Anna Patrice +44 20 3207 7863

GENERAL MID CAP - UK
Calum Battersby +44 20 3753 3118
Robert Chantry +44 20 3207 7861
Sam England +44 20 3465 2687

GENERAL MID CAP - UK (cont'd)
Ned Hammond +44 20 3753 3017
Omar Ismail +44 20 3753 3102
Ian Osburn +44 20 3207 7814
Edward James +44 20 3207 7811
Benjamin May +44 20 3465 2667
Owen Shirley +44 20 3465 2731

GENERAL RETAIL
Conrad Bartos +44 20 3753 3053
Camilla Mazzolini +44 20 3753 3042
Michelle Wilson +44 20 3465 2663

HEALTHCARE
Scott Bardo +44 20 3207 7869
Jakob Berry +44 20 3465 2724
Alistair Campbell +44 20 3207 7876
Klara Fernandes +44 20 3465 2718
Tom Jones +44 20 3207 7877
Joseph Lockey +44 20 3465 2730
Laura Sutcliffe +44 20 3465 2669

INSURANCE
Charles Bendit +44 20 3465 2729
Trevor Moss +44 20 3207 7893
Emanuele Musio +44 20 3207 7916
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Sami Taipalus +44 20 3207 7866

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Zuzanna Pusz +44 20 3207 7812

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Robert Berg +44 20 3465 2680
Laura Janssens +44 20 3465 2639
Alastair Reid +44 20 3207 7841
Sarah Simon +44 20 3207 7830

METALS & MINING
Alessandro Abate +44 20 3753 3029
Fawzi Hanano +44 20 3207 7910
Yuriy Vlasov +44 20 3465 2674

REAL ESTATE
Kai Klose +44 20 3207 7888
Tina Munda +44 20 3465 2716

TECHNOLOGY
Jean Beaubois +44 20 3207 7835
Josep Bori +44 20 3753 3058
Georgios Kertsos +44 20 3465 2715
Gal Munda +44 20 3465 2746
Richard Odumosu +44 20 3207 7851
Tammy Qiu +44 20 3465 2673

TELECOMMUNICATIONS
Ondrej Cabejsek (EM) +44 20 3753 3071
Nicolas Didio +44 20 3753 3091
Usman Ghazi +44 20 3207 7824
Siyi He +44 20 3465 2697
Laura Janssens +44 20 3465 2639
Paul Marsch +44 20 3207 7857

THEMATIC RESEARCH
Nick Anderson +44 20 3207 7838
Oyvind Bjerke +44 20 3753 3082
Asad Farid +44 20 3207 7932
Robert Lamb +44 20 3465 2623
James Sherborne +44 20 3753 3073

TOBACCO
Jonathan Leinster +44 20 3465 2645

UTILITIES
Oliver Brown +44 20 3207 7922
Andrew Fisher +44 20 3207 7937
Neha Saxena +44 20 3753 3048
Lawson Steele +44 20 3207 7887

ECONOMICS
Florian Hense +44 20 3207 7859
Carsten Hesse (EM) +44 20 3753 3001
Kallum Pickering +44 20 3465 2672
Holger Schmieding +44 20 3207 7889

EQUITY SALES

SPECIALIST SALES

AEROSPACE & DEFENCE, CAPITAL GOODS
Bruna Zugliani +44 20 3207 7818
AUTOMOTIVE & THEMATICS
Chris Armstrong +44 20 3207 7809
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Iro Papadopoulou +44 20 3207 7924
Calum Marris +44 20 3753 3040
BUSINESS SERVICES, LEISURE & TRANSPORT
Rebecca Langley +44 20 3207 7930
CONSTRUCTION,CHEMICALS, METALS & MINING
James Williamson +44 20 3207 7842
CONSUMER STAPLES
Rupert Trotter +44 20 3207 7815
CONSUMER DISCRETIONARY
Victoria Maigrot +44 20 3753 3010
HEALTHCARE
Abigail James +44 20 3753 3078
MEDIA & TELECOMMUNICATIONS
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SALES

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Nina Buechs +49 69 91 30 90 735
André Grosskurth +49 69 91 30 90 734
Florian Peter +49 69 91 30 90 740
Joerg Wenzel +49 69 91 30 90 743

UK
Alexandra Clément +44 20 3753 3018
Fabian De Smet +44 20 3207 7810
Karl Hancock +44 20 3207 7803
Sean Heath +44 20 3465 2742
David Hogg +44 20 3465 2628
Gursumeet Jhaj +44 20 3753 3041
Peter Kaineder +44 20 3753 3062
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James McRae +44 20 3753 3036
David Mortlock +44 20 3207 7850
Eleni Papoula +44 20 3465 2741
Bhavin Patel +44 20 3207 7926
Kushal Patel +44 20 3753 3038
Richard Payman +44 20 3207 7825
Clémence Peyraud +44 20 3465 2651
Christopher Pyle +44 20 3753 3076
Joanna Sanders +44 20 3207 7925
Mark Sheridan +44 20 3207 7802
George Smibert +44 20 3207 7911
Alexander Wace +44 20 3465 2670
Paul Walker +44 20 3465 2632

FRANCE
Thibault Bourgeat +33 1 5844 9505
Alexandre Chevassus +33 1 5844 9512
Dalila Farigoule +33 1 5844 9510
Benjamin Voisin +33 1 5844 9507

SCANDINAVIA
Marco Weiss +49 40 350 60 719

SWITZERLAND, AUSTRIA & ITALY
Andrea Ferrari +41 44 283 2020
Carsten Kinder +41 44 283 2024
Gianni Lavigna +41 44 283 2038
Jamie Nettleton +41 44 283 2026
Yeannie Rath +41 44 283 2029
Benjamin Stillfried +41 44 283 2033

CRM
Laura Cooper +44 20 3753 3065
Jessica Jarmyn +44 20 3465 2696
Rita Pilar +44 20 3753 3066
Greg Swallow +44 20 3207 7833

CORPORATE ACCESS
Lindsay Arnold +44 20 3207 7821
Jennie Jiricny +44 20 3207 7886
Stella Siggins +44 20 3465 2630

EVENTS
Laura Hawes +44 20 3753 3008
Suzy Khan +44 20 3207 7915
Charlotte Kilby +44 20 3207 7832
Natalie Meech +44 20 3207 7831
Rebecca Mikowski +44 20 3207 7822
Ellen Parker +44 20 3465 2684
Sarah Weyman +44 20 3207 7801

SALES TRADING

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Tim Storm +49 40 350 60 415

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Vincent Klein +33 1 58 44 95 09
Antonio Scuotto +33 1 58 44 95 03

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Mike Berry +44 20 3465 2755
Stewart Cook +44 20 3465 2752
Mark Edwards +44 20 3753 3004
Tom Floyd +44 20 3753 3136
Tristan Hedley +44 20 3753 3006
Peter King +44 20 3753 3139
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Simon Messman +44 20 3465 2754
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EQUITY TRADING

HAMBURG
David Hohn +49 40 350 60 761
Gregor Labahn +49 40 350 60 571
Lennart Pleus +49 40 350 60 596
Asbjoern Rogge +49 40 350 60 798
Marvin Schweden +49 40 350 60 576
Omar Sharif +49 40 350 60 563
Philipp Wiechmann +49 40 350 60 346
Christoffer Winter +49 40 350 60 559

LONDON
Edward Burlison-Rush +44 20 3753 3005
Richard Kenny +44 20 3753 3083
Chris McKeand +44 20 3207 7938

ELECTRONIC TRADING
Jonas Doehler +44 40 350 60 391
Matthias Führer +49 40 350 60 597
Matthias Schuster +44 40 350 60 463

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SALES
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Zubin Hubner +1 646 445 5572

SALES (cont'd)
Michael Lesser +1 646 445 5575
Jessica London +1 646 445 7218
Ryan McDonnell +1 646 445 7214
Emily Mouret +1 415 802 2525
Peter Nichols +1 646 445 7204
Kieran O'Sullivan +1 617 292 8292
Rodrigo Ortigao +1 646 445 7202
Matt Waddell +1 646 445 5562

CRM
Monika Kwok +1 646 445 4863

CORPORATE ACCESS
Olivia Lee +1 646 445 7212
Tiffany Smith +1 646 445 4874

SALES TRADING
Christopher Kanian +1 646 445 5576
Lars Schwartau +1 646 445 5571
Brett Smith +1 646 445 4873
Bob Spillane +1 646 445 5574

ECONOMICS
Mickey Levy +1 646 445 4842
Roiana Reid +1 646 445 4865