



Global Economy Watch

The changing dynamics of the Eurozone labour market



Dear readers,

Ten years after the Global Financial Crisis, the recovery is underway and output levels have surpassed pre-crisis levels in most advanced economies. But how are labour markets performing?

At a high level, they have (almost) never been better. Figure 1 shows that the Organisation for Economic Co-operation and Development (“OECD”) harmonised unemployment rate is at its lowest ever recorded rate of 5.4%. But despite tightening labour markets, wages have not yet picked up as economic theory would predict. This has been a key feature in large economies like the US and the UK—we looked at the latter in more detail in our [UK Economic Outlook report](#) last July.

In this edition, we look closely at the relationship between unemployment and wage growth—traditionally described as the ‘Phillips Curve’—for the Eurozone. Looking at the high-level statistics, the Eurozone unemployment rate currently stands at the 8.5% mark— but this doesn’t reveal the wide variation across member states from around 3.5% in Germany to over 20% in Greece.

Our analysis highlights some of the potential reasons for the decoupling of wage inflation from unemployment rates, including:

- Structural factors such as the digitalisation of work and erosion of the bargaining power of workers (in part due to reduced trade union membership);
- The creation of a single monetary authority in the Eurozone since 1999, which has lowered inflation expectations in some markets; and
- The accession of the lower income Eastern European economies which effectively increased the supply of labour available to Eurozone (and European Union) economies.

On a broader note, we continue to monitor economic developments in the Eurozone, which continues to grow at robust rates—the latest flash estimate shows the bloc grew by 0.4% quarter-on-quarter in the first three months of the year.

However, our analysis of the latest set of detailed national accounts data shows that the Eurozone is increasingly reliant on external demand as a key source of GDP growth. This could make the bloc more susceptible to uncertainties in the international trade arena and could explain some of the softening of the survey data which came out last month.

By comparison, the US economy grew by 0.6% quarter-on-quarter for the first three months of the year, whereas the UK just by 0.1% quarter-on-quarter. We will be monitoring these for any revisions in the coming weeks.

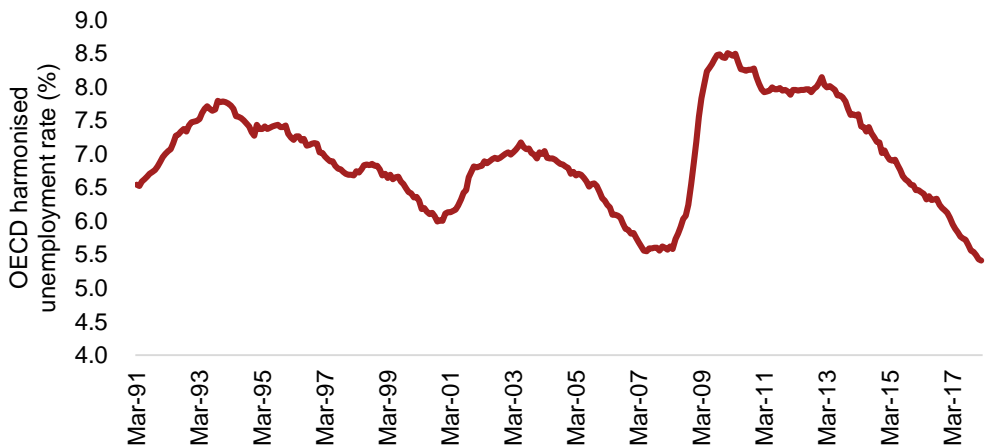


Kind regards

Barret Kupelian

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Fig 1: The OECD unemployment rate is currently at its lowest level since records began



Sources: OECD, Thomson Datastream



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Economic update: Eurozone economic performance remains reliant on external demand

Eurozone GDP is growing at robust rates...

Ten years on from the global financial crisis of 2008, the Eurozone is exhibiting signs of broad-based growth. Last year, for example, the bloc grew at an estimated rate of 2.3% —the fastest rate of growth recorded since the financial crisis. The latest breakdown of the national accounts shows a more detailed picture of the sources of growth. Our analysis of the data in Figure 2 shows that:

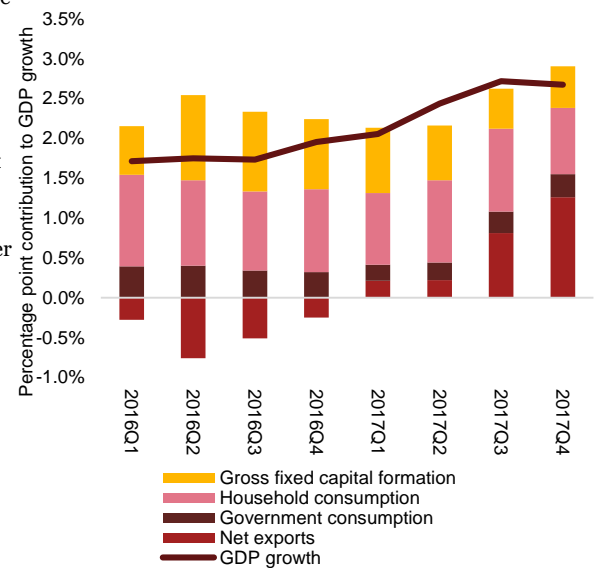
- Household consumption held up as a key source of economic growth throughout the period, but there are signs that households remain cautious in their spending habits. This was reflected in the gradual uptick in the savings ratio from about 11.9% in the last quarter of 2016 to about 12.2% in the fourth quarter of 2017—despite about a million jobs being created in the Eurozone since the first quarter of 2016.
- The contribution of gross fixed capital formation (or investments) was the biggest driver of economic growth in 2016.
- Other sources of growth like government consumption held steady as austerity has eased and government budgets are now growing in line with economic performance.

...with net exports the bloc's strong and weak point

However, the most impressive turnaround recorded is that of net exports, which swung from a negative contribution of almost one percentage point in the second quarter of 2016 to a positive contribution of 1.3 percentage points in the fourth quarter of 2017 (see Figure 2). Geographically, most of this was driven by the peripheral economies (particularly in the tourism sector where most experienced a recorded breaking year).

Looking to the future, net exports highlight both the Eurozone's key strength and vulnerability. On the one hand, strong growth in the Eurozone's key exports markets is expected to continue. But at the same time, reliance on external demand as a key source of economic growth means the Eurozone is more susceptible to uncertainty and potential disruption in the global trading system.

Fig 2: The Eurozone's most impressive feat has been the turnaround in net exports



Sources: PwC analysis, Eurostat

Do global trade rules favour larger businesses?

Global institutions have supported merchandise trade growth

Since the foundation of the World Trade Organization (WTO) in 1995, global merchandise trade has increased by over 200%, facilitated by a reduction in average tariffs. More importantly, this has been accompanied by the establishment of a rules-based framework making trade practices stable and predictable. But how has trade performance differed between larger and smaller businesses?

The data suggest that larger businesses are more likely to export

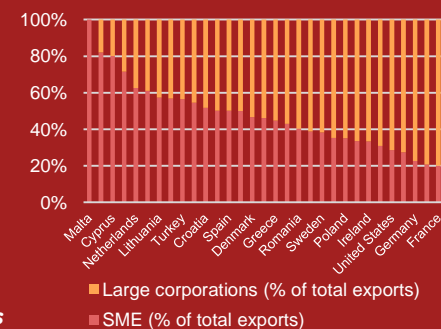
Our analysis of data (see Figure 3) for a selection of OECD and other European countries shows that larger businesses do indeed tend to be more active in the export market compared to small and medium sized enterprises (SMEs). This makes sense as large multi-national businesses—particularly those in the manufacturing sector—tend to have widely spread production processes with components crossing various international borders as part of the growing prevalence of global value chains (“GVC”).

There are also other reasons why larger businesses are naturally more inclined to export, which include:

Easier access to international capital markets, which is important for funding working capital and capital expenditure, making them more cost-efficient and competitive in international markets; and

Economies of scale (possibly because of a

Fig 3: SME contribution to OECD economies



Sources: PwC analysis, CRED, World Bank

patented product or production technique)

which allow them to spread their fixed costs over a large volume of output.

Smaller businesses tend to be more focused on services which are less tradeable

But this does not give the complete picture. According to a policy brief by the OECD*, smaller businesses tend to be more active in the services sector which, in turn, tend to be less tradeable. This, however, is not an iron-clad rule. For example, in Cyprus and in Malta, most small businesses are focused in the tourism, travel and accommodation sectors, which are much more export-oriented. Similarly, the *Mittlestand* in Germany and Austria or the highly skilled engineering businesses in the North of Italy are highly export oriented businesses despite their relatively small size.

But technological changes are supporting growth in cross-border services activity

Despite the absence of a globally agreed set of standards for trade in services, rapid and sustained technological advancements have boosted services trade. The International Monetary Fund (“IMF”), for example, estimates that cross-border trade in services has grown steadily in the past forty years and now accounts for about one fifth of global exports.

The key sector that has led growth in cross-border activity here is the “modern services” sector, which covers activities that can be delivered at a distance including telecommunications, financial intermediation and professional services. The export outlook for these sectors continues to remain bright.

In conclusion, larger corporations are expected to be more active in the international trade space because of factors inherent in their size. SMEs, which tend to be more active in the services sectors, tend to trade less internationally (with the exception of some industries mentioned above), partly because international services standards do not yet exist here to the same degree as in manufacturing. However, technological change is making the selling of cross-border services easier over time, which should help more SMEs to export in these sectors.

**Small and Medium-Sized enterprises: Local strength, Global Reach*, OECD (2000)

Why has the Eurozone Phillips Curve gone flatter and lower?

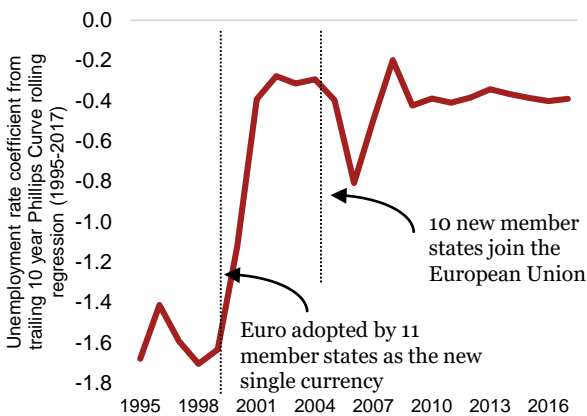
Fig 4: Phillips curve has been flattening over the past 20 years



Sources: PwC analysis, Eurostat

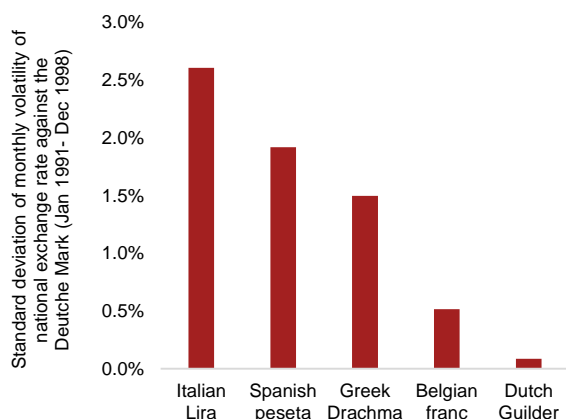
*Due to the unavailability of historic data we used nominal compensation which includes wages, salaries in cash and in kind and employer's social security contributions.

Fig 5: The Phillips Curve turned flatter after the introduction of the Euro



Sources: PwC analysis, Eurostat

Fig 6: Historically, peripheral Eurozone economies have had high levels of FX volatility with their own national currencies



Sources: PwC analysis, Thomson Datastream

Personnel costs make up a significant component of business costs, while wages and salaries also make up a key source of consumer demand in the economy, so it is important to be able to predict wage inflation. Traditional economic theory suggests that as the unemployment rate decreases and the labour market tightens, wage inflation should pick up. This relationship is generally described as the 'Phillips Curve' after the economist (A.W. Phillips) who first documented this empirical regularity.

Higher wage inflation tends to feed through into higher consumer price inflation through both a demand effect (higher purchasing power for households) and a supply effect (higher cost base for businesses). In anticipation of this, central banks may start to raise interest rates in response to signs that unemployment is falling because they expect this will feed through into higher wage and eventually price growth.

Lately, however, economists have been puzzled by the state of the labour market in the UK and US, which seems to defy the above logic. In the UK, for example, the unemployment rate has fallen to just over 4%, the lowest level since the mid-1970s, but wage growth remains relatively modest. Is the Eurozone in a similar position?

Eurozone Phillips curve has gone lower and flatter

To answer this question, we have modelled the Phillips Curve for the Eurozone as a whole since the mid-1980s (see Figure 4). We find that the relationship between the unemployment rate and a proxy for wages in the Eurozone can be characterised by three distinct periods:

- 1986-1998: From when the Single European Act was signed (where the EU committed to creating the Single Market) to the launch of the single currency
- 1999-2008: From the launch of the euro to the beginning of the global financial crisis ("GFC")
- 2009-2017: From the GFC to the present

As can be seen from Figure 4, the relationship between the unemployment rate and wage growth has become much flatter in the 1999-2008 and 2009-2017 periods than it was in 1986-1998, when a downward-sloping, higher Phillips curve did seem to be in operation (albeit with significant variation around the line of best fit). As well as the flattening of the curve, we have also seen the Phillips curve shift downwards over time as wage growth rates have declined.

Structural factors help explain some of the movement...

A number of structural factors help to explain the downward shift of the Phillips Curve, some of which are common to most advanced economies. These include the gradual decline of unionisation over the period, partly driven by shifts in the structure of the economy and partly by policy changes (including privatisation). These changes reduce labour's bargaining power and could contribute to flattening the Phillips curve. Similarly, the digitalisation of work through rapid technological change could be another contributor to the flattening of the curve, as a wider variety of work can now be carried out remotely, so making labour supply potentially more elastic.

...but the creation of the European Central Bank has also had an effect

However, what our analysis also shows is that the transfer of authority to set monetary policy from the national central banks to the European Central Bank ("ECB") in 1999 has also had a material impact on the relationship between compensation and the unemployment rate. Specifically, our analysis suggests (see Figure 5) that two key events affected the Phillips Curve through the following channels:

- **Lowering inflation expectations:** Pushed the Phillips Curve downwards for a given rate of unemployment as workers' inflation expectations were adjusted downwards towards the newly established ECB's target of "close to, but below 2%" particularly in the historically high inflation Southern Eurozone economies which also experienced high levels of foreign currency volatility (see Figure 6); and
- **Increase labour supply:** Made the Phillips Curve less steep by gradually opening up the labour to the newly admitted lower-income Eastern European economies. This key development made labour supply gradually more elastic over time.

What does this mean for the future? Assuming no further structural change, the above analysis suggests that labour market slack is unlikely to be the key driver of wage growth in the future. This makes other factors like structural changes to boost labour productivity growth rates more important in the future to improve wage growth prospects in the Eurozone.

Projections: June 2018

	Share of 2016 world GDP		Real GDP growth			Inflation		
	PPP	MER	2018p	2019p	2020-2024p	2018p	2019p	2020-2024p
Global (Market Exchange Rates)		100.0%	3.3	3.1	2.9	2.6	2.5	2.4
Global (PPP rates)	100.0%		3.8	3.7	3.5	3.0	2.9	2.8
G7	31.0%	47.1%	2.2	1.9	1.7	2.0	1.9	1.9
E7	36.9%	25.8%	5.5	5.4	5.1	3.3	3.4	3.5
United States	15.5%	24.7%	2.8	2.3	2.0	2.3	2.2	2.1
China	17.8%	14.9%	6.5	6.3	5.9	2.3	2.4	2.6
Japan	4.4%	6.6%	1.0	0.8	0.6	0.5	1.1	1.3
United Kingdom	2.3%	3.5%	1.3	1.6	1.8	2.5	2.2	2.1
Eurozone	10.4%	13.9%	2.2	2.0	1.8	1.9	1.7	1.6
France	2.3%	3.3%	2.1	1.9	1.8	2.6	2.1	1.8
Germany	3.3%	4.6%	2.4	2.1	1.9	2.1	1.7	1.8
Greece	0.2%	0.3%	2.0	2.1	1.5	1.0	1.1	1.7
Ireland	0.3%	0.4%	3.5	3.2	2.8	0.9	1.3	1.9
Italy	1.9%	2.5%	1.3	1.2	1.2	1.2	1.4	1.2
Netherlands	0.7%	1.0%	2.6	2.3	1.9	1.6	1.9	1.6
Portugal	0.2%	0.3%	2.1	1.9	1.3	1.4	1.5	1.4
Spain	1.4%	1.6%	2.8	2.5	2.0	1.6	1.6	1.4
Poland	0.9%	0.6%	3.7	3.4	3.0	2.1	2.6	2.3
Russia	3.2%	1.7%	1.7	1.7	1.7	4.2	4.1	4.2
Turkey	1.7%	1.1%	3.2	3.8	3.5	8.4	8.1	7.0
Australia	1.0%	1.7%	2.9	3.0	2.8	2.2	2.5	2.5
India	7.2%	3.0%	7.4	7.6	7.0	4.5	5.0	5.0
Indonesia	2.5%	1.2%	5.3	5.4	5.2	4.0	3.8	4.3
South Korea	1.6%	1.9%	2.9	2.7	2.8	1.8	2.0	2.0
Argentina	0.7%	0.7%	3.0	3.2	3.2	19.5	-	-
Brazil	2.6%	2.4%	2.2	2.4	2.6	4.1	4.2	4.5
Canada	1.4%	2.0%	2.2	2.0	2.0	2.1	2.0	2.0
Mexico	1.9%	1.4%	2.1	2.2	2.5	4.2	3.9	3.0
South Africa	0.6%	0.4%	1.3	1.5	3.0	5.3	5.6	5.4
Nigeria	0.9%	0.5%	2.0	3.4	4.8	12.1	10.7	9.0
Saudi Arabia	1.5%	0.8%	1.3	1.9	3.1	3.7	3.0	2.3

Sources: PwC analysis, National statistical authorities, Datastream and IMF. All inflation indicators relate to the Consumer Price Index (CPI). Argentina has recently launched a new CPI measure, which only contains data from April 2016. Therefore we only project inflation for 2017, and will provide 2018 and 2019-2023 projections once a longer series is available. Note that the tables above form our main scenario projections and are therefore subject to considerable uncertainties. We recommend that our clients look at a range of alternative scenarios. PPP refers to "purchasing power parity" and MER refers to "market exchange rates".

Interest rate outlook of major economies

	Current rate (Last change)	Expectation	Next meeting
Federal Reserve	1.75% (March 2018)	Further gradual tightening during the year	June 12-13
European Central Bank	0.00% (March 2016)	No rate rise for the foreseeable future	June 14
Bank of England	0.50% (November 2017)	Further rate rise expected before end of 2018	June 21



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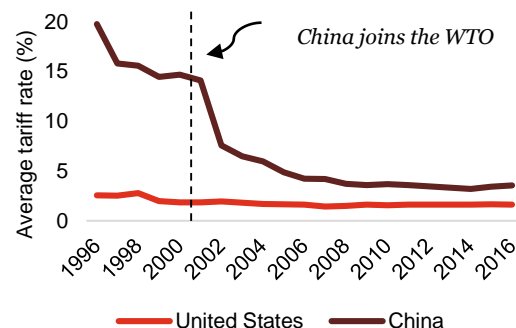
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Chart of the month

As part of joining the WTO, China committed to significantly reduce its average tariff rate levels. However, these tariff reductions mainly impacted China's merchandise trade. Recently the Chinese leadership has signalled its intent of opening up to foreign ownership some of its service sectors.

We will be monitoring these developments for any changes in the foreseeable future.

Average tariff rates in the United States and China have been falling



Source: World Bank

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