

The participation rate and working hours: Differentiated impacts on the unemployment rate

By [Bruno Ducoudré](#) and [Pierre Madec](#)

In the course of the crisis, most European countries reduced actual working hours to a greater or lesser extent through partial unemployment schemes, the reduction of overtime or the use of time savings accounts, but also through the expansion of part-time work (particularly in Italy and Spain), including on an involuntary basis. In contrast, the favourable trend in US unemployment has been due in part to a significant fall in the labour force participation rate.

Assuming that a one-point increase in the participation rate leads, holding employment constant, to a rise in the unemployment rate, it is possible to measure the impact of these adjustments (working hours and participation rates) on unemployment by calculating an unemployment rate at constant employment and checking these adjustments. Except in the United States, the countries studied experienced an increase in their active population (employed + unemployed) that was larger than that observed in the general population, due among other things to the implementation of pension reforms. Mechanically, without job creation, this demographic growth would have the effect of pushing up the unemployment rate in the countries concerned.

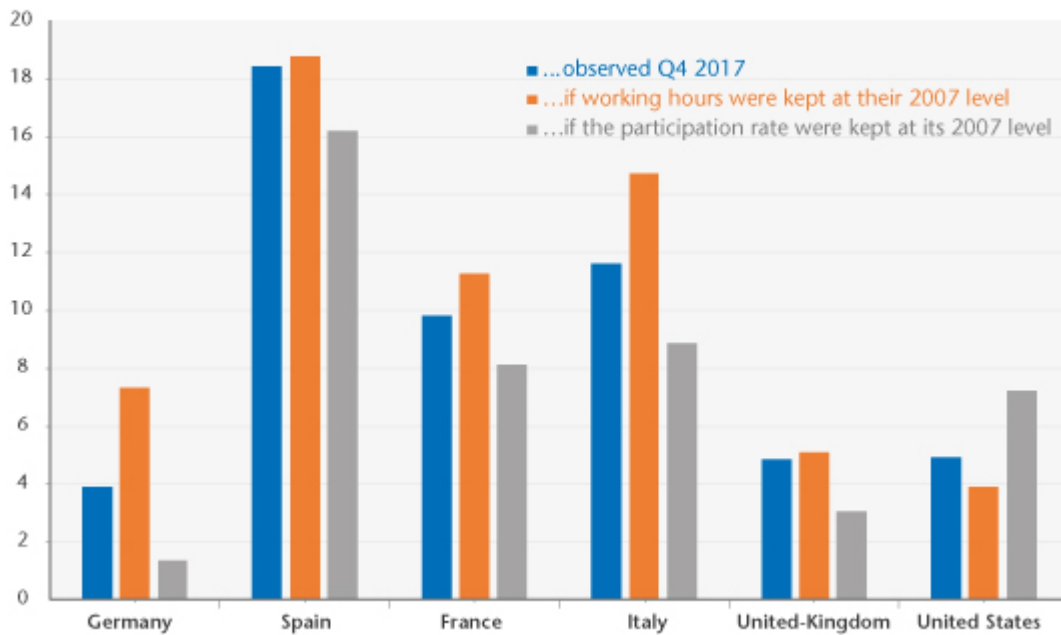
If the participation rate had remained at its 2007 level, the unemployment rate would be lower by 2.3 points in France, 3.1 points in Italy and 2 points in the United Kingdom (see figure). On the other hand, without the sharp contraction in

the US labour force, the unemployment rate would have been more than 3.2 percentage points higher than that observed at the end of 2017. It also seems that Germany has experienced a significant reduction in its unemployment rate since the crisis, even as its participation rate rose. Given the same participation rate, Germany's unemployment rate would be ... 0.9%. However, changes in participation rates are also the result of structural demographic factors, to such an extent that the hypothesis of a return to 2007 rates can be considered arbitrary. For the United States, part of the fall in the participation rate can be explained by changes in the structure of the population. The figure for under-employment can also be considered too high.

The lessons are very different with respect to the duration of work. It seems that if working hours had stayed at their pre-crisis levels in all the countries, the unemployment rate would have been 3.7 points higher in Germany and 2.9 points higher in Italy. In France, Spain, the United Kingdom and the United States, working time has fallen only slightly since the crisis. If working hours had remained the same as in 2007, the unemployment rate would have been slightly higher in all of these countries.

Note that the trend for working time to fall largely preceded the 2007 economic crisis (table). While this pre-crisis trend has continued in Germany and even been accentuated in Italy, working time has fallen to a lesser extent in France, Spain and the United States. In the United Kingdom, the reduction in working hours that was underway before 2007 has been cut short.

Figure. Unemployment rate observed at Q4 2017 and unemployment rate under the hypothesis of...



Sources: National accounts, OFCE calculations.

Table. Change in number of hours worked before and after the 2007 crisis

	Germany	Spain	France	Italy	United Kingdom	United States
1997-2007	-5.3%	-2.4%	-4.0%	-2.9%	-3.5%	-2.6%
2007-2017	-5.4%	-1.2%	-1.6%	-5.7%	0.0%	-0.6%

Sources: National accounts, OFCE calculations.

Which new path for raising labour productivity?

By [Bruno Ducoudré](#) and [Eric Heyer](#)

The industrialized countries are experiencing what seems to be a persistent slowdown in the growth of labour productivity since the second oil shock. This has been the subject of a great deal of analysis in the economic literature^[1] that considers the possible disappearance of the growth potential of the developed economies, and consequently their inability

to return to a level of activity in line with their pre-crisis trajectories. In other words, could the industrialized countries have entered a phase of “secular stagnation”, making it more difficult to reduce public and private debt? The exhaustion of gains in productivity would also modify any diagnosis made of their conjunctural situation, particularly as regards their labour markets.

Trend productivity gains are inherently unobservable; it is therefore necessary to decompose observed productivity into a trend component and a cyclical component that is linked to the more or less rapid adjustment of employment to changes in economic activity (the productivity cycle). In a [recent study published in the Revue de l'OFCE](#), we seek to highlight the slowdown in trend productivity gains and the productivity cycle in six major developed countries (Germany, Spain, the United States, France, Italy and the United Kingdom) using an econometric method – the Kalman filter – so as to allow the estimation of an equation for labour demand based on explicit theoretical underpinnings and the estimation of trend productivity gains.

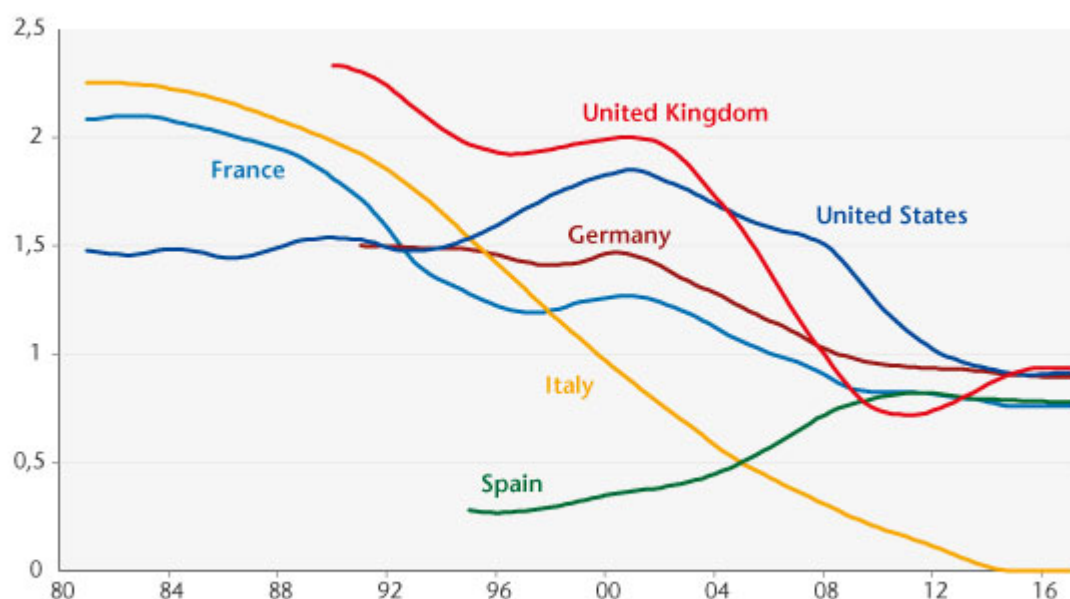
After reviewing the various possible explanations for the slowdown described in the economic literature, we present the theoretical modelling of the equation for labour demand and our strategy for an empirical estimation. This equation, derived from a CES-type production function[\[2\]](#), is based on the assumption of maximizing the profit of firms in monopolistic competition and on the assumption of a stable long-term capital-to-output ratio. This makes it possible to break down the trend and cyclical components in a single step, but makes productivity gains depend solely on labour[\[3\]](#).

The existing empirical studies usually rely on a log-linear estimate of the productivity trend and introduce fixed-date trend breaks[\[4\]](#). We propose an alternative method that consists of writing the employment equation in the form of a state-space model representing the underlying productivity

trend. This model has the advantage of allowing a less bumpy depiction of trend productivity gains since it doesn't rely on ad-hoc break dates.

We then evaluate the new growth path for labour productivity and the productivity cycle for the six countries considered. Our results confirm the slowdown in trend productivity gains (Figure 1).

Figure 1. Labour productivity growth



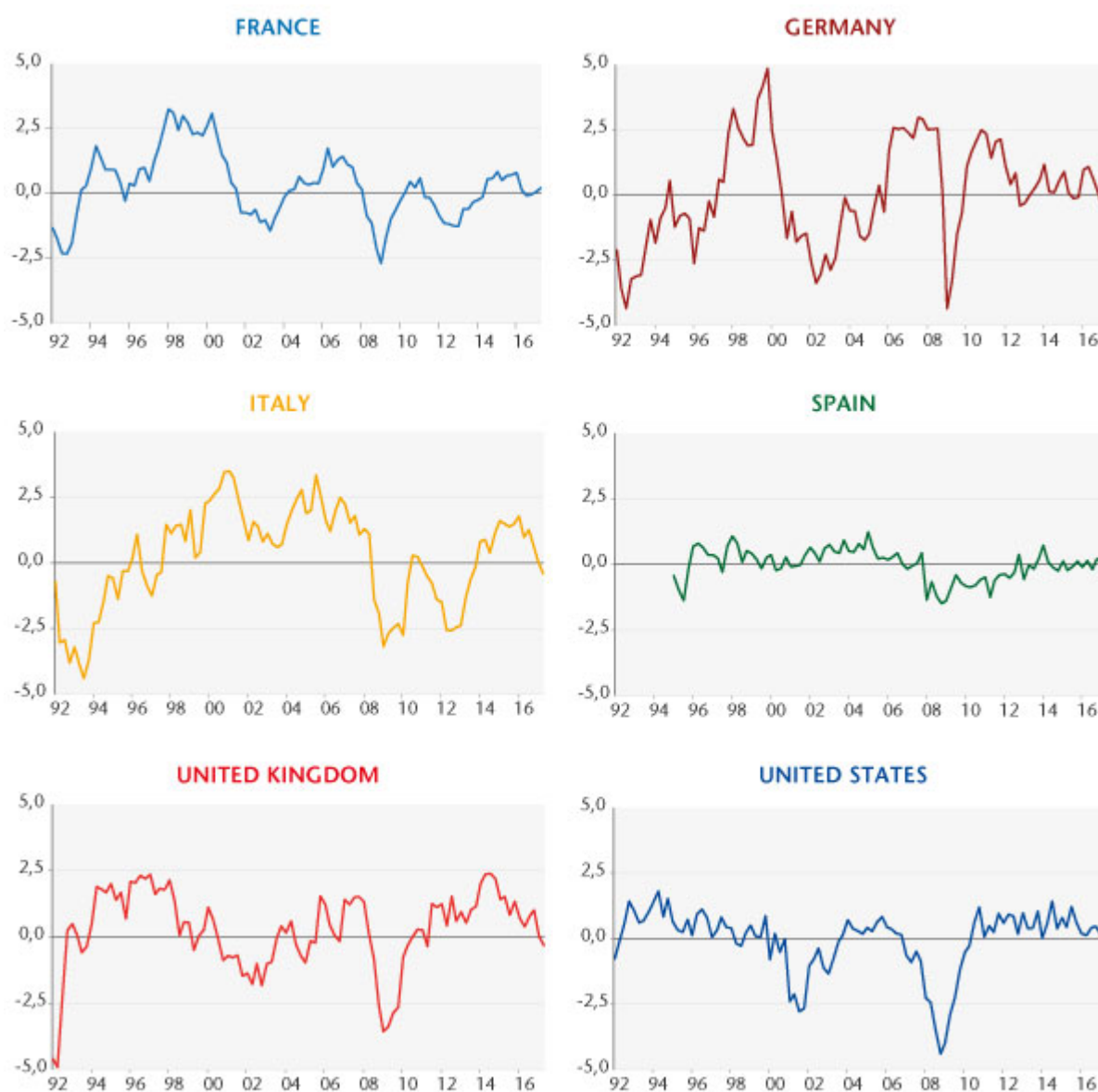
Note: year-on-year hourly trend productivity gains.
Source: authors' calculations.

The growth rate for trend productivity for five countries (France, Germany, Italy, the United States and the United Kingdom) shows a slow decline since the 1990s. Trend productivity, estimated at 1.5% in the United States in the 1980s, increased during the 1990s with the wave of new technologies, then gradually decreased to 0.9% at the end of the period. For France, Italy and Germany, the catch-up stopped during the 1990s (during the 2000s for Spain), even though the slowdown in trend productivity gains was interrupted briefly between the mid-1990s and the early 2000s. Leaving aside Italy, whose estimated trend productivity gains were zero at the end of the period, the trend growth rates converged in a range of between 0.8% and 1% in annual trend

productivity gains.

The estimated productivity cycles are shown in Figure 2. They show the greatest fluctuations for France, Italy and Germany and the United Kingdom. A calculation of the average times for the adjustment of employment to demand indicates an adjustment period of 4 to 5 quarters for these countries. The cycle fluctuates much less for the United States and Spain, indicating that the speed of adjustment of employment to economic activity is faster for these two countries, which is confirmed by the average time of adjustment to demand (respectively 2 and 3 quarters). Finally, the estimates indicate globally that the productivity cycle will have closed for each of the countries considered in the second quarter of 2017.

Figure 2. Productivity cycles



Source: authors' calculations.

[1] See, for example, A. Bergeaud, G. Clette and R. Lecat, 2016, "[Productivity Trends in Advanced Countries between 1890 and 2012](#)", *The Review of Income Wealth*, (62: 420-444) and N. Crafts and K. H. O'Rourke, 2013, "[Twentieth Century Growth](#)", *CEPR Discussion Papers*.

[2] See C. Allard-Prigent, C. Audenis, K. Berger, N. Carnot, S. Duchêne and F. Pesin, 2002, "[Présentation du modèle MESANGE](#)", French Ministère de l'Economie, des finances et de l'industrie, Forecasting Department, MINEFI, Working document.

[3] The equation for labour demand is based on a production function and an assumption of neutral technical progress in Harrod's sense.

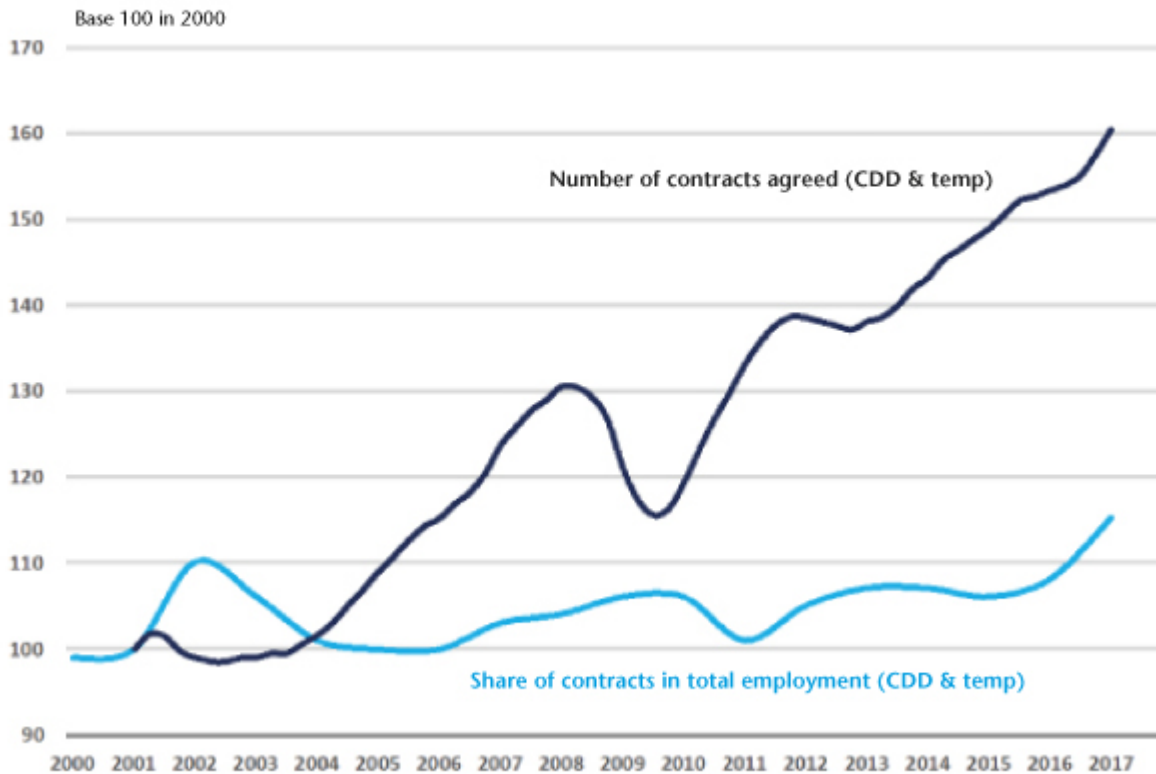
[4] See M. Cochard, G. Cornilleau and E. Heyer, 2010, "[Les marchés du travail dans la crise](#)" [Labour Markets in Crisis], *Économie et Statistique*, (438: 181-204) and B. Ducoudré and M. Plane, 2015, "[Les demandes de facteurs de production en France](#)" [The Demand for Production Factors in France], *Revue de l'OFCE* (142: 21-53).

Short-term contracts: Not all taxes are the same

By Bruno Coquet, OFCE and IZA

Short-term contracts are useful for the proper functioning of an economy, but in France their expansion, together with shortening contract periods (Figure 1), is costing economic agents as a whole dearly, while the minority of companies that make extensive use of these is bearing only a marginal fraction of the costs.

Figure. Fixed-term (CDD) and temporary contracts: number of contracts and share of total employment (2003-2017)



Sources: Insee, Acoess, author's calculations.

Experience has shown that the use of short-term contracts in France has not been held back by what are generally considered to be strict labour regulations. It seems reasonable to think that if employers make massive use of short-term contracts, it is probably not because they are forced to do so, but because they have an interest in doing so. It then becomes clear that what needs to be influenced is the economic equations of the user companies, and not simply the law. Economic theory is inclined to modulate the prices of different employment contracts in accordance with the externalities they generate.

The State could therefore tax short-term contracts, but the role of unemployment insurance in modulating the pricing of these contracts has a stronger and more immediate impact. Indeed, unemployment insurance is in the front line of change, and its rules have evolved to better ensure that short-term contracts are adapting. But the insurer is confronted with a paradox: insuring short-term contracts creates cross-subsidies that encourage their greater use. The optimal functioning of

insurance thus now requires the modulation of the price of employment contracts.

Different levers exist to price employment contracts, but they are not all equal: the goal must be clear, as must the instrument appropriate to achieve the goal. Nor are all levers adapted to the French context, which calls for rules that are transparent, easy to administer, applicable to all employment contracts and all sectors (without exception, including the public), and encourage employers to make use of less costly choices. The pricing must be contemporaneous with expensive behaviour, but neither punitive nor symbolic, not increasing the cost of labour, and not aiming to bail out the Unedic agency.

In a [working document of the OFCE](#) [in French], we describe these different instruments for modulating the prices of employment contracts, their advantages and disadvantages, in absolute terms and in the context of France. A tax that is modulated by sector, and even more so a tax modulated by company, both appear to be ill-suited to solving the problem of short-term contracts as it is currently posed in France. They could even be counterproductive.

A contribution that is digressive according to the duration of the employment contract, together with a flat rate and a deductible, appears to be the mechanism best suited to ensure the survival of unemployment insurance in a labour market marked by the increasing use of ever shorter work contracts. It would be desirable to combine this digressive contribution with a flat-rate system designed to reduce incentives to create extremely short contracts, and with a deductible designed not to increase the labour costs of small businesses, particularly those that are growing strongly.

Our simulations illustrate that finely negotiated parameters can lead to a balance that satisfies all the stakeholders.

For more, see: [Bruno Coquet, La tarification des contrats courts : objectifs et instruments, Sciences Po OFCE Working Paper, no. 29, 2017-12-08.](#)

European unemployment insurance

By Léo Aparisi de Lannoy and [Xavier Ragot](#)

The return of growth cannot eradicate the memory of how the crisis was mismanaged at the European level economically, but also socially and politically. The divergences between euro area countries in unemployment rates, current account balances and public debts are at levels unprecedented for decades. New steps in European governance must aim for greater economic efficiency in reducing unemployment and inequalities while explaining and justifying the financial and political importance of these measures in order to render them compatible with national policy choices. The establishment of a European unemployment insurance meets these criteria.

The idea of a European mechanism for unemployment compensation is an old idea dating back to at least 1975. The idea is now being extensively debated in Europe, with proposals from Italian and French economists and policymakers and studies conducted by German institutes, with the latest [OFCE Policy Brief](#) offering a summary. The possibility is even being mentioned in communications from the European Commission. The Policy Brief describes the European debates, as well as the system in place in the United States.

The European unemployment insurance mechanism presented in this note aims to finance the unemployment benefits of countries experiencing a severe recession and draws on the US experience to do this. A programme like this would constitute a second European level, supplementing the different national levels of unemployment insurance. It would help provide the unemployed support in countries hit by a deep recession, which would also contribute to sustaining aggregate demand and activity while reducing inequality in the recipient countries. It is also consistent with a reduction in the public debt. This mechanism would not lead to permanent transfers to countries that are not carrying out reform, nor to unfair competition or the transfer of political powers that are now covered by subsidiarity. As in the case of the United States, it is consistent with the heterogeneous character of national systems.

To give an order of magnitude, an insurance system that is balanced over the European economic cycle and involves no permanent transfers between countries would have boosted growth in Spain by 1.6% of GDP at the peak of the crisis, while Germany would have received European aid from 1996 to 1998 and from 2003 to 2005. France would have experienced a GDP increase of 0.8% in 2013 thanks to such a system, as shown by the simulations conducted by the European teams.

For the complete study, see: [*Policy Brief de l'OFCE, no. 28, 30 November 2017.*](#)

The new labour inequalities. Why jobs are polarizing

By Gregory Verdugo

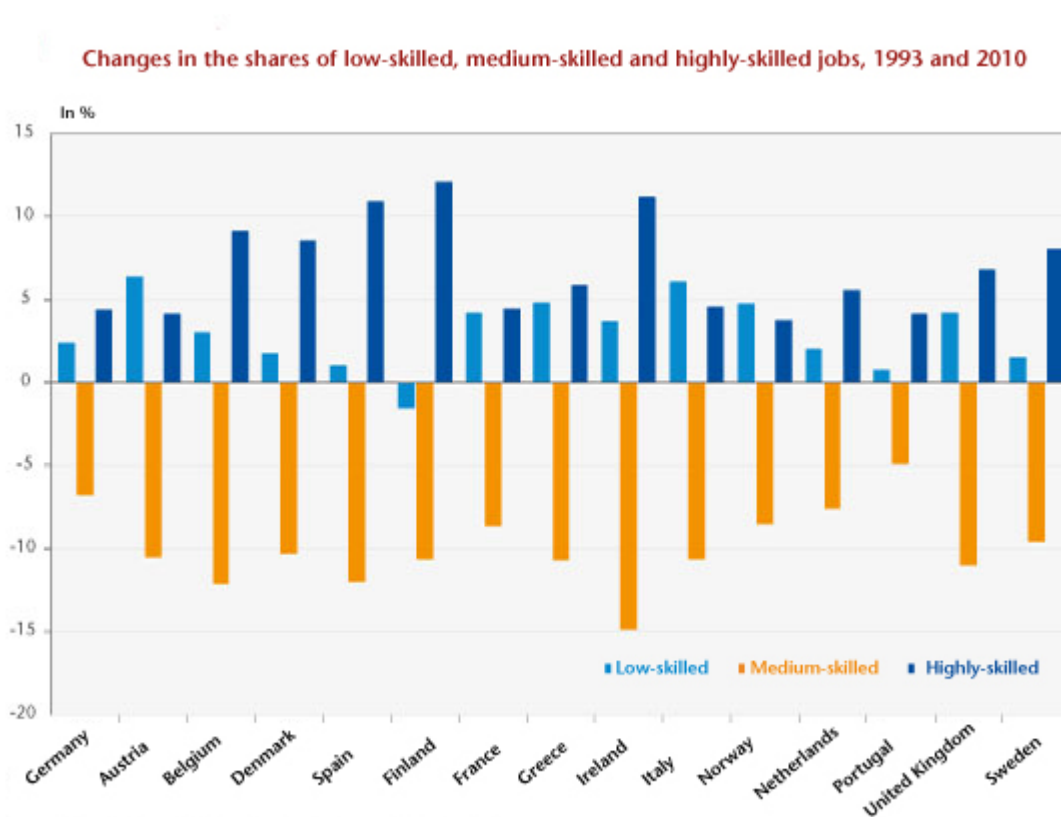
What is job polarization?

Over the past three decades, work has taken a new turn. While the post-World War II period saw a decline in wage inequalities, since the 1980s the gaps have been getting steadily wider. Differentials are increasing throughout the wage distribution, both between low and medium wages and between medium and high wages. In countries like France where wage inequalities have remained stable, the less skilled have been hit increasingly by the risk of unemployment and precarious jobs. In addition to increasing inequality, the composition of jobs has also undergone great change. To study trends in job quality, the economists Alan Manning of the London School of Economics and Maarten Goos and Anna Salomons of the University of Utrecht explored the rich data from the European Labour Force Survey for 16 European countries over the period 1993 to 2010 [\[1\]](#). Based on the average wage observed in employment at the beginning of this period, they distinguish three main categories of jobs: low-skilled, medium-skilled and highly-skilled.

Alan Manning and his co-authors calculated how the share of these three groups in total employment is changing. Their results, presented in Figure 1, show that in most countries employment is polarizing, i.e. the share of intermediate jobs is declining sharply in favor of an increase in either low-skilled or high-skilled work. The number of medium-skilled jobs has fallen substantially: in France, these jobs decreased by 8 points between 1993 and 2010, from 47% to 39%. This compares to 12 points in Spain, 11 points in the United Kingdom, 10 points in Sweden and Denmark, 6 points in Germany

and 5 points in Portugal.

While the share of intermediate occupations is shrinking, the shares of low-skilled and highly-skilled jobs are expanding. In France, these two groups have increased in a perfectly symmetrical way, by about 4% each. Thus, for every two medium-skilled jobs that disappear, one additional highly-skilled job and one unskilled job are created. Note that, compared with Belgium (+ 9%), Denmark (+ 8%) and Finland (+12%), the growth in skilled jobs has been more moderate in France, and is closer to that of Germany, Austria and Norway.



Source: Maarten Goos, Alan Manning, Anna Salomons (2014), op.cit.

Winners and losers in the information revolution

The major upheaval going on in the labour market is due first to the nature of recent technological change, which has revolutionized the organization of businesses. Because computers operate in accordance with explicit, pre-programmed procedures and rules, they have proven very adept at performing the so-called routine tasks that characterize human labour in intermediate jobs. A computer can command an

industrial robot, draw up pay slips, or distribute money. Because of their efficiency and low cost, computers have replaced the elementary and repetitive human labour that made up many intermediate jobs. The jobs most destroyed by computerization were thus those held by workers on production lines that became automated as well as those of office clerks and secretaries.

Highly-skilled workers have on the other hand been the winners from technological progress. Not only are computers unable to replace their jobs, but they also make these workers more productive. By expanding the amount of information available and facilitating its search, the Internet promotes the specialization of knowledge and makes it possible to concentrate on analytical tasks. Thanks to advances in information technology, companies are increasingly demanding more highly-skilled labour, which has made it possible to absorb the arrival of large cohorts of higher education graduates without lowering their wages.

Has international trade polarized employment?

International trade benefits the consumer by multiplying their choices and moderating prices. Indirectly, by freeing up income, it also stimulates demand and employment in the services sector. But behind the consumer is also a worker, sometimes with opposing interests. While international trade favours the former, its effect on the latter is more ambiguous.

It is now clear that medium-skilled jobs have fallen victim to the growth in trade with the developing countries. The quickening pace of trade with emerging economies with low labour costs has led companies in the developed countries to specialize in the most sophisticated design tasks that draw on information analysis and creativity. In contrast, basic production tasks have been increasingly outsourced, which has led to the destruction of a large portion of intermediate

industrial jobs in the developed countries.

Recent studies on the United States [\[2\]](#) and France [\[3\]](#) have shown that, as a result of the import boom that followed after China joined the World Trade Organization in the 2000s, the labour market worsened seriously in the areas facing greatest competition from China. For France, the destruction of industrial jobs linked to Chinese competition has been quantified at 100,000 jobs from 2001 to 2007, or 20% of the 500,000 jobs lost in this sector.

How can this market be tamed?

Of course one should not forget that the labour market is a market where supply and demand is constrained by a set of norms and rules that are crucial in terms of inequality. Despite the important role of technology and trade, labour market institutions play a key role and have shaped each country's response to computerization and the expansion of international trade and, depending on the case, have slowed or accelerated job polarization.

Many studies have noted that a minimum wage and collective wage bargaining have influenced the way inequality and employment are impacted by technological advances and globalization. These institutions have most of all had an impact on the wages of the least skilled, those they are designed to protect. For low wage earners in France, the minimum wage has dramatically closed the wage gap [\[4\]](#). The centralization of wage negotiations at the branch level has also contributed to limiting wage inequalities by levelling wages between firms within a sector. Where such institutions have remained strong, they have kept low wages up and moderated wage differentials.

But if these institutions are too restrictive, they have also been suspected of undermining job creation and pushing up unemployment among low-skilled workers. They have in

particular not been able to curb the destruction of jobs, and excessive protection is suspected of having discouraged job creation. In the late 1990s, Thomas Piketty of the Paris School of Economics noted that the growth of service jobs had declined in France compared to the United States following increases in France's minimum wage In the 1980s [\[5\]](#). More recently, the researchers Julien Albertini of Humboldt University, Jean Olivier Hairault of Paris 1 University, François Langot of the University of Maine and Thepthida Sopraseuth of the University of Cergy Pontoise showed that the minimum wage has limited the growth of the non-routine manual services sector in France [\[6\]](#) and thus diminished the opportunities for people whose jobs were destroyed by international trade or technology. This employment deficit was particularly pronounced in activities that were intensive in low-skilled labour, such as hotels and restaurants and the retail trade [\[7\]](#). A key issue facing employment policy in the years to come is how to adapt regulations to the new situation of the labour market.

The jobs of the future

Technological progress has not eliminated work. But the next wave of high-performance machines could, this time, be really different. Up to now, machines were not good at performing abstract and non-routine manual tasks, but advances in robotics and computer science could quickly change this situation. Every year has seen exponential progress in the technical possibilities for computers and robots to simulate human reasoning and intelligence: the increase in computing capabilities is making it possible to analyse and respond more skilfully to external stimuli; communication with the environment is becoming more and more sophisticated thanks to batteries of powerful sensors, aided by software that is capable, in particular, of understanding the most subtle nuances of human language and of recognizing faces and objects; data storage capabilities have been multiplying with

the development of “cloud robotics”, where each robot in the network accumulates and shares experience and information with its fellow robots[\[8\]](#).

Some researchers believe that developments in intelligent machines and robotics are likely to replace work in a large number of jobs in the years to come. In 2015, Carl Benedikt Frey and Michael Osborne, researchers at Oxford University, predicted that 47% of employees in the US hold jobs that are likely to be automated in the future[\[9\]](#). They foresee a particularly heavy impact in transport and logistics, where the progress of intelligent sensors will make driverless vehicles safe and profitable.

But the jobs of the less skilled are not the only ones under threat. The growing analytical capabilities of computers now enable them to assist in decision-making in complex tasks, especially in the medical and legal fields, where they are replacing skilled labour. At the Memorial Sloan-Kettering Cancer Center in New York, USA, a computer programme helps oncologists determine the most appropriate treatment for patients. The programme draws on 600,000 medical reports, 1.5 million patient records and clinical trials, and 2 million pages published in medical journals[\[10\]](#). It is continuously learning and improving. In the field of law, the Clearwell System uses automatic language analysis techniques to classify the masses of documents transmitted to the parties before trial, which could amount to several thousand pages. In two days, a computer is able to make a reliable analysis of 570,000 documents. The work it saves is equal to that of dozens of lawyers, saving precious time in trial preparation[\[11\]](#).

Should we fear these changes? There is no fundamental economic law that guarantees that everyone will be able to find a well-paid job in the future. The less attractive work caused by polarization is a reminder that progress does not always improve job quality. But will it offer at least some jobs?

For more information: in June 2017, Gregory Verdugo published “Les nouvelles inégalités du travail: pourquoi l’emploi se polarise” [The New Labour Inequalities: Why Employment is Polarizing] at the Presses de Sciences Po, in the Collection Sécuriser l’emploi.

Link to books from Presses de Sciences Po: http://www.pressesdesciencespo.fr/fr/livre/?GCOI=27246100938740&fa=author&person_id=1987

Link to books from Cairn: <https://www.cairn.info/les-nouvelles-inegalites-du-travail-9782724620900.htm>

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[7] Ève Caroli and Jérôme Gautié, *Bas salaires et qualité de l'emploi: l'exception française?*, Paris, Editions Rue d'Ulm, 2009, p. 49

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[10] Jonathan Cohn, "The robot will see you now", *The Atlantic*, 20 February 2013.

[11] John Markoff, "Armies of expensive lawyers replaced by cheaper software", *The New York Times*, 4 March 2011.

Trends in labour force participation rates in Europe during the Great Recession:

The role of demographics and job polarization

By [Guillaume Allègre](#) and Gregory Verdugo

In Europe as in the United States, employment fell considerably during the Great Recession. Moreover, over the last few decades, the labour markets in both regions have been reshaped by the forces of automation and globalization. However, the response of labour force participation to these changes has varied from country to country. One of the most significant developments in the US labour market over the past decade has been the decline in labour force participation. Between 2004 and 2013, the labour force participation rate for the group aged 25 to 54 fell by 2.6 percentage points (from 83.8% to 81.1%), a decline that has persisted well beyond the end of the Great Recession. In the EU-15, on the other hand, the participation rate for this age group increased by 2 percentage points during the same period (from 83.7% to 85.6%), despite low growth and the persistence of high levels of unemployment.

What explains these differences on the two sides of the Atlantic? To answer this question, we examine [here](#) the determinants of the evolution of labour force participation over the last two decades in twelve European countries and compare this with the United States.

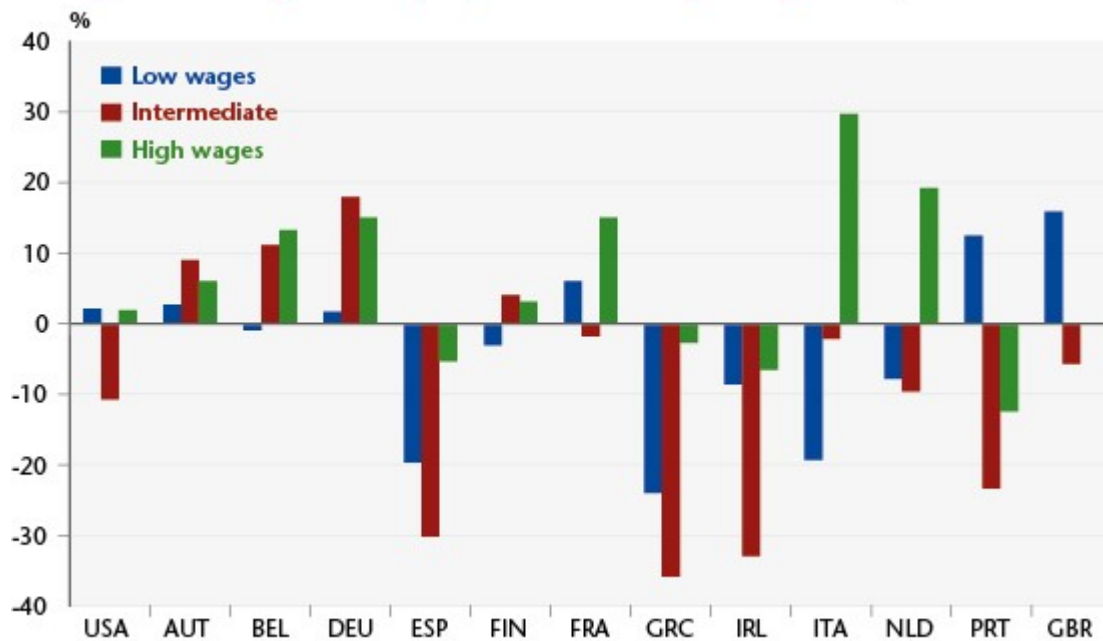
Consistent with previous work on the United States, we found that recent demographic shifts account for a substantial share of cross-country differences. The share of retired baby boomers increased more rapidly in the United States and triggered a sharper decline in participation rates there than in Europe. Over the past decade, the rate of increase in the number of higher education graduates was twice as high in Europe as in the United States, especially in southern Europe

and in particular for women. Women with higher levels of education are more likely to join the workforce, and they have contributed dramatically to the rise in labour force participation in Europe.

However, these changes do not explain everything. For the population with a diploma below the level of the high school baccalaureate, men's labour force participation rates have fallen in all countries. For women, they have increased rapidly, especially in the countries hit hardest by unemployment. In Spain, Greece and Italy, the participation rates for women with a diploma below the baccalaureate level rose by 12, 5.5 and 2 points, respectively, between 2007 and 2013, while these economies were in the midst of a deep recession.

To explain these facts, we investigated the role of changes in patterns of labour demand in recent decades and in particular during the Great Recession. We show that, as in the United States, job polarization (which denotes the reallocation of employment towards the lowest and highest paying occupations at the expense of intermediate professions) accelerated in Europe during the Great Recession (Figure 1). Due to the greater destruction of jobs in intermediate occupations, the recent polarization has been much more intense in Europe.

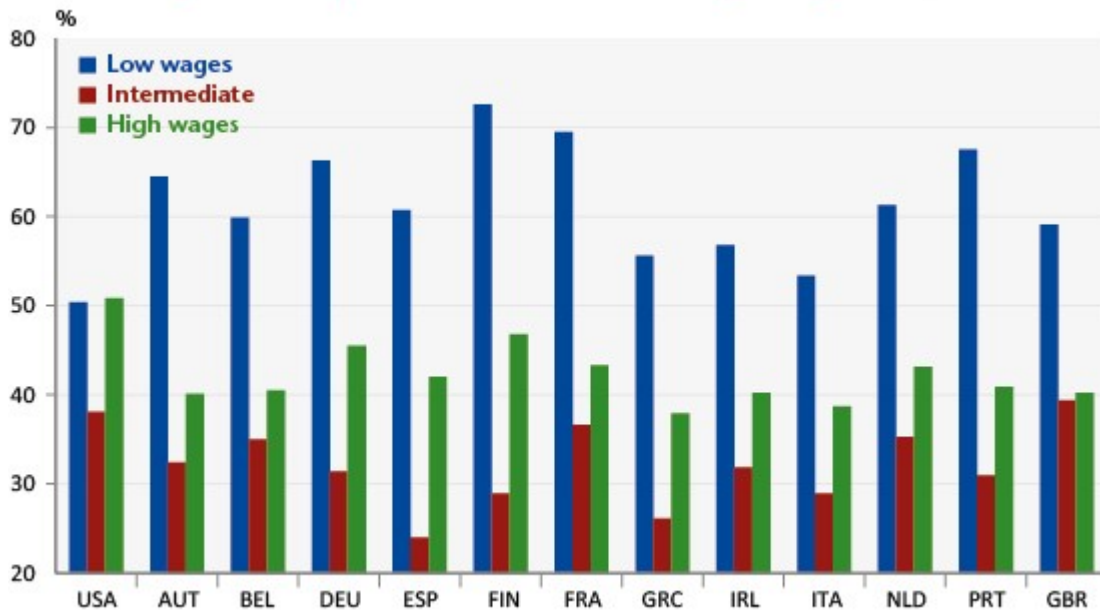
Figure 1. Changes in employment according to wage level, 2007-2013



Source : EU-LFS, CPS (US).

Another important difference with the United States is that occupational segregation between men and women is more pronounced in Europe. The intermediate jobs that are rapidly disappearing are much more likely to employ male workers in Europe, whereas the expansion of low-skilled occupations is disproportionately benefitting women (Figure 2). As a result, in Europe, more than in the United States, job polarization and the destruction of intermediate jobs has led to a decline in labour market opportunities for men that is more dramatic than the decline for women. We find that these asymmetric demand shocks between the genders accounted for most of the increase in labour force participation rates for women with the lowest educational levels during the Great Recession.

Figure 2. Proportion of women according to wage level, 2007



Source : EU-LFS, CPS (US).

For further information: [Gregory Verdugo, Guillaume Allègre, "Labour Force Participation and Job Polarization: Evidence from Europe during the Great Recession", Sciences Po OFCE Working Paper, no. 16, 2017-05-10](#)

Beyond the unemployment rate. An international comparison since the crisis

By [Bruno Ducoudré](#) and [Pierre Madec](#)

[According to figures from the French statistics institute \(INSEE\) published on 12 May 2017](#), non-agricultural commercial employment in France increased (+0.3%) in the first quarter of

2017 for the eighth consecutive quarter. Employment rose by 198,300 in one year. Despite the improvement on the jobs front experienced since 2015, the impact of the crisis is still lingering.

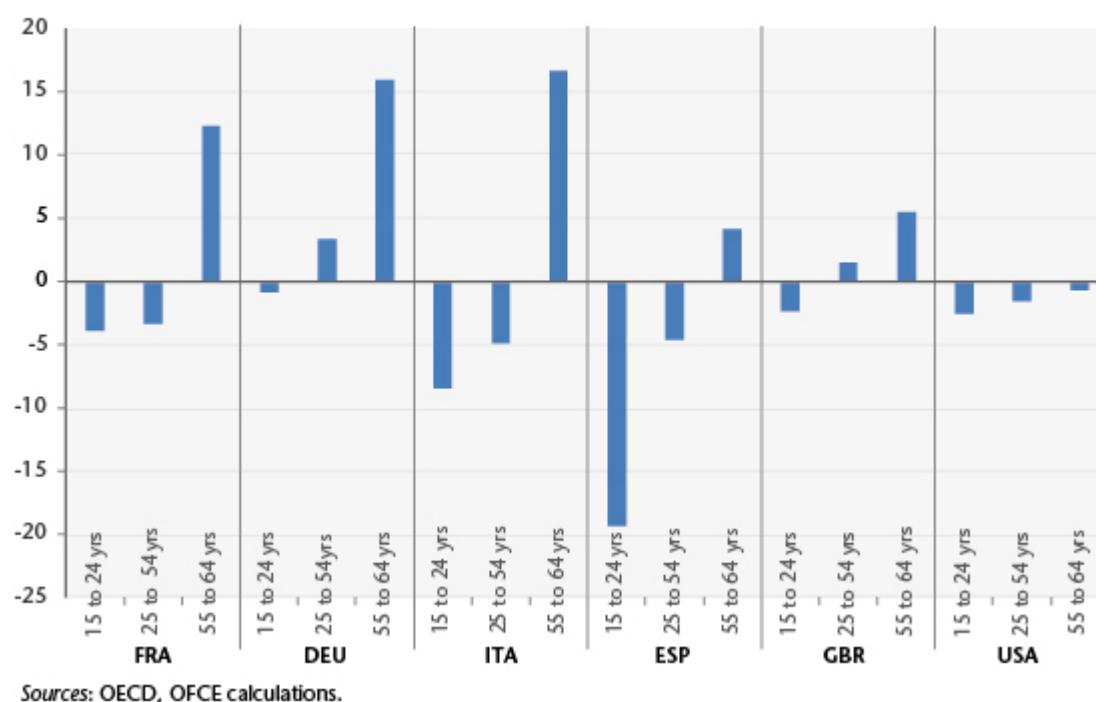
Since 2008, employment trends have differed significantly within the OECD countries. Unemployment rates in the United States, Germany and the United Kingdom are now once again close to those seen before the onset of the crisis, while the rates in France, Italy and particularly Spain still exceed their pre-crisis levels. Changes in unemployment reflect the gap between changes in the active population and changes in employment. An improvement in unemployment could therefore mask less favourable developments in the labour market, in terms of employment behaviour (changes in the labour force participation rate and the “unemployment halo”) or an increase in precarious employment (involuntary part-time work, etc.). In this paper we take another look at the contribution of changes in participation rates and in working time duration relative to changes in unemployment rates and to a broader measure of the unemployment rate that encompasses the “halo of unemployment” and involuntary part-time work.

Unemployment rates are marked by the crisis and reforms

With the exception of the United States, employment rates have changed considerably since 2008. In France, Italy and Spain, the employment rate for 15-24 year-olds and for those under age 55 more generally has fallen sharply (Figure 1). Between the first quarter of 2008 and the last quarter of 2016, the employment rate for 18-24 year-olds fell by 19 percentage points in Spain, by more than 8 percentage points in Italy and by almost 4 percentage points in France, while at the same time the unemployment rates in these countries rose by 9, 5 and 3 percentage points respectively. The poor state of the economy in these countries, accompanied by negative or weak job creation, has hit young people entering the labour market hard. Conversely, over this same nine-year period, the

employment rate of individuals aged 55 to 64 increased in all the above countries. In France, as a result of successive pension reforms and the [elimination of the job search exemption](#), the employment rate of older workers increased by 12.3 percentage points in nine years to 50% in Q4 2016. In Italy, even though the labour market worsened, the employment rate of 55-64 year-olds has risen by almost 18 percentage points.

Figure 1. Change in employment rate by age between Q1 2008 and Q4 2016



A sharp impact of the participation rate on unemployment, offset by a reduction in working time

During the course of the crisis, most European countries reduced the actual working hours to a greater or lesser extent by means of partial unemployment schemes, the reduction of overtime and the use of time-savings accounts, but also through the expansion of part-time work (particularly in Italy and Spain), including involuntary part-time work. On the other hand, the favourable trend in unemployment in the US (Table 1) is explained partly by a significant decline in the labour force participation rate of people aged 15 to 64 (Table 2). The rate in the last quarter of 2016 was 73.1%, i.e. 2.4

points less than at the beginning of 2007.

Table 1. Change in ILO unemployment rate (in % points)

	Q1 2007 – Q4 2011	Q1 2012 – Q4 2016	Q1 2007 – Q4 2016
DEU	-3,4	-1,7	-5,1
ESP	14,6	-4,2	10,3
FRA	0,9	0,7	1,6
ITA	3,1	2,7	5,8
GBR	2,9	-3,6	-0,7
USA	4,1	-3,8	0,4

Sources: National accounts, OFCE calculations.

Table 2. Change in the participation rate (in % points)

	Q1 2007 – Q4 2011	Q1 2012 – Q4 2016	Q1 2007 – Q4 2016
DEU	2,1	0,6	2,8
ESP	2,5	0,0	2,5
FRA	0,6	1,2	1,8
ITA	0,5	2,7	3,2
GBR	0,2	1,7	1,9
USA	-2,3	-0,2	-2,4

Sources: National accounts, OFCE calculations.

Assuming that a one percentage point increase in the labour force participation rate leads, holding employment constant, to a 1 percentage point increase in the unemployment rate, it is possible to measure the impact of these adjustments (working hours and participation rate) on unemployment, by calculating an unemployment rate at constant employment and controlling for these adjustments. Except in the United States, all the countries studied saw a greater increase in their labour force (employed + unemployed) than in the general population, owing, among other things, to pension reforms. Mechanically, absent job creation, this demographic growth has the effect of increasing the unemployment rate of the countries concerned.

If the labour force participation rate remained at its 2007 level, the unemployment rate would fall by 1.7 percentage points in France, 2.8 percentage points in Italy and 1.8 percentage points in the United Kingdom (Table 3). On the

other hand, without the large contraction in the US labour force, the unemployment rate would have been at least 2.3 percentage points higher than in 2016. It also seems that Germany experienced a significant decline in the level of its unemployment (-5.1 points), even though the participation rate rose by 2.8 percentage points. For an unchanged employment rate, the German unemployment rate would be 1.3% (Figure 2).

As regards working hours, the lessons seem quite different. It seems that if working time had been maintained in all the countries at its pre-crisis level, the unemployment rate would be higher by 3.4 points in Germany, 3.1 points in Italy and 1.5 points in France. In Spain and the United Kingdom, working time has changed very little since the crisis. By controlling for working time, the unemployment rate changes in line with what was observed in these two countries. Finally, without adjusting for working time, the unemployment rate in the United States would be 1 point lower.

Table 3. Difference between the unemployment rate seen at Q4 2016 and the unemployment rate in case of (in % points)

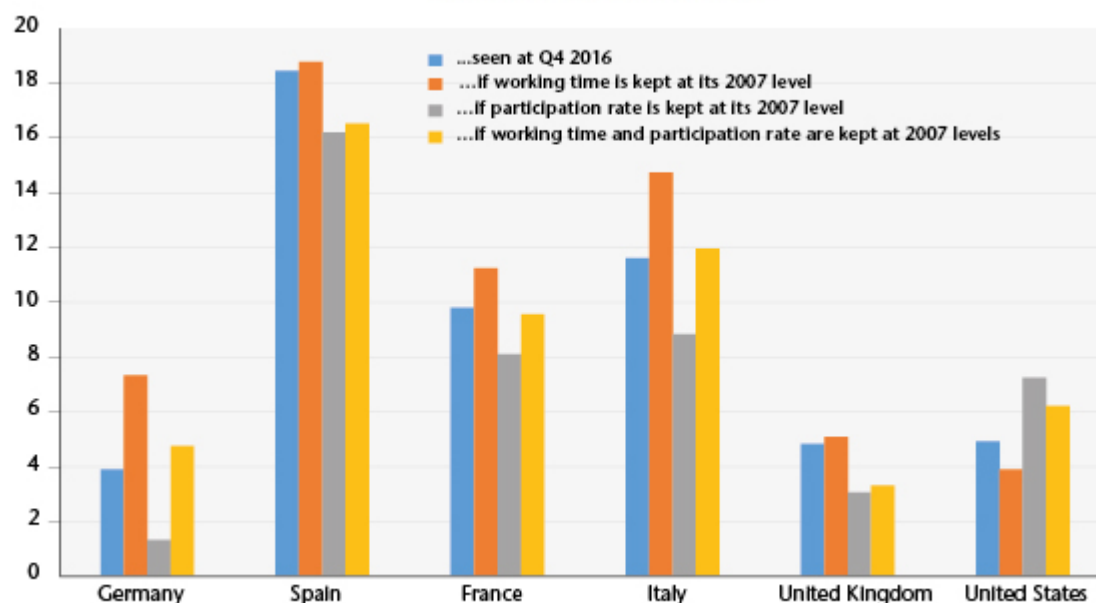
	...keeping working time at its 2007 level	... keeping the participation rate at its 2007 level	...keeping working time and the participation rate at their 2007 levels
DEU	-2,6	3,4	0,9
ESP	-2,2	0,3	-1,9
FRA	-1,7	1,5	-0,2
ITA	-2,8	3,1	0,3
GBR	-1,8	0,3	-1,5
USA	2,3	-1,0	1,3

Sources: National accounts, OECD, OFCE calculations.

Note that this trend towards a reduction in working hours is an old one. Indeed, since the end of the 1990s, all the countries studied have experienced large reductions in working time. In Germany, this decline averaged 0.5% per year between 1998 and 2008. In France, the transition to the 35-hour work week resulted in a similar decrease (-0.6% per year) over that period. Overall, between 1998 and 2008, working hours were down 5% in Germany, 6% in France, 4% in Italy, 3% in the

United Kingdom and the United States, and 2% in Spain.

Figure 2. Unemployment rate...



Sources: National accounts, OECD, OFCE calculations.

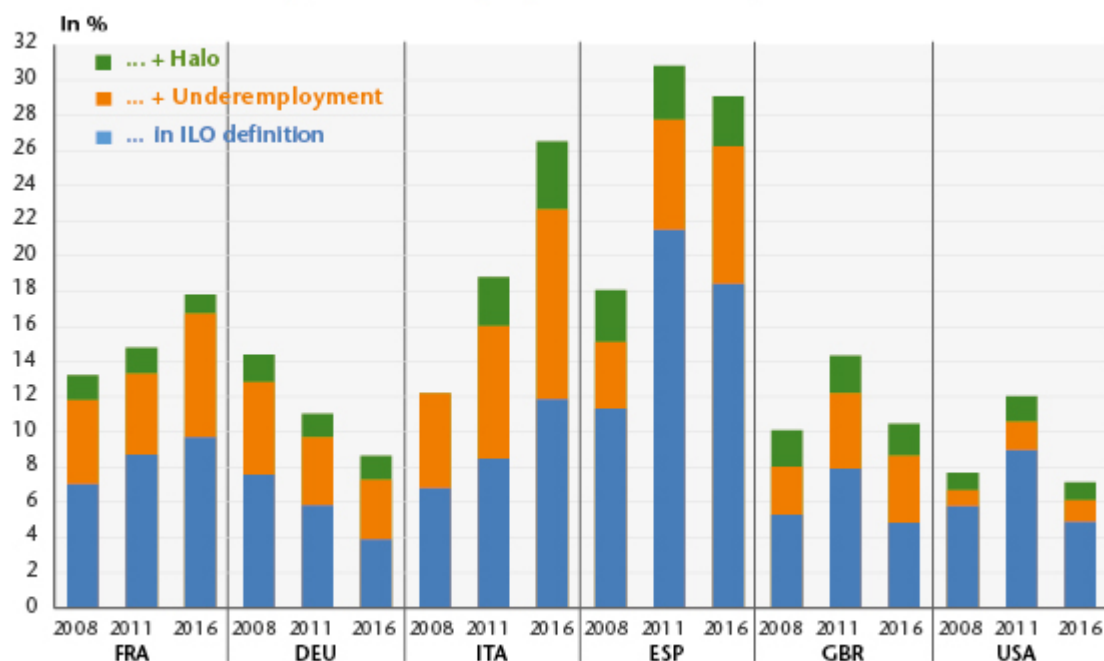
Beyond the “unemployment rate”

In addition to obscuring the dynamics affecting the labour market, the ILO's (International Labour Organization) strict definition of unemployment does not take into account situations on the margins of unemployment. So people who wish to work but are considered inactive in the ILO sense, either because they are not quickly available for work (in under two weeks) or because they are not actively seeking employment, form what is called a “halo” of unemployment.

The OECD's databases can be used to integrate into the unemployed category people who are excluded by the ILO definition. Figure 3 shows for the years 2008, 2011 and 2016 the observed unemployment rate, to which are added, first, people who are employed and declare that they want to work more, and second, individuals who are inactive but want to work and are available to do so. In Germany, the United Kingdom and the United States, changes in these various measures seem to be in line with a clear improvement in the labour market situation. On the other hand, between 2008 and 2011, France and Italy experienced an increase in their

unemployment rates, especially from 2011 to 2016, both in the ILO's strict sense of the term and in a broader sense. In Italy, the ILO unemployment rate increased by 3.4 percentage points between 2011 and 2016. At the same time, underemployment rose by 3.2 percentage points and the proportion of individuals maintaining a "marginal relationship" with employment by 1 percentage point. Ultimately, in Italy, the unemployment rate including some of the jobseekers excluded from the ILO definition came to 26.5% in 2016, more than double the ILO unemployment rate. In France, because of a lower level of unemployment, these differences are less significant. Despite this, between 2011 and 2016, underemployment increased by 2.4 points while unemployment in the strict sense grew "only" by 1 percentage point. In Spain, although there was notable improvement in ILO unemployment over the period (-3 points between 2011 and 2016), underemployment continued to grow strongly (+1.5 points). By 2016, Spain's ILO unemployment rate was 7 percentage points higher than it was in 2008. By including jobseekers excluded from the ILO measure, this difference comes to 11.0 percentage points.

Figure 3. Unemployment rate at Q4 2016...



Note : For 2016, as all the data were not available, we assume that the "halo" changed in line with 2015.

Sources : OCDE, calculs OFCE.

What is the initial assessment of Germany's minimum wage?

By Odile Chagny (IRES) and Sabine Le Bayon

A year and a half after introducing a statutory minimum wage, the German Commission in charge of adjusting it every two years decided on 28 June to raise it by 4%. On 1 January 2017, the minimum will thus rise from 8.50 to 8.84 euros per hour. This note offers an initial assessment of the implementation of the minimum wage in Germany. We point out that the minimum wage has had some of the positive effects that were expected, helping to reduce wage disparities between the old Länder (former West Germany) and the new Länder (former East Germany), and between more skilled and less skilled workers. By establishing recognition of the wage value of Germany's "mini-jobs", the minimum wage has made these marginal forms of employment less attractive for employers, representing a major rupture for the welfare state. But the minimum wage has also had some less fortunate results. Due probably to the flattening of pay scales at the minimum wage level, certain categories of employees in former West Germany seem to have suffered from the wage restraint that was imposed on them just before the introduction of the minimum wage, as companies limited the impact of the minimum wage on their total salary costs.

Unlike in France, there are no rules requiring an automatic annual revision of the minimum wage in Germany. It is adjusted only every two years upon a decision by the Commission. The decision taken on 28 June 2016 will take effect on 1 January

2017. There will then not be another revision until 2019, based on a decision taken in June 2018.

At first glance, the revaluation is fairly significant (+4% on 1 January 2017, i.e. a 2% annual rate) when compared to recent revisions of the minimum wage in France, where the SMIC, as it is called, rose by 1% per year over the last four years. This is due to the fact that, in accordance with the law establishing the minimum wage, the revaluation that takes place in Germany is made in light of increases concluded under collective bargaining agreements[\[1\]](#), thereby ensuring equivalent gains in purchasing power for all employees covered by a collective agreement. Since increases in negotiated wages have been relatively high since 2012 (+2.7% annual rate for the basic hourly wage index negotiated between 2011 and 2015, against +1.6% for the basic monthly wage in France over this same period), this automatically affects the minimum wage[\[2\]](#).

However, the level of the minimum wage is low and it is likely to remain so. It is much lower than the current level in France (9.67 euros since January 2016). According to the national accounts, this represented 34% of the average wage in 2015 (47% in France) and 48% of the median wage of full-time employees in 2014 (61% in France), which puts Germany in the lower range among the major European economies[\[3\]](#).

Nevertheless, even though set at a relatively low level, much was expected of the minimum wage's ability to correct the very sharp wage segmentation in Germany[\[4\]](#), which points to the need to pay particular attention to the categories of employees who benefited from it.

Between 4 and 5.8 million employees were potentially affected by the introduction of the minimum wage in 2015

Somewhat paradoxically, it is difficult to get a clear picture of the actual number of employees who received less than 8.50 euros at the time the minimum wage was introduced. The most

recent estimates vary between 4 million according to [Destatis](#) and a range of 4.8 to 5.4 million according to the [WSI Institute](#) (between 10% and 16% of the total workforce)[5]. This is because the law establishing the minimum wage left some uncertainty about its practical application. For instance, the law stipulates that the minimum wage of 8.5 euros per hour applies while taking into account the actual working time (knowing that there is no statutory work week in Germany), and it gives no precise definition of the pay elements to be taken into account (year-end bonuses, 13th month bonus, miscellaneous bonuses). On this point, following an employee's complaint, on 25 May 2016 Germany's Federal Labour Court ruled that a bonus previously paid once a year can be included in the calculation of the minimum wage when it is henceforth paid fractionally each month and this has been approved by a company agreement. This automatically leads to decreasing the number of potential beneficiaries.

While calculating the number of people receiving less than 8.50 euros is tricky, there is nevertheless relatively good agreement on estimates indicating that employees holding mini-jobs and employees in the new Länder just prior to the introduction of the minimum wage were the main ones affected. Thus, according to Destatis, 55% of the employees concerned were "mini-jobbers", mainly in western Germany where they are the most numerous. In eastern Germany, the proportion of people earning less than 8.50 euros was twice as high as in western Germany (just over 20% of employees, around 10% in the old Länder). Not surprisingly, more than 80% of those working for less than 8.50 euros were in companies not covered by collective bargaining agreements, with twice as many women as men. Finally, catering and retail were the trades most affected, as approximately 50% and 30% of their employees earned less than 8.50 euros, according to the WSI in 2014.

1.9 million people were on the minimum wage in April 2015 according to Destatis

The minimum wage has partly fulfilled its mission by ensuring a “decent” wage for society’s most vulnerable people. If we stick to the [Destatis](#) estimate, while 4 million people received a wage of less than 8.50 euros in April 2014, “only” 1 million were in this situation a year later. Moreover, among the 1.9 million employees earning 8.5 euros in April 2015, the great majority of whom were undoubtedly earning less before the entry into force of the minimum wage, 91% worked in companies not covered by a collective agreement and 56% held mini-jobs.

A significant increase in wages in the new Länder and for mini-jobs

It is obviously too early to have microeconomic surveys with accurate information about changes in the salaries of those affected by the introduction of the minimum wage, so the main source used is the quarterly wage survey [\[6\]](#), which provides data on different job categories (conventional jobs, i.e. subject to social security contributions, and mini-jobs) and skills levels.

Based on this survey, it is clear that the implementation of the minimum wage undoubtedly led to raising the monthly wages of certain categories of employees in 2015: for conventional jobs [\[7\]](#) in the new Länder and for mini-jobs in western Germany (Table 1).

Hourly wages in eastern Germany rose especially quickly in 2015 for unskilled (+8.6%) and semi-skilled employees (+5.8%) compared to those with average qualifications (+4%), helping to reduce wage inequality in these German states. However, no such trend could be seen in western Germany regardless of the skills level.

Table 1. Changes in gross total monthly wages (incl. Bonuses)

	Conventional jobs (full time and part time)		Mini-jobs	
	Ex-West Ger.	Ex-East Ger.	Ex-West Ger.	Ex-East Ger.
2011	3.1	2.3	1.8	7.6
2012	2.5	1.0	1.0	7.2
2013	1.0	1.7	5.6*	4.2
2014	1.5	1.9	1.4	6.7
2015	1.6	3.4	3.2	5.7

* This increase is due to the revision of the monthly cap on pay for mini-jobs from 400 to 450 euros.

Source: Destatis, Quarterly wage survey; authors' calculations.

Questioning the logic of mini-jobs

Given that 60% of employees holding mini-jobs received less than 8.5 euros per hour in 2014, one would expect a more marked acceleration of average earnings in this category of employees. The most likely reason why this was not the case is that the implementation of the minimum wage has de facto made these jobs less attractive for employers and led to a reduction in those workforce numbers and probably in the hours worked.

While mini-jobs are characterized by an absence of employee social security contributions and the acquisition of fewer employee rights, they are nonetheless subject to higher levies paid by employers (mainly social contributions and flat-rate tax on income) than in the case of a conventional job. As a result, the attraction for employers prior to the introduction of the minimum wage was due mainly to the flexibility offered by this type of employment as well as to the possibility of low hourly wages[\[8\]](#), as there was no limitation on working hours (the only constraint being the monthly ceiling of 450 euros).

However, by including mini-jobs within the coverage of the minimum wage, the law has made them much less financially attractive to employers because their hourly cost now exceeds that of a conventional job, including a midi-job[\[9\]](#) (see Table

2), with the number of hours implicitly capped (at 12 hours per week given the monthly ceiling of 450 euros).[\[10\]](#)

We therefore expect a reduction in the number of these jobs through simple destruction or reclassification as conventional jobs [\[11\]](#). There has in fact been a sharp decrease in the number of mini-jobs since the beginning of 2015, especially mini-jobs that are the worker's main activity, and an acceleration in the creation of conventional part-time jobs (graphic). The conversion into conventional jobs seems clear in the hotel, catering and retail trades, where mini-jobs had been prevalent and where conventional job creation has been particularly important. But although the conversion of mini-jobs into conventional jobs has been relatively high, it has not been massive, which is probably due both to a reduction in the actual hours worked so as to stay under the ceiling for mini-jobs (which for the employee has reduced the impact of a higher hourly wage) and to incorrect documentation of working time by the employer, with an underestimation of the hours worked[\[12\]](#). The assurance that the legal conditions governing these jobs will be applied is even less certain given that the employee too may have a financial interest in non-compliance with the minimum wage, by accepting an underestimation of the number of hours so that their monthly wage remains below the 450 euro ceiling. The employee thus receives a net wage equal to the gross wage, which is not the case if the wage exceeds 450 euros and he occupies a midi-job, since the rate of the employee social contribution is then progressive and he becomes subject to conventional taxation (which depends on the employee's family characteristics).

Table 2. Charges for a conventional job subject to social contributions and a mini-job before and after the introduction of the minimum wage

	Before the introduction of the minimum wage, a low wage cost for a mini-job enabled the employer to limit the cost of labour	After the introduction of the minimum wage, the employer trades off between:	
		Maintaining the mini-job (higher employer cost)	Converting it to a conventional job ⁽¹⁾ (same employer cost as previously)
Gross wage (€/hour)	7.8	8.5	8.5
Employer social contributions (€/hour)	2.3	2.6	1.6
Labour cost for the employer (€/hour)	10.2	11.1	10.1
Employee social contributions (€/hour)	0.0	0.0	1.7 ²
Net wage (€/hour)	7.8	8.5	6.8

(1) Case of a mini-job with a monthly salary of 451 euros, i.e. just above the ceiling for mini-jobs, for a working time of a little more than 12 hours. The employee social contributions are then 10.9%.

(2) Case of an employee with a child. Otherwise, the dependency contribution rate (taux de cotisation dépendence) of an employee subject to social contributions is increased by 0.25%.

Mini-job :

Employer portion: 30% (= 13% health + 15% pension + 2% flat-rate income tax).

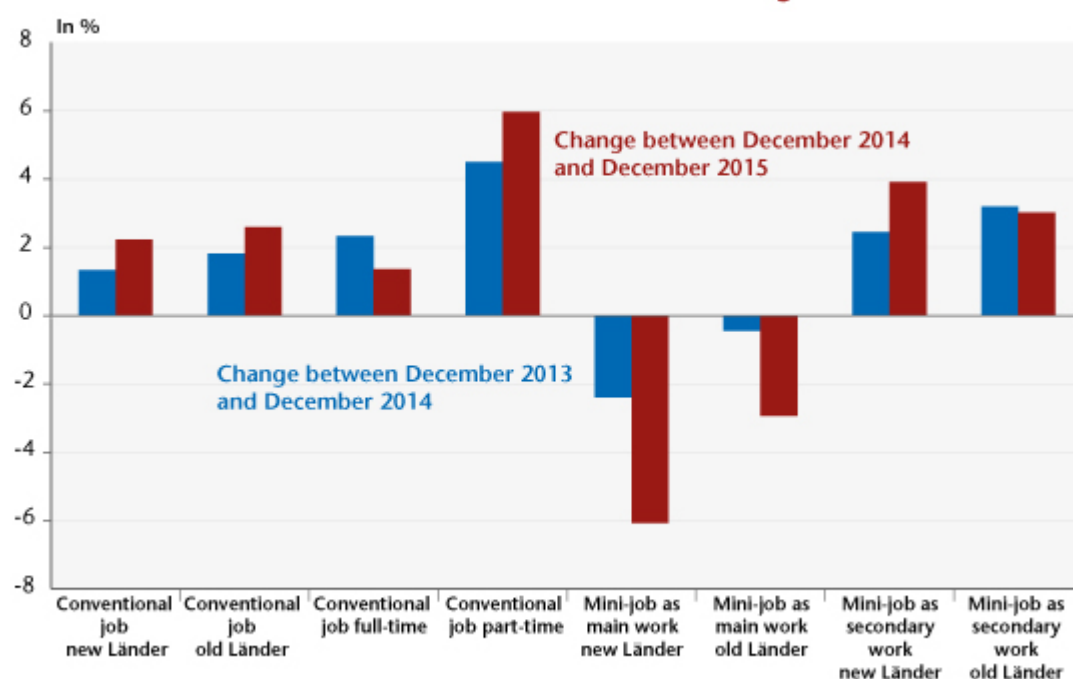
Conventional job, subject to social contributions:

Employer portion: 19.325% (=7.3% health + 9.3% pension + 1.5% unemployment + 1.175% dependence);

Employee portion: 20.425% (=8.4% health +9.35% pension + 1.5% unemployment + 1.175% dependence).

Source: German legislation.

Figure. Change in employment by categories, before and after the introduction of the minimum wage



Source: Job center.

In the spring of 2015, 1 million people were still being paid below the minimum wage

The magnitude of the workforce still earning less than 8.5 euros after the implementation of the minimum wage raises several questions. This could of course be explained by the implementation deadlines and by the fact that various exemptions are allowed (long-term unemployed for the first 6 months of employment, employees in sectors providing for a transitional adaptation period – newspaper delivery, temping, the meat industry, hairdressing, agriculture, textile, laundry).

But we could also consider the actual capacity to implement the minimum wage in the “grey areas” of the collective bargaining system[\[13\]](#). Among these 1 million workers, almost 80% were employed in companies not covered by collective agreements and 47% held mini-jobs.

This highlights the importance of official controls to ensure compliance, especially as the methods of calculating the hourly wage as defined by law and jurisprudence are problematic[\[14\]](#). Parliament has provided for a requirement to report working hours, but this does not apply to all employees. Of course, for all mini-jobs and for those below a certain salary threshold[\[15\]](#) in certain sectors particularly affected by illegal work (construction, catering, passenger transport, logistics, industrial cleaning, meat industry, etc.), the employer is now required to record the start and end of each work day and the duration of work and keep these documents for two years to avoid circumvention of the law through unpaid overtime. But there are not many inspections, and the frequency even fell by about one-third in 2015 from 2014, even as the number of people affected by the minimum wage exploded.

A fairly moderate impact on the average wage of conventional jobs

More unexpectedly, it seems that some companies anticipated the coming into force of the minimum wage by slowing increases

in unskilled wages in the months preceding the law's implementation (recall that parliamentary elections took place in October 2013, and the minimum wage took effect in January 2015). The year 2014 was indeed characterized by a sharp halt to wage hikes for less skilled workers, which occurred in both the old and new Länder, a phenomenon that cannot be explained by objective factors related to the economic situation. This means, surprisingly, that certain categories of employees would have received higher wage increases in the absence of the introduction of the minimum wage.

To assess this, we simulated the hourly wages in 2014 and 2015 for conventional jobs on the basis of the 2010-2013 trend (i.e. before the minimum wage was officially incorporated into the coalition agreement of autumn 2013), and we compared the wage observed at end 2015 with the one simulated by type of qualifications and Länder in order to see which employees were overall losers or winners (Table 3).

While in the new Länder on average all categories of employees benefited from the implementation of the minimum wage, with a diffusion effect from the minimum wage on wages immediately above 8.50 euros (and a revaluation of all salary scales), it seems that in the old Länder the least skilled categories suffered from its introduction. In other words, those whose salary was slightly higher than the minimum wage before the law took effect would have enjoyed a higher hourly wage in early 2016 on the basis of past trends!

This braking effect is such that at the level of Germany as a whole, and given the weight of the old Länder in the workforce (81% of conventional waged jobs), the unskilled and semi-skilled have therefore generally suffered from the introduction of the minimum wage, a situation that is somewhat paradoxical and which most observers have failed to highlight, focusing instead on the analysis of developments following the minimum wage's introduction.

Table 3. Difference between the gross hourly wage (excl. Bonuses) for conventional jobs recorded at end 2015 and wage simulated on the basis of the 2010-2013 trend 2010-2013¹

	Total ²	Managers	Experienced skilled	Skilled	Semi-skilled	Unskilled
Germany	0.8	0.9	1.4	0.1	-0.3	-1.1
New Länder	2.7	2.9	2.6	2.9	2.0	3.8
Old Länder	0.7	0.7	1.0	-0.4	-0.8	-1.9

1. The wage is simulated from Q1 2014 based on the trend observed between Q4 2010 and Q4 2013. The difference between the wage seen in the last quarter of 2015 and the wage simulated on the basis of the past trend is shown in this table.

2. The total is the weighted sum of the different skills categories, based on the 2013 workforce.

Source: Destatis (Quarterly wage survey); authors' calculations.

If the stated objective of the law introducing a minimum wage in Germany was indeed achieved, namely, to end a situation where a significant number of employees were on extremely low wages, there are 1 million people who have yet to benefit, i.e. a quarter of the workforce who were potentially concerned. There is also evidence that many companies anticipated the introduction of the minimum wage in the year before its introduction by making trade-offs in their wage policy in order to limit the impact on their costs. The result is that not all employees have been winners from the introduction of the minimum wage. What has taken place in Germany, especially in the old Länder, is a form of redistribution among unskilled workers between those who have benefited from the law [\[16\]](#) and those earning a little more than the minimum wage, who have experienced two years of wage restraint.

[\[1\]](#) For this initial reassessment, the Commission based itself on [changes in the negotiated hourly wages \(excluding bonuses\) between December 2014 and June 2016](#), which was 4%, including the retroactive effect of the latest collective agreement signed for the civil service.

[\[2\]](#) Like employee purchasing power, inflation rates in France and Germany have been very similar over the same period: +1.1% annual rate over the period 2011-2015 in Germany, 0.9% in

France for the HICP.

[\[3\] M. Amlinger, R. Bispinck and T. Schulten, 2016 : "The German Minimum Wage: experiences and perspectives after one year", WSI Report No. 28e, 1/2016.](#)

[\[4\] O. Chagny and F. Lainé 2015: "Comment se comparent les salaires entre la France et l'Allemagne?", Note d'analyse no. 33, France Stratégie.](#)

[\[5\]](#) By removing the exceptions: trainees, apprentices and those under age 18.

[\[6\]](#) This was conducted among about 40,000 companies with more than 10 employees (5 in some sectors such as retail or catering to reflect the specific characteristics of these areas) in industry and the service sector.

[\[7\]](#) This observation holds whether one is interested in the total monthly pay (including bonuses) or the hourly wage excluding bonuses, with wage increases of respectively 3.4% and 4% in 2015.

[\[8\]](#) B. Lestrade, 2013: "Mini-jobs en Allemagne. Une forme de travail à temps partiel très répandue mais contestée", *Revue française des affaires sociales*, 2013/4.

[\[9\]](#) For these contracts, which pay between 450 and 850 euros, the contribution rate for the employer is that of a conventional job, while the contribution rate for employees is progressive, ranging from 10.9% to 20.425% based on the salary.

[\[10\]](#) Note that the average working time in 2008 for these jobs was 12.8 hours per week ([D. Voss and C. Weinkopf, 2012, "Niedriglohnfalle Minijob", WSI Mitteilungen 1/2012](#)).

[\[11\]](#) For a midi-job, if the employee works between 12 and 23 hours weekly, and in a conventional job more than 23 hours.

[12] The most common strategies for circumventing the law in terms of working time are: unpaid overtime, payment for a task without fixed working hours and poor calculation of the time worked (on-call time, etc.). For more, see [T. Schulten, 2014, "Umsetzung und Kontrolle von Mindestlöhnen", Arbeitspapiere 49, GIB, November 2014.](#)

[13] For more, see: ["Allemagne. L'introduction d'un salaire minimum légal : genèse et portée d'une rupture majeure", O. Chagny and S. Le Bayon, Chronique internationale de l'IRES, no. 146, June 2014.](#)

Unemployment: beyond the (good) figures from France's job centre

Analysis and Forecasting Department (France team)

The 60,000 person decline in March for the number of people registered in Category A at France's Pôle emploi job centre is exceptional. One has to go back to September 2000 to find a fall of this magnitude. There is some natural volatility in the monthly statistics for job seekers, but the fact remains that the trajectory has changed noticeably. In the last year, the number registered in Category A at the job centre rose by 17,000. A year earlier, from March 2014 to March 2015, the increase was 164,000. Better yet, over the last six months the number registered fell by 19,000.

Nevertheless, the number of Category A job seekers is a

relatively poor reflection of the multiple dynamics at work in the labour market. If, in addition to job seekers registered in Category A, we add those working reduced hours (categories B and C), the March upturn remains visible, but smaller. The number registered in categories A-B-C falls slightly in March (8700 people) but also over 3 months (down 23,900).

Once again, however, beyond the good results in March, given the continuing deterioration of the labour market and the emergence of more precarious situations with regard to employment over the last eight years, there will be no lasting improvement in households' job situation until these "good figures" have accumulated over a medium-term horizon.

More relevant statistical sources ...

These monthly figures provide only a partial representation of unemployment. They omit in particular people seeking employment who are not registered at the job agency. As for those registered in Category A, people are also counted who are not performing a real job search because they are close to retirement (see [The elimination of the job search exemption: When governments voluntarily increase the jobless count! – in French](#)). In addition, the figures released by the job centre can be distorted by changes in administrative practices and by occasional technical problems that affect the management of the job centre's files.

The quarterly figures provided by the INSEE are a more reliable source for the analysis of unemployment. According to the employment survey, a person is considered "unemployed within the meaning of the [International Labour Office \(ILO\)](#)" if he or she meets the following three conditions:

- being unemployed, that is to say, not having worked at least one hour during the reference week of the survey;
- being available to take a job within 15 days;
- having actively sought work in the month preceding the

survey or having found a job that begins within three months.

Based on these criteria, the unemployment rate in metropolitan France in the fourth quarter of 2015 stood at 10% of the active population (+871,000 people since Q4 2007).

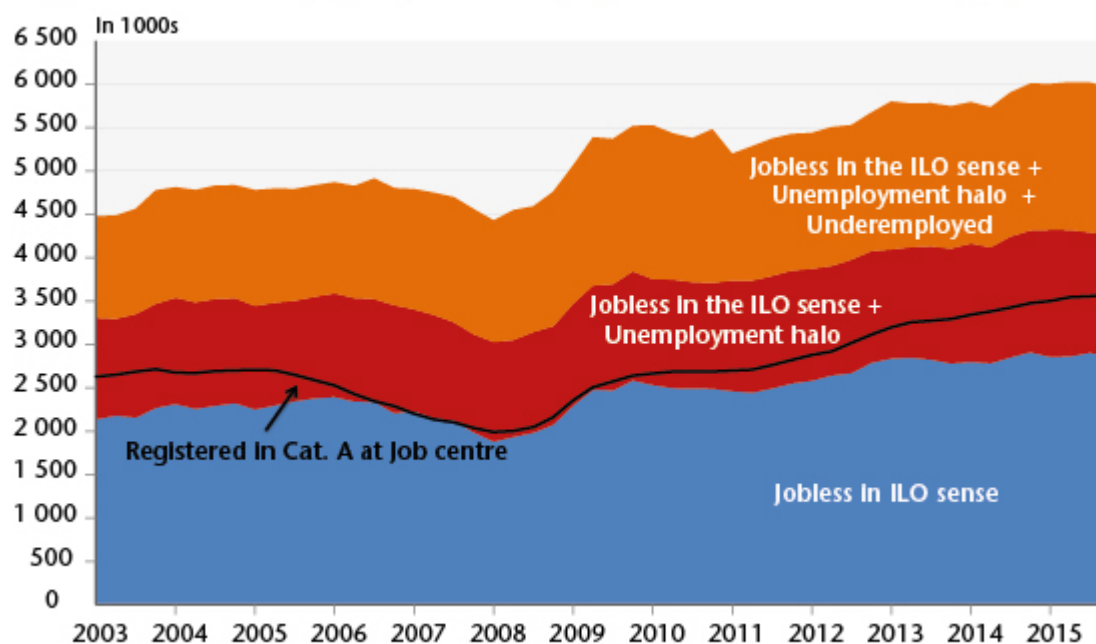
...that help to better measure the precarity of the labour market

But this definition is still restrictive. It still fails to take into account situations at the margins of unemployment. Thus people who want to work but are considered inactive in the ILO sense, either because they are not readily available for work (within two weeks) or because they are not actively seeking a job, form what is called the unemployment “halo”. In the fourth quarter, this halo included 1.41 million people (+25% over the fourth quarter of 2007, i.e. an additional 279,000 people).

Similarly, the strict ILO definition does not include people who are working part-time but want to work more, or people who are in a situation of partial unemployment. In the fourth quarter of 2015, these situations of “underemployment” involved 1.7 million people (up 18% compared to the fourth quarter of 2007, i.e. by 254,000).

In total, by incorporating underemployment and the “halo” into the strict definition of ILO-measured unemployment, 5.9 million people are in a weakened position with regard to employment, 31% more than eight years ago, i.e. 18.8% of the workforce broadly speaking (Figure 1) [\[1\]](#).

Figure 1. The unemployed, the unemployment halo and underemployment



Source : INSEE, DARES, Pole emploi.

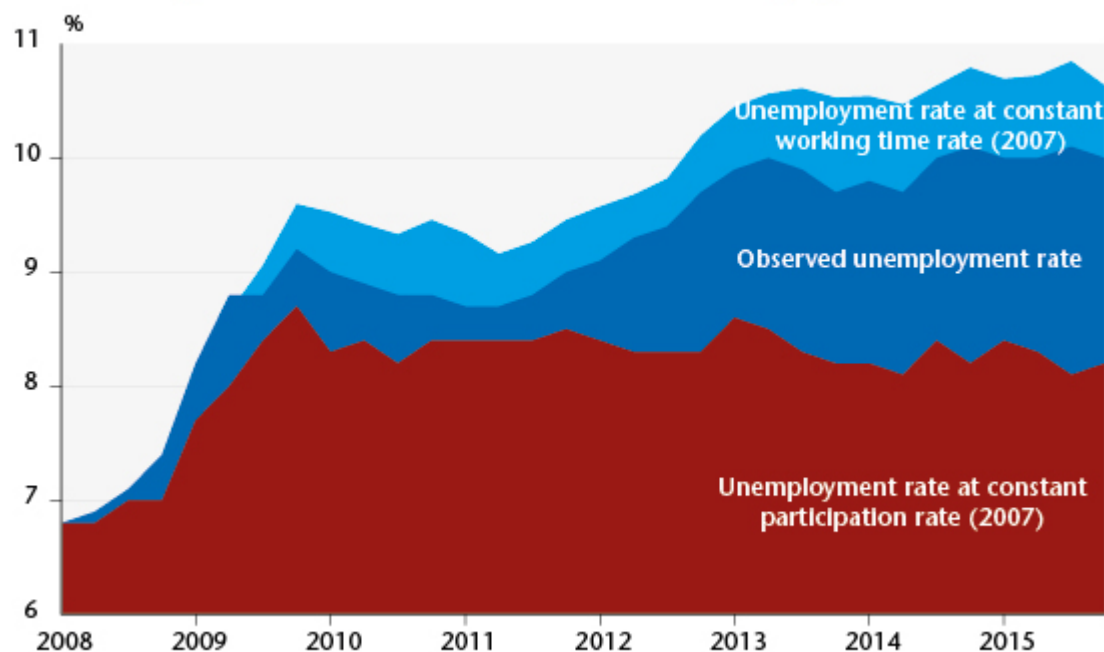
Multiform unemployment, with a transforming labour market

The analysis of the unemployment rate does not therefore include all the dynamics at play in the labour market. The increase in the number of people experiencing underemployment is partly explained by adjustments in the effective working time, via the policy on partial unemployment, the reduction of overtime and the use of working-time accounts, but also through the expansion of part-time work, including on an involuntary basis. While these adjustments increased underemployment, they also helped slow the rise in unemployment (in the strict sense) that started in mid-2008. Without these adjustments, in other words, if the hours worked had remained stable between 2007 and 2015, the ILO-based unemployment rate in France would have been 0.6 points higher in the fourth quarter of 2015 (Figure 2).

Along with these adjustments in working time, since the beginning of the crisis France has also experienced greater growth in the labour force (employed + unemployed) than in its overall population. This is attributable partly to the implementation of pension reforms that delay seniors' exit from the workforce. Mechanically, without the creation of new

jobs, this growth in the labour force has had the effect of pushing up the unemployment rate. In the case of France, the impact has been massive. Indeed, if the participation rate had remained at its 2007 level, the unemployment rate in France would be, all else being equal, 8.2%, i.e. 1.6 points lower than the unemployment rate observed in the fourth quarter of 2015.

Figure 2. Observed and "theoretical" unemployment rate



Source : INSEE.

It must nevertheless be noted that while these adjustments are important, the developments on which they are based are not fully due to the crisis. Indeed, there has been a tendency for working time to decrease since 1990. Between 1990 and 2002, the effective working time decreased on average by 0.9% per year. While this decline has certainly been less rapid since 2003, it is continuing (-0.2% per year). At the same time, the participation rate has been rising continuously, due to the combined effects of the increase in women's participation in the labour market and the successive reforms of the pension system. The participation rate in France, which stood at 67.1% in 1990, reached 69.7% in 2007, and in the fourth quarter of 2015 had risen to 71.5%.

Matteo Renzi's Jobs Act: A very guarded optimism

By Céline Antonin

At a time when the subject of labour market reform has aroused passionate debate in France, Italy is drawing some initial lessons from the reform it introduced a year ago. It should be noted that the labour market reform, dubbed the Jobs Act, had been one of Matteo Renzi's campaign promises. The Italian labour market has indeed been suffering from chronic weaknesses, including segmentation, a duality between employees with and without social protection, high youth unemployment, and a mismatch between costs and labour productivity. Renzi's reform takes a social-liberal approach, advocating flexicurity, with the introduction of a new permanent employment contract with graduated protection, lower social charges on companies, and better compensation and support for the unemployed. Although the initial assessment is surely positive in terms of both unemployment and job creation, there's no cause for hasty triumphalism: the reform has been implemented in especially favourable circumstances, marked by a return of growth, an accommodative policy mix, and a stagnating work force.

Jobs Act Italian-style: The key points

The Jobs Act is actually the latest in a series of measures adopted since the Fornero Act of 2012 that are aimed at a more flexible labour market. Act I of the Jobs Act, the Poletti Decree (DL 34/2014), was adopted on 12 May 2014, but went

relatively unnoticed because it targeted fixed-term contracts and apprenticeships. It allowed in particular extending the duration of fixed-term contracts from 12 to 36 months, suppressing gap periods, and allowing for more fixed-term contracts to be renewed, all while limiting the proportion of fixed-term contracts within a single company[\[1\]](#).

The real change came with Act II of the Jobs Act, for which the Italian Senate passed enabling legislation on 10 December 2014. The eight implementing decrees adopted in the first half 2015 have four key points:

- The elimination of Article 18 of the Labour Code, which allowed reinstatement in cases of manifestly unfair dismissal: the reinstatement requirement was replaced by a requirement for indemnification that is capped[\[2\]](#), with reinstatement still being required in case of a dismissal involving discrimination;
- The creation of a new form of permanent (open-ended) contract and graduated protection, lying between permanent contracts and fixed-term contracts: dismissal was facilitated during the first three years on the job, with severance pay that increases with employee seniority;
- The suppression of the abuse of what are called “collaboration contracts”, [\[3\]](#)precarious contracts that are often used to disguise an actual employment relationship, affecting about 200,000 people. These contracts will be transformed into wage labour contracts from 1 January 2016 (1 January 2017 for public administrations), except for a few limited cases;
- The reform of unemployment insurance, with an extension of compensation schemes. The benefit period, for instance, is extended to two years (from 12 months previously). As for compensation for short-time working (“technical unemployment”), this is extended to cover apprentices and

companies with 5-15 employees[\[4\]](#). A National Employment Agency (ANPAL), which introduces a one-stop system that helps to link training and employment, was also established.

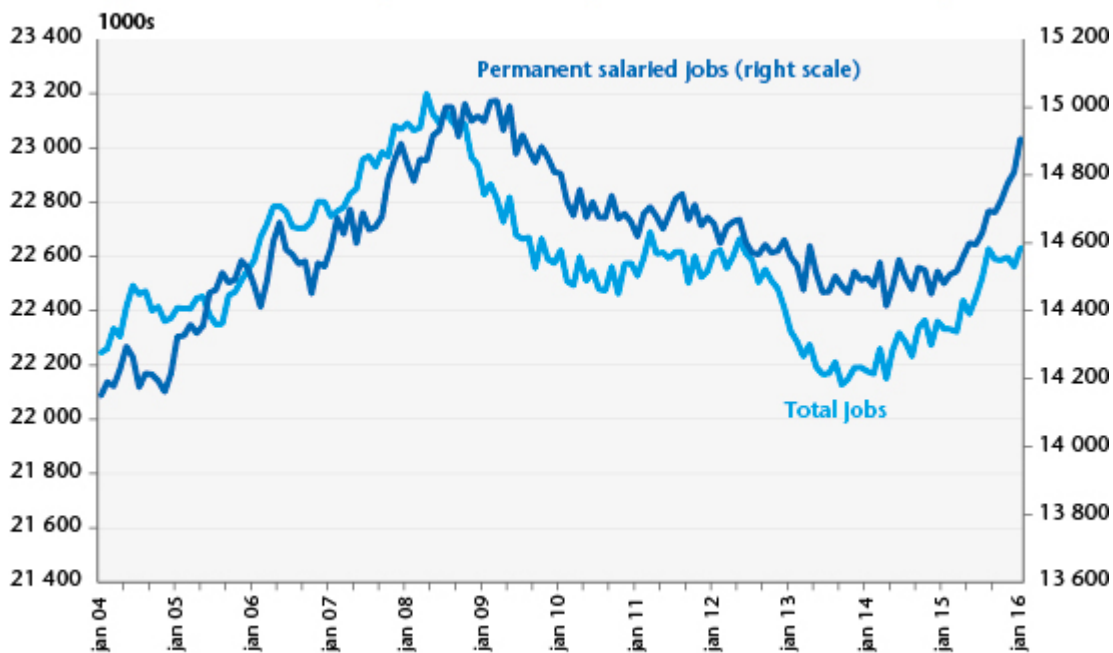
Note that only measures related to experimentation with a national minimum wage[\[5\]](#), which are contained in the enabling law in December 2014, were not addressed.

Alongside the Jobs Act, Italy opted to lower taxes on labour: in 2015, the wage part of the IRAP (equivalent to a business tax) for those employed on permanent contracts was eliminated, reducing the amount of the IRAP by about one-third. Above all, Italy's 2015 Budget Act eliminates social security contributions for 3 years on the new open-ended contracts with graduated protection, up to a limit of 8,060 euros per year for new hires taken on between January 1 and December 31, 2015 who did not have permanent job contracts in the six months preceding their hiring. This measure is expected to cost 3.5 billion euros between now and 2018. It was extended in 2016: companies that hire employees on the new permanent contracts in 2016 will be exempt from 40% of social security contributions for 2 years.

Strong jobs growth and a lower unemployment rate

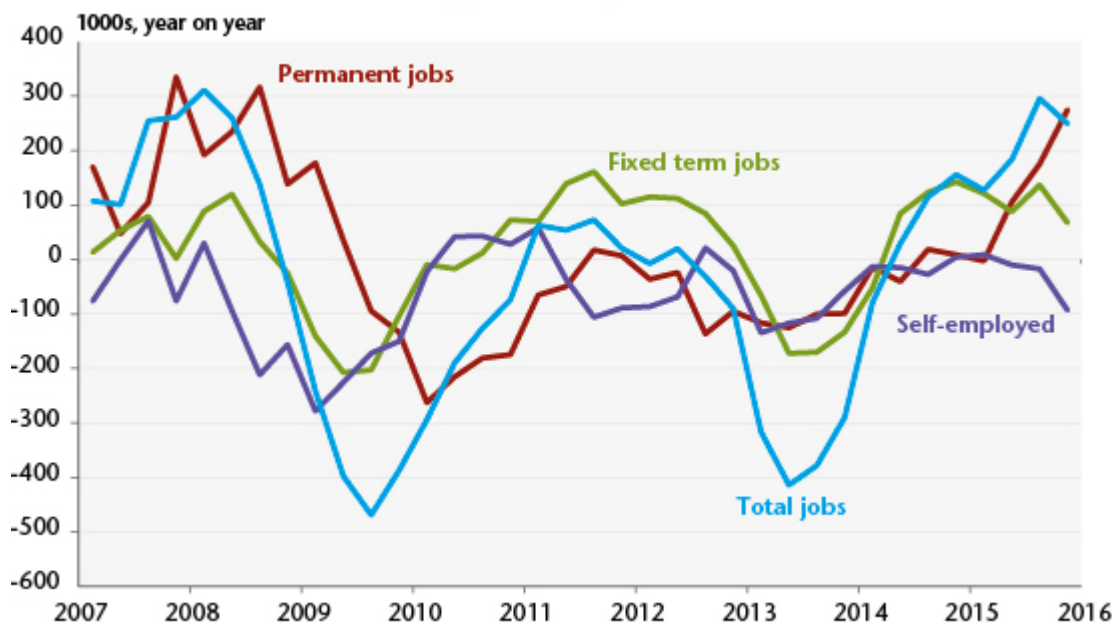
There has been strong growth in employment, in particular permanent jobs, since the start of 2015: between January 2015 and January 2016, the number of employed increased by 229,000, with strong growth in the number of salaried employees (+377,000) and a decline in the number of self-employed (-148,000). Among employees, there was a sharp increase in the number of permanent positions (+328,000). The number of permanent employees has now returned to the 2009 level of 22.6 million (Figure 1); as for total employment, even if it has not yet reached its pre-crisis level, the decline in the 2012-2014 period has been overcome. At the same time, the annual rate of job creation has returned to its pre-crisis level, with growth of about 250,000 per year (Figure 2).

Figure 1. Number of jobs (total and permanent), 2004-January 2016



Sources : Istat, author's calculations.

Figure 2. Annual change in number of jobs by contract type, Q1 2007 – Q4 2015



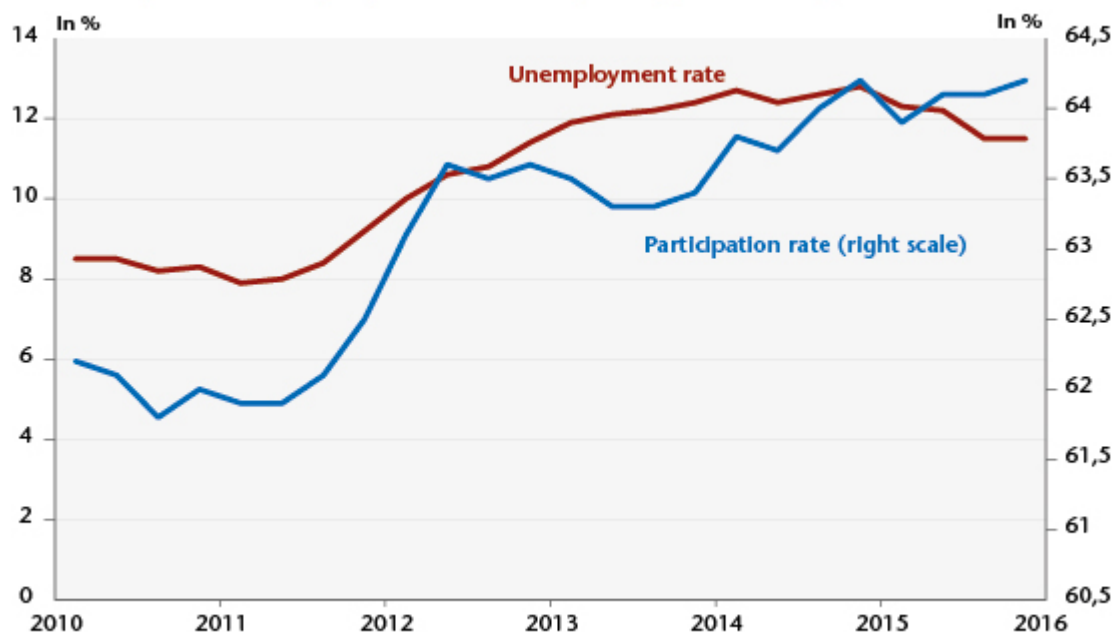
Sources : Istat, author's calculations.

In addition to new hires on permanent contracts, the Jobs Act has led to replacing precarious jobs with permanent jobs with increasing guarantees. Thus, 5.4 million new jobs were created in 2015 (+11% compared to 2014) [6], mainly permanent jobs. Of the 2.4 million permanent jobs created, there were 1.9 million

new open-ended contracts and 500,000 fixed-term contracts that were converted into open-ended contracts (including 85,000 apprenticeship contracts), up sharply from 2014. There were also fewer collaboration contracts (a 45% decrease from Q3 2014 to Q3 2015) and apprenticeship contracts (-24.6%). Note also the 4.3% increase in the number of resignations and the 6.9% decrease in layoffs.

The corollary to this jobs growth is a marked fall in the unemployment rate (Figure 3), which fell to 11.4% in the last quarter of 2015 (from 12.8% one year earlier). However, the decline in unemployment was also due to stagnation in the labour force in 2015, unlike previous years that were marked by the pension reform.

Figure 3. Unemployment rate and participation rates, 2010-2015



Sources : Istat, author's calculations.

Uncertainties remain

Matteo Renzi seems to have won his bet. Yet this fall in unemployment should not be over-interpreted, as a number of positive factors have undoubtedly contributed to strengthening this trend.

First, there was a windfall effect related to the announcement

of the exemptions on social contributions for hiring new permanent employees, which led some companies to put off new hiring planned for 2014 until 2015 (which led to a rise in unemployment in late 2014). Moreover, part of the fall in unemployment is related to the impact of replacing precarious short-term contracts with the new permanent contracts with graduated protection (see above). The question is whether the new flexibilities allowed by these new contracts will be used over the next three years, and consequently whether there will be an increase in contract terminations.

In addition, the stagnation of the work force (Figure 3) has significantly amplified the downward trend in unemployment. With the improvement observed in the labour market, we expect in the future that the growth in the workforce that began in the last quarter of 2015 will continue due to what is called in French an “*effet de flexion*”, or “bending effect”, [\[7\]](#) which would absorb some of the impact of the job creation in 2016 and 2017.

Furthermore, the Jobs Act was adopted when the economy was emerging from a recession, with a recovery that, while soft (+0.6% growth in 2015), still exceeded the growth potential [\[8\]](#). The easing of fiscal constraints had a stimulus effect in 2015, which may partially explain the fall in unemployment. As for monetary conditions, they are particularly favourable, as Italy is one of the main beneficiaries of the quantitative easing measures taken by the ECB.

Notwithstanding these qualifications, it is undeniable that the cut in the social contributions level has had a positive impact. The February 2016 report of the National Social Security Institute (INPS) showed that, of the 2.4 million new permanent jobs created in 2015, 1.4 million benefited from exemptions on employer contributions, or almost two-thirds of these new jobs. Moreover, the reduction of precarious job contracts and their replacement by permanent contracts, even if they offer less protection than before, is a rather

encouraging sign for access to long-term employment by groups that have traditionally been more marginal (self-employed, collaboration contracts).

Perhaps the main regret about this reform is the absence of a component aimed explicitly at vocational training, which is one of the main weaknesses of Italy's labour market. The country holds a dismal EU record for the number of young people (15-24) who are neither in employment nor in school or training. Moreover, the workforce has insufficient training, and investment in research and development is low, which results in low productivity. It is legitimate to want to take action on labour costs and the duality of the labour market, but this will not be enough to solve the problem of productivity and the inadequacy of the workforce. Matteo Renzi would therefore do well to foresee an Act III in his labour reforms to finally pull the country out of its stagnation.

[1] See [C. Antonin, Réforme du marché du travail en Italie : Matteo Renzi au pied du mur](#), [Labour market reform in Italy: Matteo Renzi with his back to the wall], *Note de l'OFCE* no. 48.

[2] The monetary payment is determined by a scale based on the employee's seniority. It is equivalent to two months of the final salary per year of service, for a total that cannot be less than 4 months of salary and is capped at 24 months.

[3] "Intermediate status between salaried employment and self-employment, for workers not subject to a hierarchical subordination but 'coordinated' with the company and creator of certain social rights. These are self-employed workers who are, in fact, dependent on a single client company (which exercises limited management powers, for example in terms of the organization of work and the working time)." [E. Prouet, Contrat de travail, les réformes italiennes](#) [The job contract,

the Italian reforms], France Stratégie, *La Note d'Analyse*, no. 30, May 2015.

[4] Other measures concerning short-time work (“chomage technique”) are also planned, including that an employee on short-time work may not have their hours cut by more than 80% of their total work hours. Furthermore, the period during which a company may resort to this procedure is a maximum of 24 months over five rolling years.

[5] There is no national minimum wage in Italy, with minimum wages instead set at the industry level, as was the case in Germany before 2015.

[6] This figure of 5.4 million represents gross job creation, including all forms of employment (including very short-term contracts), and without taking into account job destruction. In terms of net job creation between January 2015 and January 2016, we accept the figure of 229,000.

[7] When unemployment rises, working-age people are discouraged from reporting for the labour market. Conversely, when employment picks up again, some people are encouraged to return to the labour market, slowing the decline in unemployment; this phenomenon is called the “effet de flexion” in French, or the bending effect.

[8] Labour productivity tends to grow relatively slowly in Italy; consequently, an increase in production tends to create more jobs in Italy than in France for example, where labour productivity is higher.