

Economic Research:

# Why Wages And Core Inflation Are Strengthening In The Eurozone And U.K.

November 13, 2018

## Key Takeaways

**Econometrical evidence suggests that tightening labor markets are the main factor behind the current acceleration in earnings, both in the eurozone and in the U.K.**

Productivity gains only play a marginal role. Looking forward, as a further decline in unemployment is on the cards, we expect wages to rise by 2.3% in 2018, 2.6% in 2019, and 2.7% in 2020 in the eurozone.

**In recent years, structural factors have dragged on wage dynamics.** To name a few of them, population aging, globalization, and the decline of trade union density and collective wage bargaining have been among the structural brakes. Subdued inflation expectations have been another factor of wage moderation over the past years. Now, however, as inflation expectations tend to follow past inflation dynamics, rising consumer price dynamics look set to bolster earnings growth in the years to come.

**The pass-through of earnings' growth to inflation is alive and well in the eurozone and the U.K.** Higher wage growth, not driven by productivity, is already translating into rising unit labor costs. In the eurozone, a 1 percentage point (pp) rise in annual wage growth boosts core inflation by 0.2 (pp). As long as the recovery matures and employment continues to rise, producers will become more likely to offset the erosion of their margin share in higher selling prices.

**Rising core inflation will continue to underpin the European Central Bank's normalization of monetary policy.** We think the central bank is unlikely to change course just based on recent market turmoil and political developments. We expect it to exit quantitative easing as scheduled in December and raise rates for the first time in the third quarter of 2019.

## SENIOR ECONOMIST

Marion Amiot

London

+ 44 20 7176 0128

marion.amiot  
@spglobal.com

## EMEA CHIEF ECONOMIST

Sylvain Broyer

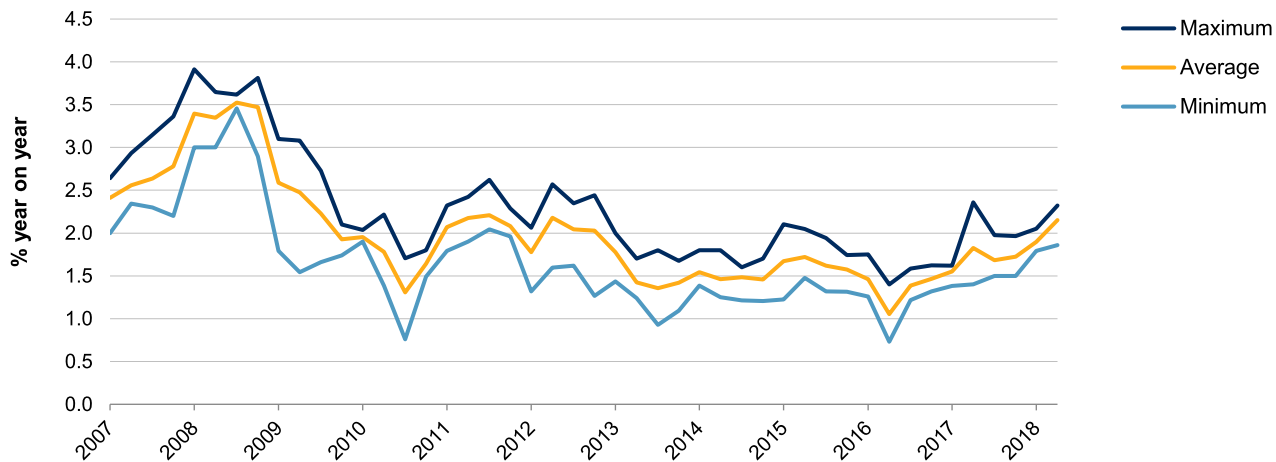
Frankfurt

(49) 69-33-999-156

sylvain.broyer  
@spglobal.com

Chart 1

### Wages In The Eurozone Are Rising At Their Fastest Pace In Six Years



Note: Range of wage growth - including hourly wages, negotiated wages and wages per employee.

Sources: Eurostat, ECB, S&P Global Ratings.

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After almost five years of stagnating wages in the eurozone, wage growth has been on an upward trend since the start of the year (see chart 1). Trade unions have negotiated significant wage increases in Germany, Spain, and France, while governments have lifted the statutory minimum wage by 4% in Spain and Portugal, and by 4.4% in the U.K. Even in Italy, where growth has remained well below the eurozone average, wages were up 1.6% annually in the second quarter of 2018. In Germany, the government recently decided to increase the minimum wage by 4% as of January 2019 and a further 1.7% in 2020. To pinpoint the main drivers of this recent wage increase, we estimated a so-called "Wage Phillip's Curve": we looked at the relationship between earnings' growth, labor market slack, inflation expectations, and productivity. We focused on the eurozone, Germany, France, Italy, Spain, the Netherlands, and the U.K.

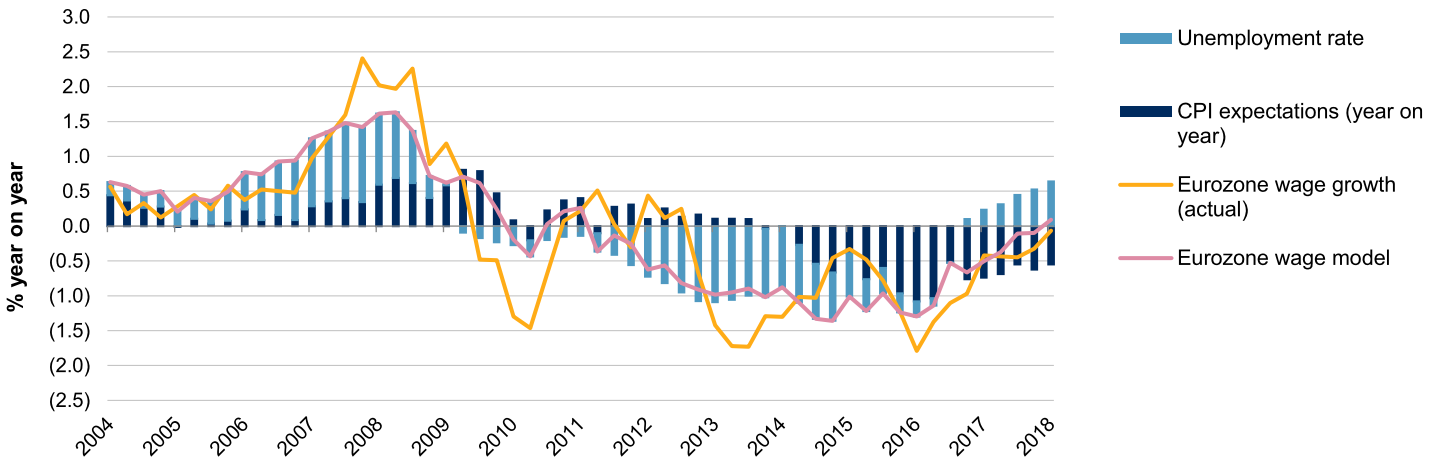
Our findings, illustrated in table 1 and charts 2 and 3, suggest the following:

**Currently, a tightening labor market is the main driver of rising wage growth across economies.**

In the eurozone, the reduction in the unemployment rate explains more than two-thirds of the increase in wages since the second quarter of 2017 (see chart 2) and around three-quarters in the U.K. (see chart 3). Interestingly, except for Spain, wider measures of labor market slack, such as a larger share of part-time and temporary contracts in total employment, do not have a significant impact on wage growth. Among the countries we looked at, Spain is the only one in which firms seem to use temporary contracts and part-time employment as a tool to smooth the economic cycle. The share of temporary contracts decreases in times of crisis as jobs are shed, and increases in the recovery period as jobs are created.

Chart 2

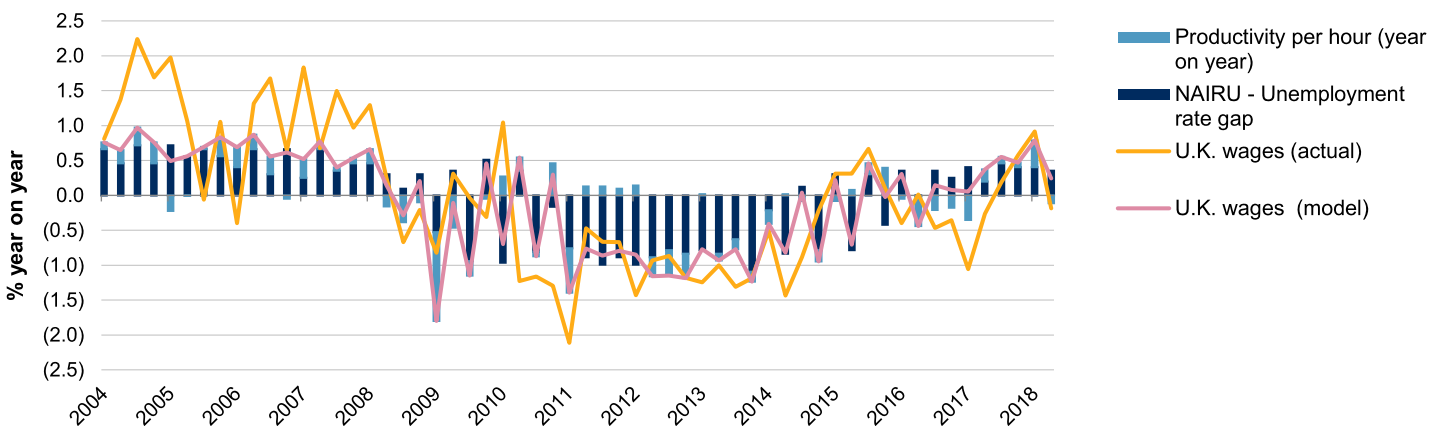
**Our Eurozone Wage Phillip's Curve Suggests Labor Market Tightening Is Behind The Recent Wage Increases**



Note: All series have been normalized and standardized to estimate the model. CPI--Consumer price index. Sources: S&P Global Ratings. Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

Chart 3

**U.K. Earnings Have Risen With Decreasing Unemployment And Some Productivity Improvements, But Were Negatively Impacted By Brexit Uncertainty**



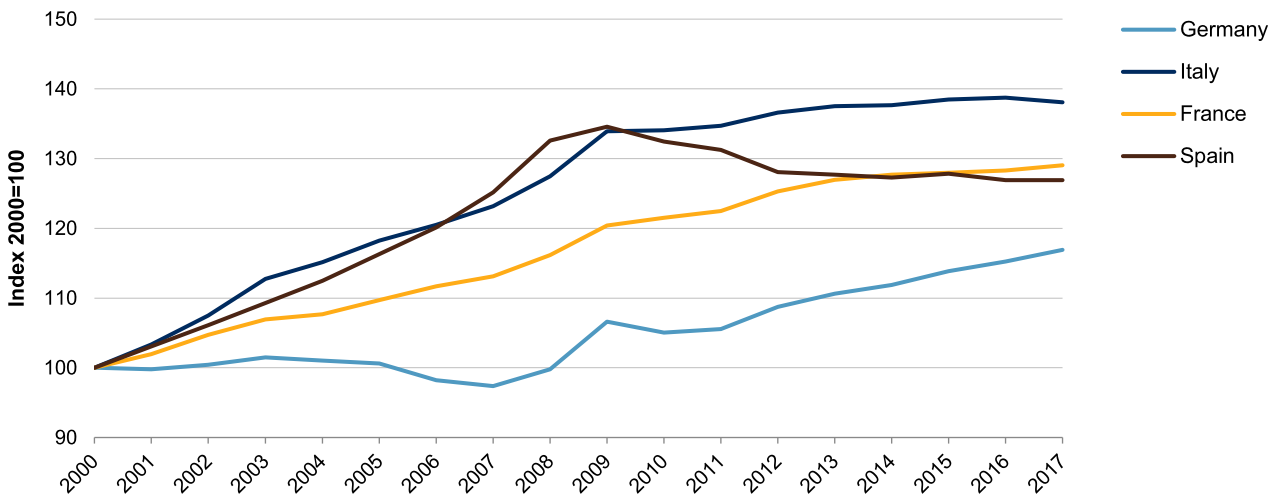
Note: All series have been normalized and standardized to estimate the model. NAIRU--Non-accelerating inflation rate of unemployment. Sources: S&P Global Ratings. Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

**Although higher inflation expectations have lately contributed to rising wages, they continue to weigh on earnings' growth in the eurozone.** After consistently falling between the summer of 2014 and the autumn of 2016--reflecting the sustained period of low inflation driven by lower energy prices--inflation expectations in the eurozone have recovered to 1.7% since the end of 2017. However, this remains below the ECB's inflation target of close to but below 2% and at odds with the rebound of headline inflation to 2.0%-2.1% since this summer. This suggests that the de-anchoring of long-term inflation expectations since 2014 is still having a negative impact on wage negotiations. In the U.K., by contrast, inflation expectations do not have a significant impact on earnings' growth, as wage growth is not indexed on past inflation.

**Productivity growth is not a significant driver of wages, except in France, the Netherlands, and the U.K.** First, this reflects few productivity improvements since the financial crisis. Output per hour is only 8% above that in 2008 in the eurozone and 3% in the U.K. in the second quarter of 2018. Second, structural reforms aiming to restore competitiveness through wage moderation in many eurozone countries (such as the decentralization of wage bargaining or public sector wage cuts) explain why productivity has not been reflected in wage growth in the sample we considered (2004-2018). Wages are now converging back to the productivity trend in Spain and Germany, having risen faster than productivity in Spain and slower than productivity in Germany in the early 2000s (see chart 4). This is in sharp contrast with Italy, where wages have risen, in spite of a stagnation in productivity; and wnd with France, where a gap has opened up between wage growth and productivity trends since the crisis. This also likely explains why the economic and labor market recovery have been more sluggish in France and Italy.

Chart 4

**Labor Market Reforms Have Led To Wage Moderation In Spain And Germany, Blurring The Link Between Productivity And Wages**  
Hourly nominal unit labor costs



Sources: Eurostat, S&P Global Ratings.

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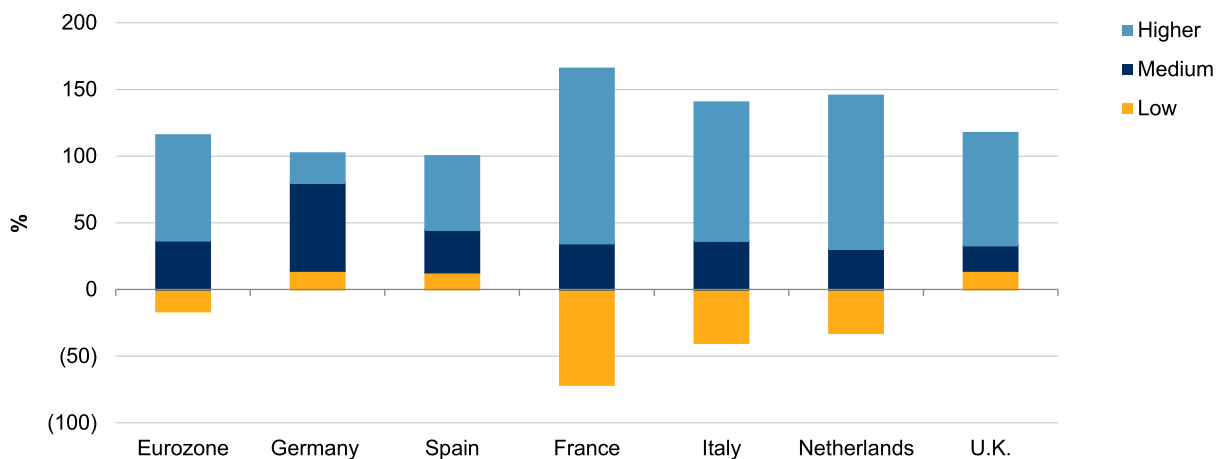
## Aging And The Move Away From Collective Bargaining Are Still Putting Some Downward Pressure On Wages

Apart from cyclical factors, structural institutional and demographic shifts not captured by our model explain why wage growth has remained sluggish in the past few years. Looking at employment creation by skill level since the start of the labor market recovery in 2013, it is striking to see that most jobs created have been taken up by higher skilled workers (workers with a university degree; see chart 5). Those would usually tend to ask for higher wages, yet our models point to structural downward pressure on wages since 2013, as the residuals tend to be negative.

Chart 5

### Despite An Employment Creation Mainly Focused On Higher Skills, Wage Growth Has Been Under Structural Downward Pressure Since 2013

Net employment increase by skill, 2013-2017



Sources: Eurostat, S&P Global Ratings.

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Other factors at play include:

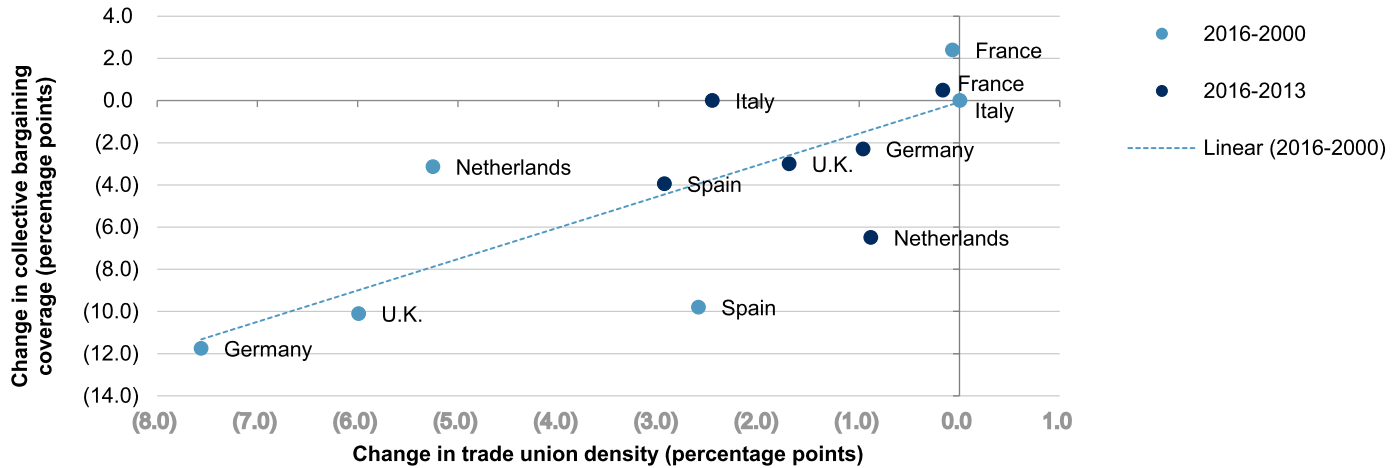
**Demographics:** A rising labor supply linked to higher immigration, but also the increased participation of senior workers and women in the labor market has put some downward pressure on wages. Meanwhile, a higher share of senior employment weighs on wage growth because this group has usually already reached high levels of productivity and compensation. Moreover, senior workers may prefer more leisure to higher wages.

**The shift away from collective wage bargaining:** Aside from France and Italy, labor market reforms have sought to give firms more flexibility to adjust to the economic cycle, in part by allowing them to strike wage agreements different to their sector-wide agreements. This has led to decreasing wage bargaining coverage and trade union density (see chart 6), arguably weighing on workers' bargaining power and thus their wage growth.

**Globalization:** This means that European workers are in competition with other workers in the world, and thus might rather agree to lower wage increases than see their jobs offshored.

Chart 6

**Collective Wage Bargaining Has Been On A Downward Trend Since 2000, Weighing On Workers' Bargaining Power**



Sources: OECD, S&P Global Ratings.

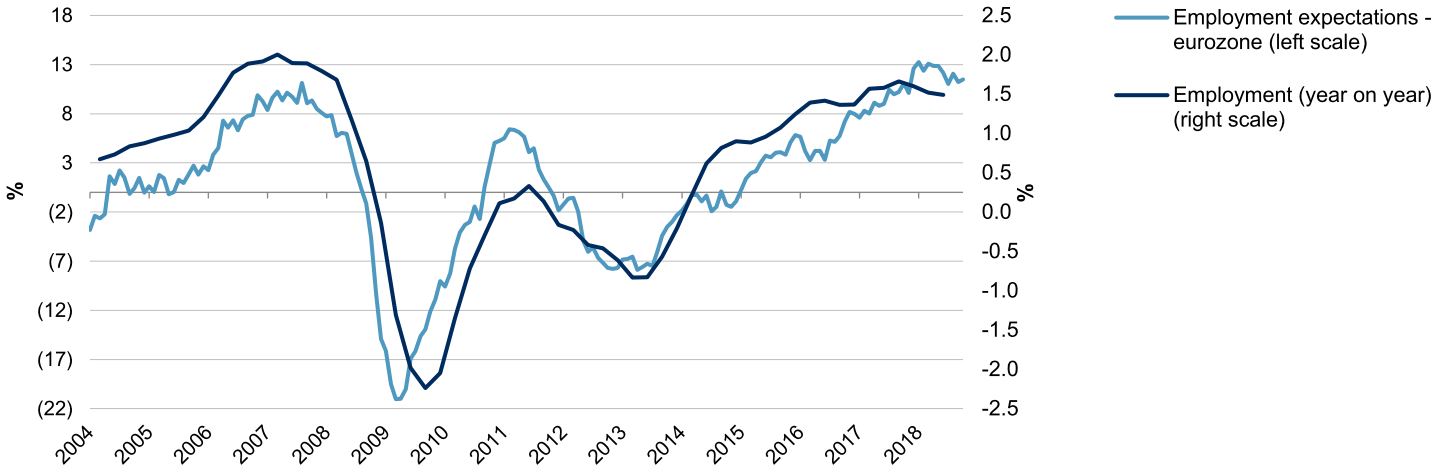
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**Higher Wage Growth Should Lead To Higher Underlying Prices**

Looking forward, wage growth will continue to find support in a tightening labor market. Even if economic growth has slowed this year, employment expectations and job vacancy rates remain high and consistent with solid job creation in the eurozone (see chart 7). We expect the unemployment rate to fall further in 2019 to 7.8% from an expected 8.3% this year. According to our model, this should add 0.2 percentage points (pp) to annual wage growth in the eurozone by the end of 2019. Meanwhile, as inflation expectations tend to be anchored at past inflation growth, the higher headline inflation seen this year should translate into higher wage growth in 2019, especially in sectors in which tariff agreements have not been reviewed this year (in Italy, Spain, and Germany, most tariff agreements are reviewed less frequently than once per year). Other elements not taken into account by our model, such as inequality concerns translating into further minimum wage increases planned for next year should also boost wage growth. Overall, we expect wages to rise by 2.3% in 2018, 2.6% in 2019, and 2.7% in 2020 in the eurozone.

Chart 7

**Employment Expectations Remain High And Consistent With Strong Job Creation**



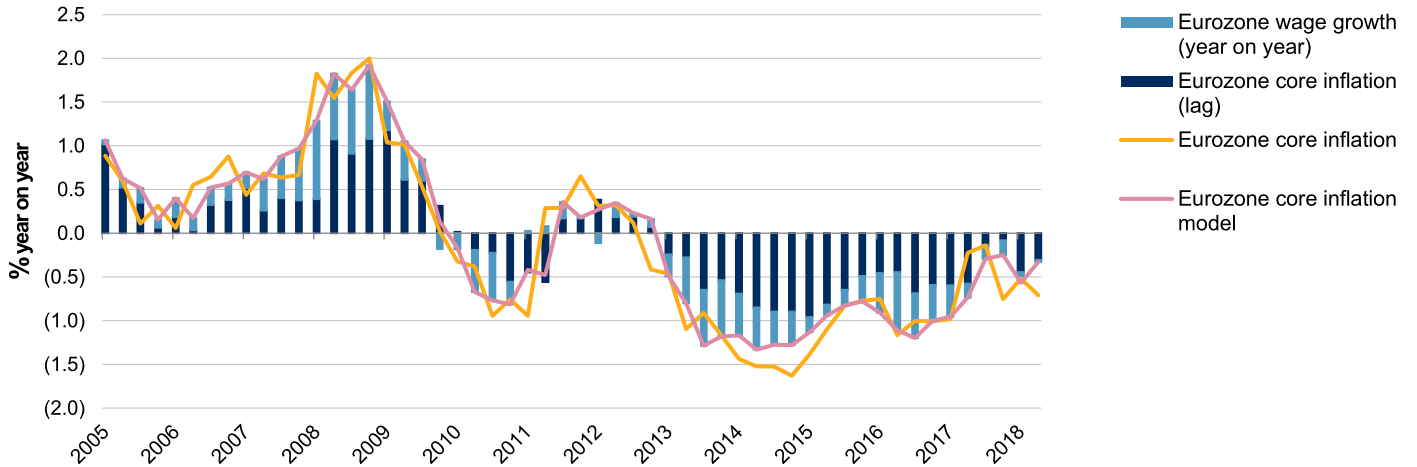
Sources: Eurostat, European Commission, S&P Global Ratings.  
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Higher earnings' growth will eventually translate into higher inflation as well. Against this backdrop, the ECB is unlikely to change course just based on recent market turmoil and political developments. We expect that it will exit quantitative easing as scheduled in December and raise rates for the first time in the third quarter of 2019.

The pass-through of wages to inflation suggests that a 1pp rise in annual wage growth gives a direct boost of 0.2pp to core inflation. This impact grows over time through the backward-looking inflation component (see chart 8), but hence makes for a slow-moving process. This is likely one reason why higher wage growth has not yet sparked higher core inflation. Another reason might be that, in the face of slowing economic expansion, firms might choose to delay the pass-through of higher wages to inflation by reducing their healthy profit margins.

Chart 8

**The Pass-Through Of Wages To Inflation Is Alive And Well In The Eurozone, But Has An Important Backward-Looking Component**



Note: All series have been normalized and standardized to estimate the model. Source: S&P Global Ratings. Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.



Table 1

**Summary Table: Augmented Wage Phillip's Curve**

**Dependent variable: hourly nominal wages and salaries, y/y %**

	<b>Eurozone</b>	<b>France</b>	<b>Germany</b>	<b>Italy</b>	<b>Spain</b>	<b>Netherlands</b>	<b>U.K.</b>
CPI(-1) y/y%		0.409	0.307				
		(0.1101)***	(0.1251)**				
CPI expectations y/y%	0.476			0.878	0.312	0.264	
	(0.0735)***			(0.0875)***	(0.0756)***	(0.1073)**	
Productivity per hour y/y%		0.478					0.295
		(0.0907)***					(0.1080)***
Productivity per hour y/y%; 4q mvg avg						0.358	
						(0.1096)***	
Unemployment rate %	-0.605	-0.472	-0.376		-1.199	-0.275	
	(0.0711)***	(0.1187)***	(0.1283)***		(0.1874)***	(0.1096)**	
Change in the unemployment rate %		-0.673		-1.199			
		(0.3485)*		(0.5932)**			
NAIRU - Unemployment Rate Gap %							-0.599
							(0.1107)***
Share of part time employment %					-0.330		
					(0.1387)**		
Share of temporary contracts in employment %					-0.861		
					(0.1873)***		
Number of observations	57	57	57	57	57	57	70
R-squared	0.72	0.75	0.19	0.65	0.85	0.45	0.42
Sample	<b>Q2 2004 - Q2 2018</b>						<b>Q1 2001 - Q2 2018</b>

Note: We use normalized series to estimate the model so that the coefficients can be compared and interpreted as elasticities; We only present the retained models; Standard Errors are in parenthesis; significance level: \*=10%, \*\*=5%, \*\*\*=1%; For Eurozone countries we use the 5y5y forward inflation swap rate for inflation expectations. Source: S&P Global Ratings.

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