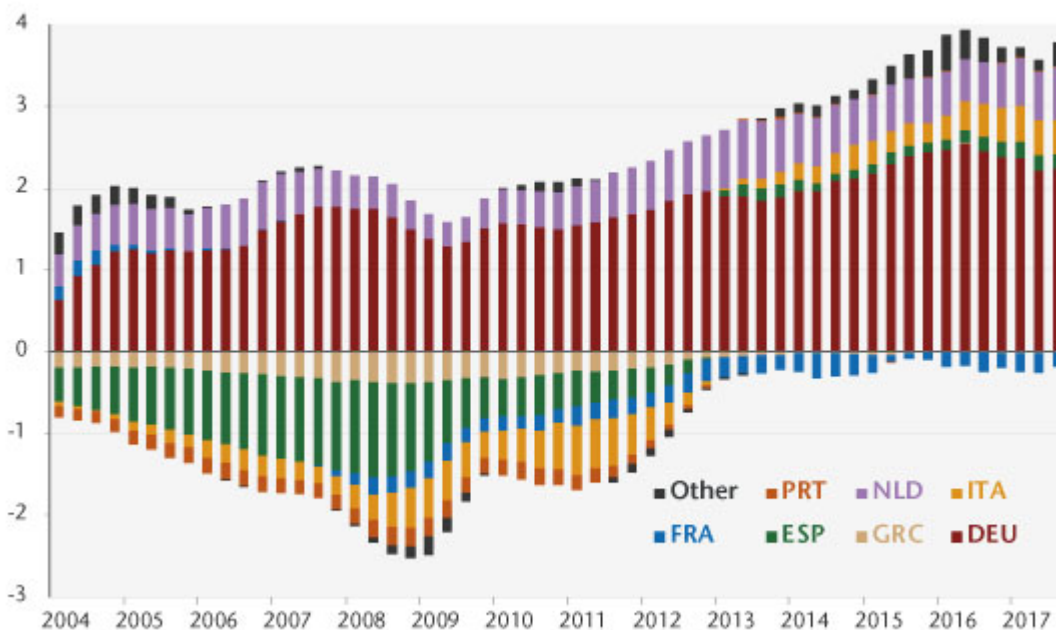


Major adjustments are awaiting the euro zone

By [Bruno Ducoudré](#), [Xavier Timbeau](#) and [Sébastien Villemot](#)

Current account imbalances are at the heart of the process that led to the crisis in the euro zone starting in 2009. The initial years of the euro, up to the crisis of 2007-2008, were a period that saw widening imbalances between the countries of the so-called North (or the core) and those of the South (or the periphery) of Europe, as can be seen in Figure 1.

Figure 1. Current account balances (moving average over four quarters) in % of GDP of the euro zone



Source: Eurostat.

The trend towards diverging current account balances slowed sharply after 2009, and external deficits disappeared in almost all the euro zone countries. Despite this, there is still a significant gap between the northern and southern countries, so there cannot yet be any talk about reconvergence. Moreover, the fact that the deficits have fallen (Italian and Spanish) but not the surpluses (German and Dutch) has radically changed the ratio of the euro zone to the rest of the world: while the

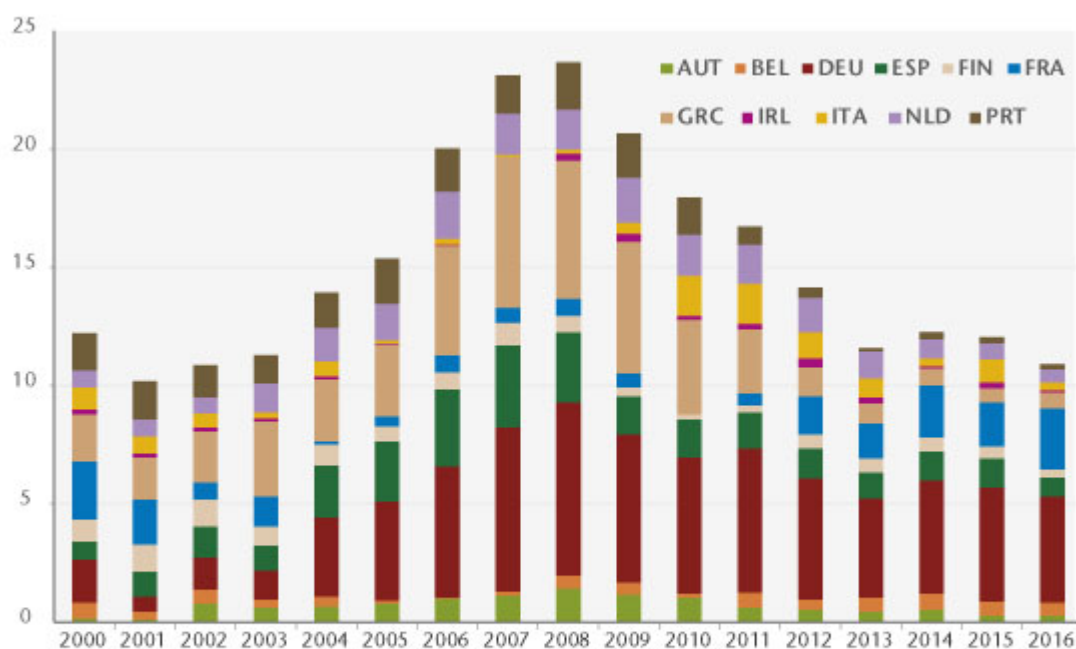
zone's current account was close to balanced between 2001 and 2008, a significant surplus has formed since 2010, reaching 3.3% of GDP in 2016. In other words, the imbalance that was internal to the euro zone has shifted into an external imbalance between the euro zone and the rest of the world, in particular the United States and the United Kingdom. This imbalance is feeding Donald Trump's protectionism and putting pressure on exchange rates. While the nominal exchange rate internal to the euro zone is not an adjustment variable, the exchange rate between the euro and the dollar can adjust.

It seems unlikely that the euro zone can maintain a surplus like this over the long run. Admittedly, the pressures for the appreciation of the euro are now being contained by the [particularly accommodative monetary policy of the European Central Bank](#) (ECB), but when the time comes for the normalization of monetary policies, it is likely that the euro will appreciate significantly. In addition to having a deflationary impact, this could rekindle the crisis in the zone by once again deepening the Southern countries' external deficits due to their loss in competitiveness. This will in turn give new grounds for leaving the euro zone.

[In a recent study \[1\]](#), we seek to quantify the adjustments that remain to be made in order to resolve these various current account imbalances, both within the euro zone and vis-à-vis the rest of the world. To do this, we estimate equilibrium real exchange rates at two levels. First, from the point of view of the euro zone as a whole, with the idea that the adjustment of the real exchange rate will pass through an adjustment of the nominal exchange rate, notably the euro vis-à-vis the dollar: we estimate the long-term target of euro / dollar parity at USD 1.35 per euro. Next, we calculate equilibrium real exchange rates within the euro zone, because while the nominal exchange rate between the member countries does not change because of the monetary union, relative price levels allow adjustments in the real exchange rate. Our

estimates indicate that substantial misalignments remain (see Figure 2), with the average (in absolute terms) misalignment relative to the level of the euro being 11% in 2016. The relative nominal differential between Germany and France comes to 25%.

Figure 2. Indicator of nominal intra-euro zone adjustments with countries' contributions



Note: Figure 2 relates the average (weighted by GDP) of the absolute value of the nominal adjustments. The contribution of each country to this average is shown. The nominal disadjustments correspond to the changes in price of the added value that must be made simultaneously so that all the countries hit their current account target. This figure can be interpreted as a summary measure of the level of the internal disadjustments of the euro zone, with the contribution of each country.
Source: OFCE calculations.

In the current situation, claims by some euro zone countries are not accumulating on others in the zone, but there is accumulation by some euro zone countries on other countries around the world. This time the exchange rate (actual, weighted by accumulated gross assets) can serve as an adjustment variable. The appreciation of the euro would therefore reduce the euro zone's current account surplus and depreciate the value of assets, which are probably accumulated in foreign currency. France however now appears as the last country in the euro zone running a significant deficit. Relative to the zone's other countries, it is France that is contributing most (negatively) to the imbalances with Germany (positively). If the euro appreciates, it is likely that France's situation

would further deteriorate and that we would see a situation where the net internal position accumulates, but this time between France (on the debtor side) and Germany (creditor). This would not be comparable to the situation prior to 2012, since France is a bigger country than Greece or Portugal, and therefore the question of sustainability would be posed in very different terms. On the other hand, reabsorbing this imbalance by an adjustment of prices would require an order of magnitude such that, given the relative price differentials that would likely be needed between France and Germany, it would take several decades to achieve. It is also striking that, all things considered, since 2012, when France undertook a costly reduction in wages through the CICE tax credit and the Responsibility Pact, and Germany introduced a minimum wage and has been experiencing more wage growth in a labour market that is close to full employment, the relative imbalance between France and Germany, expressed in the adjustment of relative prices, has not budged.

Three consequences can be drawn from this analysis:

1. The disequilibrium that has set in today will be difficult to reverse, and any move to speed this up is welcome. Ongoing moderation in rises in nominal wages in France, stimulating the growth of nominal wages in Germany, restoring the share of German added value going to wages, and continuing to boost the minimum wage are all paths that have been mentioned in the various iAGS reports. A reverse social VAT, or at least a reduction in VAT in Germany, would also be a way to reduce Germany's national savings and, together with an increase in German social security contributions, would boost the competitiveness of other countries in the euro zone;
2. The pre-crisis internal imbalance has become an external imbalance in the euro zone, which is leading to pressure for a real appreciation of the euro. The order of

magnitude is significant: it will weigh on the competitiveness of the different countries in the euro zone and will lead to the problems familiar prior to 2012 resurfacing in a different form;

3. The appreciation of the euro caused by the current account surpluses in certain euro zone countries is generating an externality for the euro zone countries. Because their current accounts respond differently to a change in relative prices, Italy and Spain will see their current account balance react the most, while Germany's will react the least. In other words, the appreciation of the euro, relatively, will hit the current accounts of Italy and Spain harder than Germany's and will lead to a situation of internal imbalance much like what existed prior to 2012. This externality together with the reduced sensitivity of Germany's current account to relative prices argues for a reduction in imbalances by boosting Germany's internal demand, i.e. by a reduction in its national savings. The tools to do this could include boosting public investment, lowering direct personal taxes, or raising the minimum wage more quickly relative to productivity and inflation.

[\[1\]](#) Sébastien Villemot, Bruno Ducoudré, Xavier Timbeau: "Taux de change d'équilibre et ampleur des désajustements internes à la zone euro" [Equilibrium exchange rate and scale of internal misalignments in the euro zone], *Revue de l'OFCE*, 156 (2018).

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.

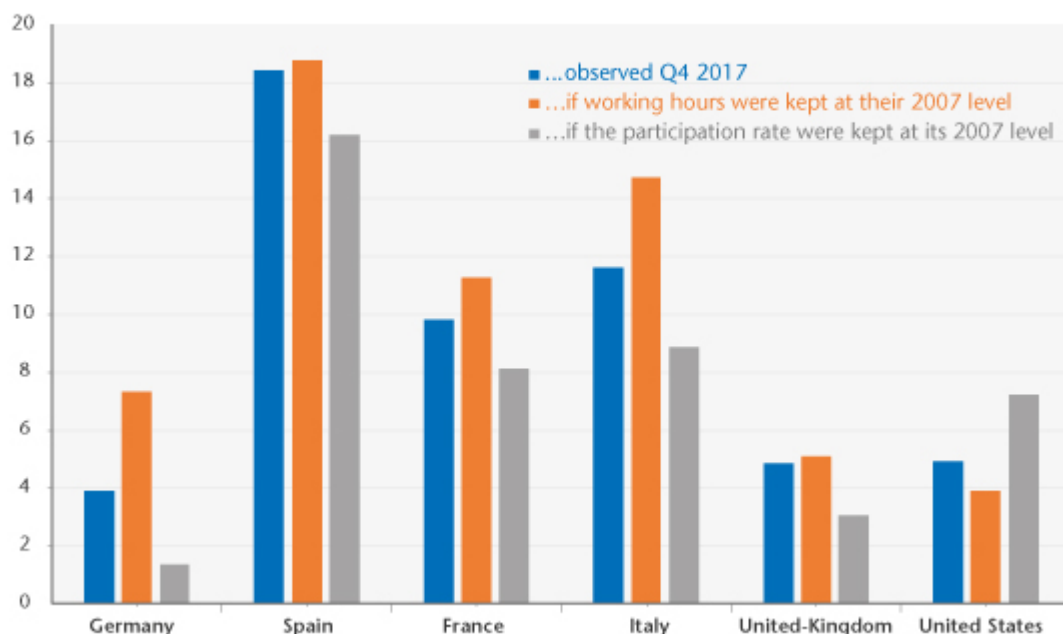
If the participation rate had remained at its 2007 level, the unemployment rate would be lower by 2.3 points in France, 3.1 points in Italy and 2 points in the United Kingdom (see figure). On the other hand, without the sharp contraction in the US labour force, the unemployment rate would have been more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

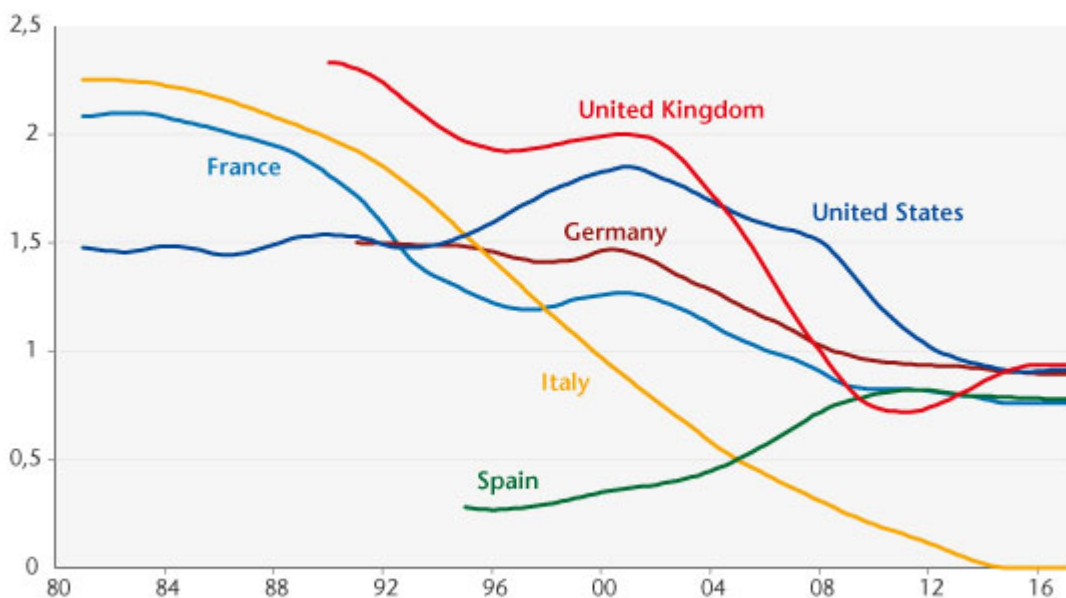
After reviewing the various possible explanations for the slowdown described in the economic literature, we present the theoretical modelling of the equation for labour demand and our strategy for an empirical estimation. This equation, derived from a CES-type production function [\[2\]](#), is based 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



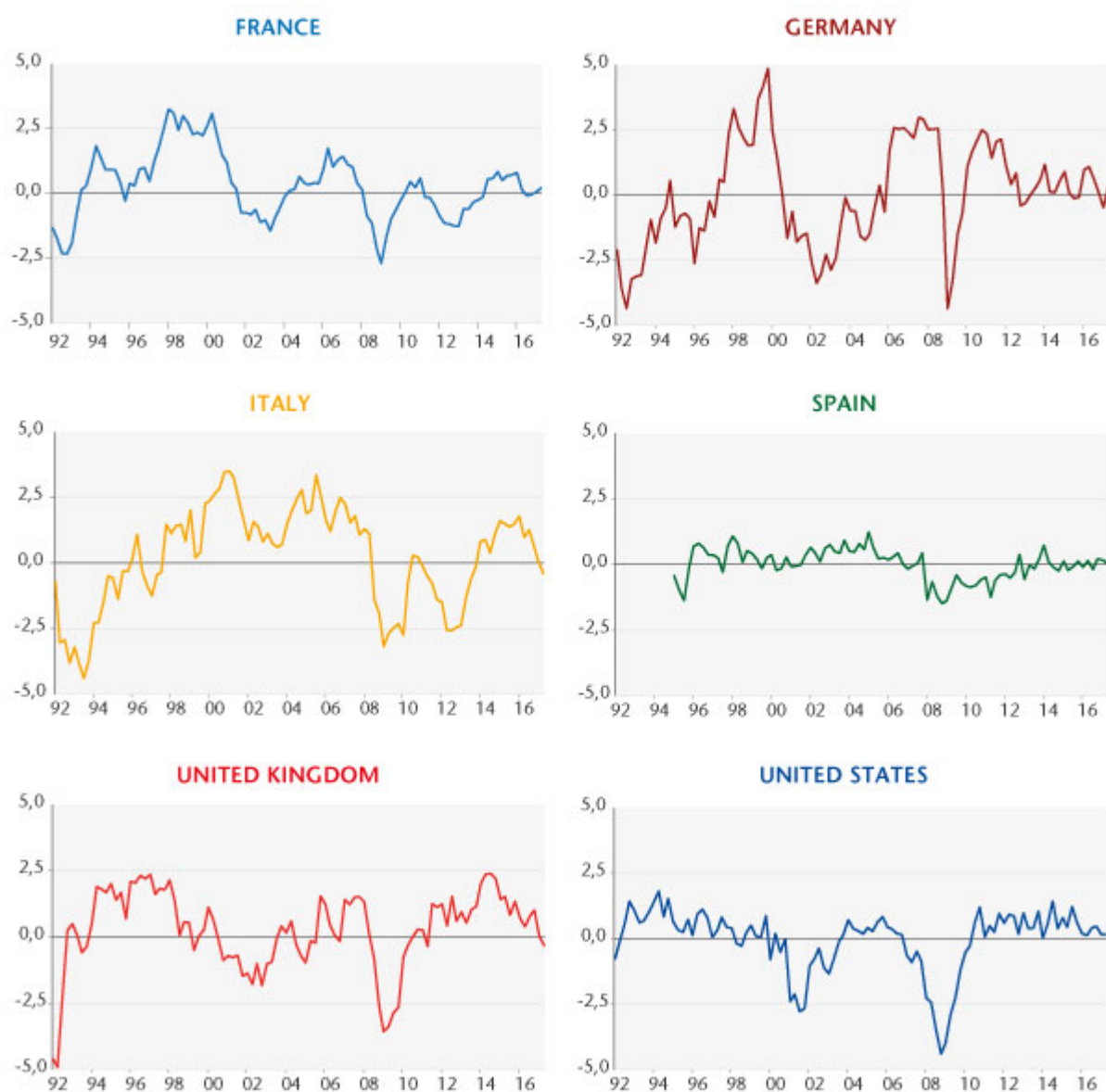
Note: year-on-year hourly trend productivity gains.
Source: authors' calculations.

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. Cette 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'Économie, 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).

Fin de partie pour les contrats aidés

par [Bruno Ducoudré](#)

L'été 2017 a été marqué, sur le plan des politiques de l'emploi, par un changement de stratégie majeur du nouveau gouvernement par rapport au précédent quinquennat. La nouvelle politique de l'emploi donne désormais la priorité à la formation et à l'accompagnement des jeunes NEET (*Not in Education, Employment or Training* – ni en étude, emploi, ou stage) et des chômeurs les plus éloignés du marché du travail, et délaisse les contrats aidés comme outil de traitement du chômage. Cette nouvelle stratégie s'est opérée en deux temps. Premièrement le gouvernement a annoncé cet été qu'il n'y aurait pas de rallonge pour les contrats aidés au deuxième semestre et que le nombre de contrats prévus pour 2018 serait en forte baisse par rapport aux années précédentes. Puis [le Plan Investissement Compétences \(PIC\), prévoyant notamment 15 milliards d'euros dédiés à la formation professionnelle sur cinq ans, a été présenté à la presse le 25 septembre](#). Dans ce

billet, nous précisons quel devrait être l'effet de la baisse des contrats aidés sur l'emploi à partir du deuxième semestre 2017, effet pris en compte dans [le dernier exercice de prévision de l'Ofce d'octobre 2017 pour 2017-2019](#).

La baisse programmée des contrats aidés

Le quinquennat précédent a été marqué par une progression des contrats aidés, avec notamment la création des Emplois d'avenir et l'allongement de la durée des Contrats uniques d'insertion – Contrats d'accompagnement dans l'emploi (CUI-CAE) (graphique 1). Ainsi, en 2013-2014, face à la dégradation du marché du travail, 380 000 contrats aidés dans le secteur non-marchand avaient été signés en moyenne chaque année (360 000 en moyenne sur 2012-2016). La montée en charge des emplois d'avenir, dont la durée moyenne était de 2 ans, ainsi que l'allongement de la durée des CUI-CAE avec pour objectif une durée moyenne des contrats de 10,5 mois contre 7 mois en 2012, avaient permis une forte progression du stock d'emplois en contrat aidé. Le pic des contrats aidés a été atteint au deuxième trimestre 2016, que l'on considère les contrats aidés dans le non-marchand seuls (307 000 en stock) ou que l'on inclut l'Insertion par l'activité économique (IAE) et les contrats aidés du secteur marchand (540 000 en stock). Par la suite, [le nombre d'emplois en contrat aidé a légèrement diminué](#), avec la baisse entamée du stock des Emplois d'avenir pour le secteur non-marchand et des Contrats uniques d'insertion – Contrats initiative emploi (CUI-CIE) dans le secteur marchand. Au deuxième trimestre 2017, on comptait 476 000 contrats aidés en France métropolitaine, dont 292 000 dans le secteur non-marchand, 135 000 dans l'IAE et 49 000 dans le secteur marchand.

L'été 2017 a marqué une rupture brutale avec les années précédentes. Alors que 280 000 contrats aidés ont été votés dans la Loi de finances 2018, une partie importante de l'enveloppe annuelle a été consommée sur le premier semestre. Une rallonge conséquente (généralement votée en Loi de

finances rectificative) aurait donc été nécessaire pour stabiliser le stock de contrats aidés atteint à la fin juin 2017. Le gouvernement en a décidé autrement avec une rallonge de 30 000 contrats aidés, ciblés uniquement sur le secteur non-marchand, actant ainsi une baisse rapide du stock de contrats aidés dans ce secteur (-50 000 contrats aidés en stock prévus au second semestre 2017) et la fin des entrées en contrats aidés dans le secteur marchand.

Graphique. Contrats aidés dans le secteur non-marchand



Champ : France métropolitaine.

Note : la baisse des CUI-CAE observée au deuxième semestre 2014 provient du basculement des CAE des entreprises d'insertion en CDDi (CDD d'insertion).

Source : DARES, PoEm, Calculs et prévision OFCE e-mod.fr 2017-2019, octobre 2017.

Cette forte baisse des contrats aidés se prolongera en 2018. Cela se traduit dans le Projet de loi de finance (PLF) pour 2018 par 200 000 contrats aidés prévus exclusivement dans le secteur non-marchand sous la forme de CUI-CAE dont la durée serait de 10,2 mois en moyenne, avec un taux de prise en charge par l'État qui baisserait à 50% contre environ 70% en 2017 (Tableau 1). Les Emplois d'avenir marchands et non-marchands disparaîtront ainsi que les CUI-CIE. Pour 2019, nous avons fait l'hypothèse de maintien du stock de CUI-CAE à son niveau prévu fin 2018. Par ailleurs, et à contre-courant de la baisse prévue sur les autres types de contrats aidés, les dispositifs d'insertion par l'activité économique bénéficieraient d'une rallonge de 10 000 contrats en 2018, que nous avons maintenue

pour 2019.

Tableau. Entrées et effectifs de bénéficiaires des dispositifs spécifiques de politique de l'emploi

En milliers	Entrées			Effectifs en fin d'année (T4)			Effet cumulé sur l'emploi net de l'effet d'aubaine 2017-2019
	2017	2018	2019	2017	2018	2019	
Emplois aidés	1754	1128	1308	1323	1185	1352	-98
Contrats aidés	533	436	433	415	325	302	-86
CUI-CAE	220	182	179	197	165	164	-41
CUI-CIE	29	0	0	20	0	0	-6
Emplois d'avenir	40	0	0	67	22	0	-48
<i>dont non marchand</i>	35	0	0	53	21	0	-42
<i>marchand</i>	5	0	0	14	1	0	-6
Insertion par l'activité économique	244	254	254	132	137	137	8
Contrats en alternance	488	493	493	602	610	610	2
Apprentissage	286	291	291	393	400	400	1
Contrat de professionnalisation	202	202	202	209	209	209	1
Autres emplois aidés	733	198	382	306	251	441	-13
Dispositifs ciblés sur les territoires en difficulté	15	15	15	35	35	35	0
Contrats de génération	10	0	0	25	13	3	-5
Exonérations de cotisations chômage sur les embauches de jeunes en CDI	525	0	0	44	0	0	-8
Aides aux chômeurs créateurs d'entreprise	181	181	365	198	198	398	nc
Accompagnement des restructurations	2	2	2	5	5	5	nc
Formation des personnes en recherche d'emploi (1)	750	860	960	194	320	362	44
Garantie jeunes (2)	71	93	93	66	86	88	23
Total							-31

(1) L'effet de la formation sur l'emploi est calculé en appliquant une élasticité de retour à l'emploi de 0,07 sur le différentiel d'entrées en formations par rapport aux entrées constatées en 2015 (660 000 entrées), l'année 2016 étant marquée par le Plan « 500 000 formations ». Cet effet ne tient pas compte d'un possible effet de changement dans la file d'attente, qui atténuerait l'impact du dispositif sur le retour à l'emploi.

(2) L'effet sur l'emploi est calculé en retenant un impact de 9 % sur le taux d'emploi durable (CDI et CDD de 6 mois et plus hors emplois aidés) sur le nombre de jeunes entrant dans le dispositif chaque année. Cet effet ne tient pas compte d'un possible effet de changement dans la file d'attente, qui atténuerait l'impact du dispositif sur la probabilité d'être en emploi durable.

Champ : France métropolitaine.

Source : Insee, Dares, PoEm, Calculs et prévision OFCE e-mod.fr 2017-2019, octobre 2017.

Des effets négatifs à court terme sur l'emploi

Compte tenu de ces éléments, le stock de contrats aidés baisserait fortement entre la fin 2017 et la fin 2019 (cf. graphique 1 et Tableau 1 : -86 000 contrats aidés non-marchands, -123 000 contrats aidés y compris secteur marchand et IAE). L'effet cumulé sur 2017-2019 de la baisse du stock de contrats aidés conduirait à réduire le nombre d'emplois de 86 000. Cet effet négatif s'explique principalement par [le faible effet d'aubaine des contrats aidés non-marchands contrairement au secteur marchand](#) (0,3 retenu pour les CUI-CAE, 0,4 pour les Emplois d'avenir, 0,84 pour les CUI-CIE et 0,75 pour les Emplois d'avenir du secteur marchand)[\[1\]](#).

Concernant l'alternance, en attendant la réforme à venir, le gouvernement a fixé pour 2018 un objectif de hausse de 2% du

nombre d'entrées en apprentissage et nous avons retenu une hypothèse de stabilisation du stock de contrats de professionnalisation en prévision. L'effet sur l'emploi serait négligeable en prévision (+2 000 emplois cumulés entre 2017 et 2019).

Les autres dispositifs d'emplois aidés voient la fin de l'exonération de cotisation chômage sur les embauches de jeunes en CDI à compter du 1^{er} octobre 2017 (entrée en vigueur de la nouvelle convention d'assurance chômage de l'Unedic) ainsi que la suppression du contrat de génération dès 2018. L'aide aux chômeurs créateurs d'entreprise serait en revanche étendue progressivement à partir de 2019[2]. Nous avons inscrit 200 000 bénéficiaires supplémentaires en 2019. Enfin, nous avons stabilisé en prévision les bénéficiaires de l'accompagnement des restructurations, ainsi que les dispositifs ciblés sur les territoires. Ces derniers devraient être toutefois rediscutés en 2019 avec l'allègement supplémentaire de cotisations sociales au niveau du SMIC[3]. Au total, les politiques de l'emploi, *via* les contrats aidés et les autres dispositifs d'emplois aidés, contribueraient négativement à l'évolution de l'emploi total pour -98 000 emplois sur la période 2017-2019. Ce chiffrage indiqué dans le tableau 1 ne tient toutefois pas compte d'un possible effet de l'extension de l'Accre (Aide au chômeur créant ou reprenant une entreprise) sur l'emploi[4], ni de l'effet positif attendu du Plan d'investissement compétences sur l'amélioration de l'employabilité des jeunes et des chômeurs de longue durée : compte tenu de la montée en charge des formations et de la Garantie jeunes, et de l'effet attendu sur le retour à l'emploi de ces dispositifs[5], le Plan d'investissement compétences pourrait contribuer positivement à l'emploi en 2018-2019 (+54 000 emplois).

La nouvelle orientation des politiques de l'emploi devrait donc avoir un effet négatif à court terme sur l'emploi total, l'effet négatif de la forte baisse des contrats aidés entre le

deuxième semestre 2017 et la fin d'année 2018 n'étant que partiellement compensé par la montée en charge progressive de Plan d'investissement compétences.

[1] Pour plus de détails, voir « Les contrats aidés : quels objectifs, quel bilan ? », *Dares Analyses*, n° 21, mars 2017.

[2] Suivant le PLF 2018, l'exonération de cotisations sociales « Aide au chômeur créant ou reprenant une entreprise » (ACCRE) sera étendue dès 2019 à l'ensemble des travailleurs indépendants qui créent ou reprennent une activité, pour un coût de 200 millions d'euros » et pourrait bénéficier à terme à 350 000 créateurs ou repreneurs d'entreprise supplémentaires.

[3] Les allègements supplémentaires rendraient ces dispositifs non incitatifs.

[4] Cet effet pourrait toutefois être négligeable. Cf. Redor, D., « L'aide à la création d'entreprises a-t-elle un impact sur leur survie ? Une évaluation pour quatre cohortes d'entreprises créées par des chômeurs en France », *Économie et Statistique*, n° 493, 2017.

[5] L'effet de la formation sur l'emploi est calculé en appliquant une élasticité de retour à l'emploi de 0,07 sur le différentiel d'entrées en formation par rapport aux entrées constatées en 2015 (660 000 entrées). Cf. Card, D., Kluve, J., & Weber, A. (2017), « What works? A meta analysis of recent active labor market program evaluations », *Journal of the European Economic Association*, jvx028. L'effet de la Garantie jeunes sur l'emploi est calculé en retenant un impact de 9 % sur le taux d'emploi durable (CDI et CDD de 6 mois et plus hors emplois aidés) sur le nombre de jeunes entrant dans le dispositif chaque année. Cf. Tableau 2.2, p. 22 dans Dares, 2016 : « Premiers résultats d'évaluation statistique de l'impact de la Garantie jeunes – Annexe 5 », novembre.

Labour force participation rates and working time: differentiated adjustments

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

In the course of the crisis, most European countries reduced actual working time to a greater or lesser extent by making use of 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 involuntary part-time work. In contrast, the favourable trend in US unemployment is explained in part by a significant fall in the participation rate.

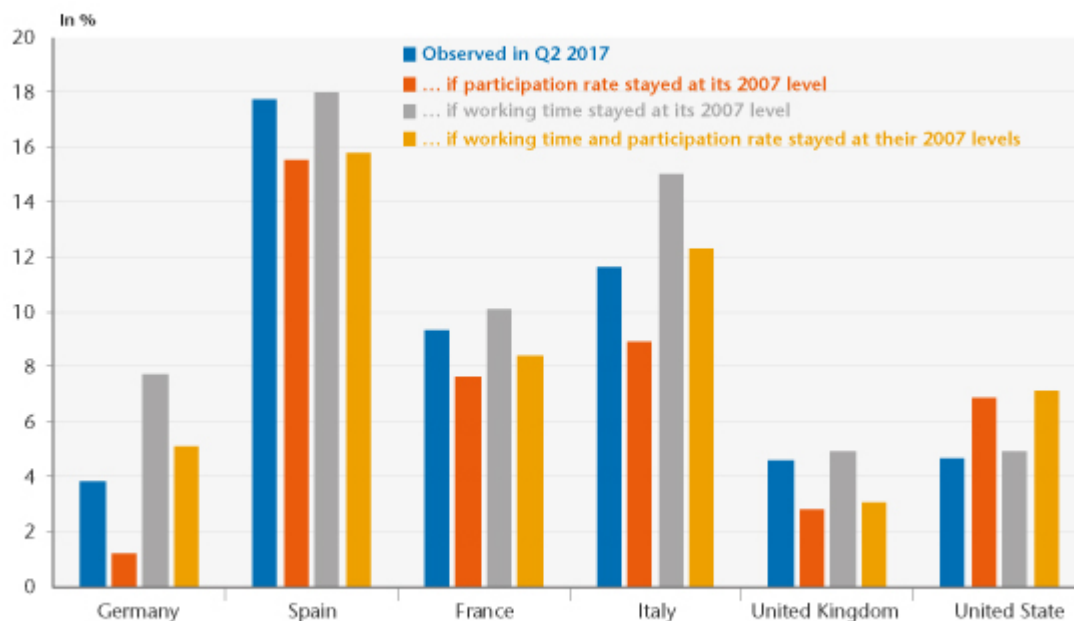
Assuming that, for a given level of employment, a one-point increase in the participation rate (also called the “activity rate”) leads to a rise in the unemployment rate, it is possible to measure the impact of these adjustments (working time and participation rates) on unemployment, by calculating an unemployment rate at a constant employment level and controlling for these adjustments. In all the countries studied, the active population (employed + unemployed) increased by more than the general population, except in the United States, which was due in part to pension reforms. Mechanically, without job creation, demographic growth results in increasing the unemployment rate of the countries in question.

If the participation rate had remained at its 2007 level, the unemployment rate would be lower in France by 1.7 points, by 2.7 points in Italy and by 1.8 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 points higher than that observed in 2016. Germany has also experienced a significant decline in unemployment since the crisis (-5.1 points) even though its participation rate increased by 2.2 points. Given the same participation rate, Germany's unemployment rate would be... 1.2%. However, changes in participation rates are also the result of structural demographic factors, meaning that the hypothesis of a return to 2007 rates is arbitrary. For the United States, part of the decline in the participation rate can be explained by changes in the structure of the population. The underemployment rate might well also be overstated.

As for working time, the lessons seem very different. It thus seems that if working time had stayed at its pre-crisis level in all the countries, the unemployment rate would have been 3.9 points higher in Germany, 3.4 points higher in Italy and 0.8 point higher in France. In Spain, the United Kingdom and the United States, working time has not changed much since the crisis. By controlling for working time, the unemployment rate is therefore changing along the lines seen in these three countries.

Figure. Unemployment rate observed at Q2 2017 and unemployment rate if....



Sources: National accounts, OFCE calculations.

It should not be forgotten that there is a tendency for working time to fall, which is reflected in developments observed during the crisis independently of the specific measures taken to cushion the impact on employment through mechanisms such as short-time working or the use of time savings accounts. Since the end of the 1990s, working time has fallen substantially in all the countries studied. In Germany, between 1998 and 2008, it fell by an average of 0.6% per quarter. In France, the switch to the 35-hour work week resulted in a similar decline over the period. In Italy, the United Kingdom and the United States, average working hours fell each quarter by -0.3%, -0.4% and -0.3%, respectively. In total, between 1998 and 2008, working time declined by 6% in Germany and France, 4% in Italy, 3% in the United Kingdom and the United States and 2% in Spain, which was de facto the only country that during the crisis intensified the decline in working time begun in the late 1990s.

2018 : baisse du chômage non garantie

par [Bruno Ducoudré](#)

Contre toute attente, [le taux de chômage au sens du BIT pour le troisième trimestre 2017 a augmenté de 0,2 point](#). Dans notre [dernier exercice de prévisions pour l'économie française](#), nous avons prévu une stabilité du taux de chômage, en soulignant toutefois les risques qui pèsent sur son évolution au deuxième semestre 2017 et pour l'année 2018. Dans ce billet, nous revenons sur notre prévision d'emploi et de chômage pour 2017-2019 et sur les risques d'observer un coup d'arrêt à la baisse du taux de chômage en 2018.

Graphiques 1. Taux de chômage réalisé et prévu



Note : Nous associons à notre projection un intervalle de confiance simulée à l'aide de la méthode de Monte-Carlo pour 15 000 simulations. Le premier intervalle est à 75 %, le deuxième à 90 % et le troisième à 95 %.

Source : Insee, calculs et prévision OFCE *e-mod.fr* 2017-2019, octobre 2017.

L'emploi marchand ralentira en 2018...

Après trois années de destructions d'emplois salariés dans le

secteur marchand (-130 000 emplois entre fin 2011 et fin 2014), la reprise des créations d'emplois s'est amorcée en 2015 (+113 000 emplois) et celles-ci ont accéléré en 2016 (+229 000 emplois salariés marchands). Les créations d'emplois ont été soutenues par le rebond, certes faible, de la croissance à partir de 2014, et par les mesures de baisse de coût du travail (CICE, Pacte de responsabilité, Prime à l'embauche). Les créations nettes d'emplois étant supérieures à l'évolution de la population active, le nombre de chômeurs a diminué (-187 000 depuis fin 2014), portant le taux de chômage au sens du BIT en France métropolitaine à 9,4 % de la population active au troisième trimestre 2017, contre 10,1 % fin 2014 (tableau 1).

Tableau 1. Emploi et chômage

Variations annuelles en milliers, au dernier trimestre

Glissement annuel	2014	2015	2016	2017*	2018*	2019*
Population active observée	179	48	187	96	71	80
Emploi total	63	113	238	251	123	196
- Secteur marchand	-13	86	227	247	161	223
Salariés	-12	113	229	249	161	223
Non-salariés	-1	-27	-2	-2	0	0
- Secteur non marchand	76	27	11	4	-38	-27
Emplois aidés	22	14	0	-46	-63	-22
Emplois non aidés	54	13	11	50	25	-6
Chômage	116	-65	-51	-155	-51	-117
Variation du taux de chômage entre le t4 de l'année n - 1 et le t4 de l'année n (en %)	0,4	-0,2	-0,2	-0,6	-0,2	-0,4

* prévision OFCE. La prévision du taux de chômage n'intègre pas la hausse observée au t3 2017.
Sources : INSEE ; ministère du Travail ; prévisions OFCE, *e-mod.fr* 2017-2019, octobre 2017.

À l'horizon 2019, les créations d'emplois salariés dans le secteur marchand seraient soutenues par la croissance de l'activité économique. Le rythme des créations d'emplois ralentirait toutefois par rapport à 2017, sous le coup de la fin de la Prime à l'embauche au deuxième semestre 2017 et de la fin de la montée en charge du CICE et du Pacte de responsabilité.

Concernant la politique de l'emploi, celle-ci ne soutiendrait plus, hors mesures fiscales, les créations d'emplois à partir

du deuxième semestre 2017 (-46 000 contrats aidés dans le secteur non-marchand en 2017), en raison d'un nombre prévu de contrats aidés au deuxième semestre insuffisant pour maintenir le stock existant. Pour 2018, le gouvernement a annoncé 200 000 contrats aidés non-marchands (contre 310 000 attendus pour 2017), ainsi que l'arrêt des emplois d'avenir. Le stock de contrats aidés devrait donc continuer de baisser rapidement. Pour 2019 nous avons retenu l'hypothèse d'une stabilisation du stock de contrats aidés non-marchands (hors baisse des emplois d'avenir), qui pourrait toutefois s'avérer optimiste compte tenu de la volonté du gouvernement de réorienter la politique de l'emploi vers la formation des jeunes éloignés du marché du travail et des chômeurs de longue durée. L'emploi public hors emplois aidés diminuerait quant à lui de 24 000 postes, en cohérence avec l'annonce de la suppression de 120 000 emplois publics sur l'ensemble du quinquennat[1].

Au total, et compte tenu des créations d'emplois non-salariés et de la réduction attendue des effectifs dans le secteur non-marchand, 251 000 emplois seraient créés en 2017, 123 000 en 2018, puis 196 000 en 2019.

... et le chômage devrait baisser...

Après sept années de hausse du taux de chômage, 2015 a été l'année de l'inversion de la courbe du chômage, celui-ci entamant une baisse quasi-ininterrompue depuis lors. Le dynamisme des créations d'emplois salariés dans le secteur marchand (483 000 entre la fin d'année 2014 et le deuxième trimestre 2017) explique une part importante de cette baisse. La population active observée est aussi bien moins dynamique depuis 2015 (+110 000 actifs par an en moyenne) qu'entre 2008 et 2014 (+166 000 actifs par an en moyenne).

En prévision et sur la base des [dernières projections de population active de l'Insee\[2\]](#), la population active tendancielle croîtrait ainsi de 80 000 personnes en moyenne

sur la période 2017-2019, contre 160 000 personnes en moyenne chaque année sur la période 2008-2016. Le dynamisme des créations d'emplois aurait également un effet positif sur la population active *via* un effet de flexion, des personnes inactives étant incitées à revenir sur le marché du travail du fait de l'amélioration des conditions sur ce dernier.

Par ailleurs, le Plan d'investissement des compétences (2 millions de formations supplémentaires annoncées pour 2018-2022 dans le cadre du Grand plan d'investissement) doit débuter en 2018 et monterait en charge progressivement, ce qui freinera légèrement la hausse de la population active, en transférant temporairement des chômeurs de longue durée vers l'inactivité, sans toutefois modifier significativement la trajectoire prévue du taux de chômage.

En 2017-2019, l'emploi total resterait relativement dynamique (+251 000 en 2017, +123 000 en 2018 et +196 000 en 2019), soit un rythme suffisant pour faire baisser le chômage. Le taux de chômage en France métropolitaine devrait baisser de 0,2 point en 2018, et poursuivrait sa baisse en 2019 à un rythme plus rapide (-0,4 point, tableau 1). Cette baisse serait soutenue principalement par une croissance de l'activité plus dynamique en 2019 par rapport à 2018.

... si les contrats aidés ne pèsent pas trop sur l'emploi

La forte baisse des contrats aidés dans le secteur non-marchand, le moindre enrichissement de la croissance en emplois et la croissance de l'activité un peu moins dynamique en 2018 par rapport à 2017 freineraient la baisse du chômage en 2018 après la baisse significative de 2016 (-60 000 chômeurs prévus en 2018 en glissement annuel). La baisse attendue du chômage en 2018 pourrait toutefois ne pas se réaliser en cas d'effet plus fort de la baisse des contrats aidés sur l'emploi non-marchand et en cas de baisse de l'emploi non-salarié. Plus précisément, la croissance à elle seule ne garantit pas la baisse du chômage en 2018, la reprise

étant molle par rapport aux reprises observées par le passé (croissance supérieure à 2%). Le gouvernement prend donc un risque avec la réduction des contrats aidés en raison des incertitudes qui entourent les prévisions d'emploi (effets d'aubaine, cycle de productivité, emplois non-salariés, ...).

Le premier risque concerne l'effet des contrats aidés sur l'emploi non-marchand, qui pourrait être plus important compte tenu de la diminution conjointe du taux de prise en charge par l'État. À cela pourrait s'ajouter une baisse de l'emploi non-salarié. Afin d'illustrer l'incidence de ces incertitudes sur notre prévision de taux de chômage, nous avons utilisé la méthode de simulation de Monte-Carlo. Le choix des sources d'incertitudes porte sur le taux de croissance de l'emploi non-salarié, celui de l'emploi salarié marchand, mais aussi sur l'impact de la baisse des contrats aidés sur l'emploi non-marchand et sur l'incertitude relative au défaut de bouclage[31]. Le tableau ci-dessous résume les principales hypothèses concernant les densités de probabilités de chacun de ces facteurs d'entrée porteurs d'incertitudes qui seront propagées pour obtenir la densité de probabilité du taux de chômage à l'horizon de notre prévision. Cela nous permet d'associer à notre prévision un intervalle de confiance. Compte-tenu de l'impact de l'incertitude entourant le défaut de bouclage, nous donnons les intervalles de confiance avec et sans l'incertitude liée au défaut de bouclage.

En lien avec nos hypothèses de croissance, l'emploi salarié marchand augmenterait de façon quasi-certaine à l'horizon de notre prévision, tandis que l'emploi non-marchand diminuerait. Hors défaut de bouclage, le taux de chômage baisserait à l'horizon 2019. En revanche il resterait stable ou augmenterait au deuxième semestre 2017 (respectivement fin 2018) avec une probabilité de 40 % (3 %). La prise en compte du défaut de bouclage augmente considérablement l'incertitude sur l'évolution du taux de chômage, qui pourrait rester stable ou augmenter d'ici la fin d'année 2018 avec une probabilité de

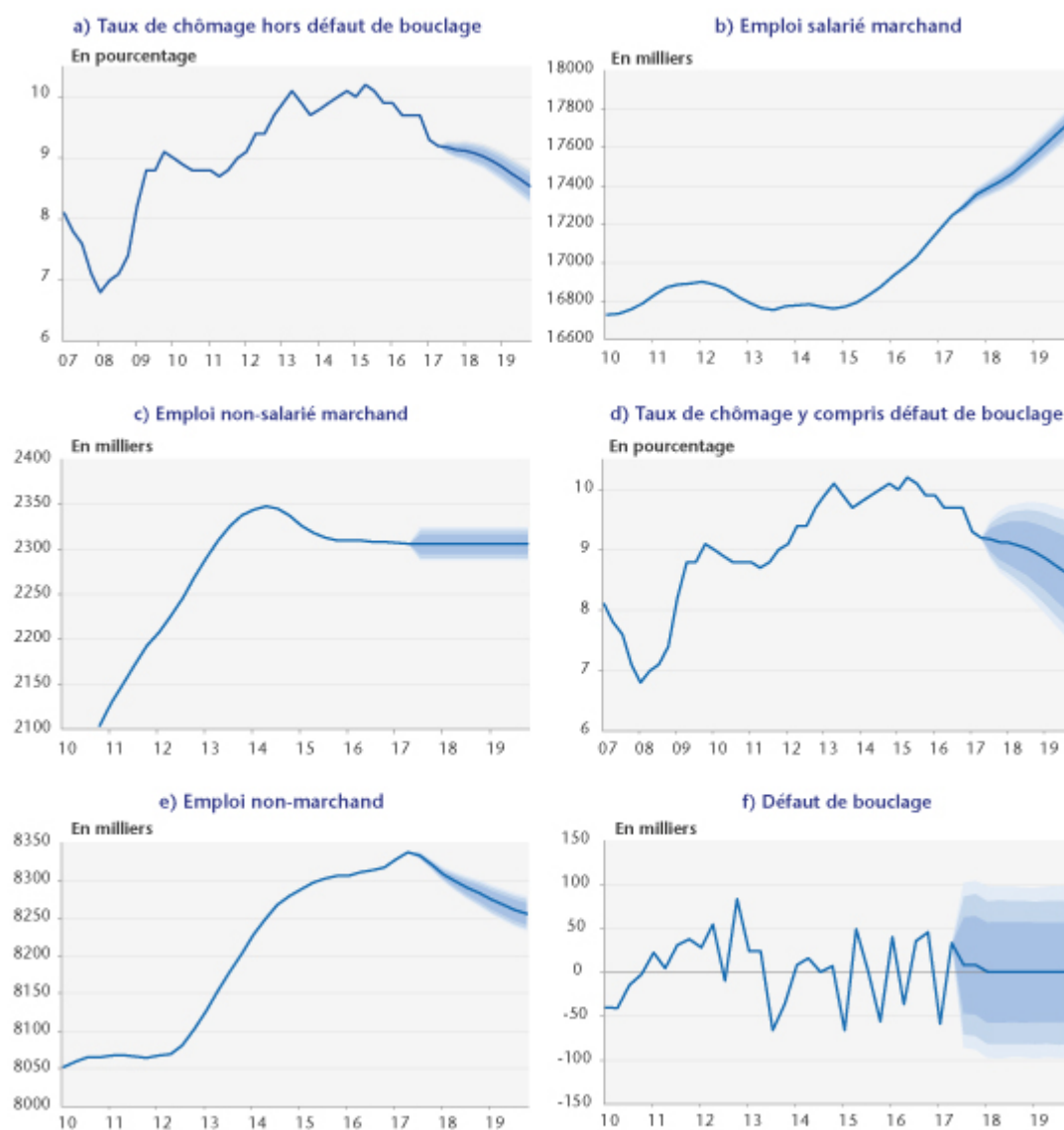
30 %. Celui-ci baisserait toutefois fin 2019 avec une probabilité de 87 % en prenant en compte le défaut de bouclage. Pour conclure, la baisse du taux de chômage attendue pour l'année 2018 est entourée d'une incertitude telle qu'il ne faut pas exclure l'arrêt de la baisse du taux de chômage en 2018.

Tableau 2. Hypothèses de distributions de probabilité

	Distribution de probabilités	Moyenne	Écart-type	Valeur Min	Valeur Max
Emploi salarié marchand (taux de croissance)	Loi normale	0	0,07		
Emploi non-salarié marchand (variation en milliers)	Loi normale	0	9,6		
Emploi non salarié non-marchand (variation en milliers)	Loi normale	0	2,4		
Impact contrats aidés (coefficient d'impact)	Loi uniforme			0,5	0,9
Défaut de bouclage (niveau en milliers)	Loi normale	0	47,9		

Source : Calculs et hypothèses OFCE.

Graphiques 2. L'incertitude en prévision



Note : Nous associons à notre projection un intervalle de confiance simulée à l'aide de la méthode de Monte-Carlo pour 15 000 simulations. Le premier intervalle est à 75 %, le deuxième à 90 % et le troisième à 95 %.

Source : Insee, calculs et prévision OFCE *e-mod.fr* 2017-2019, octobre 2017.

[1] La baisse des emplois aidés dans le secteur non marchand en 2019 s'explique par la fin des emplois d'avenir. Les emplois non aidés non marchands diminuent de 6 000, intégrant la baisse de 24 000 postes de fonctionnaires, compensée pour partie par une hausse des autres emplois non aidés (une partie des contrats aidés étant remplacée par des contrats non aidés).

[2] Cf. Koubi M., & Marrakchi A., 2017, « Projections de la population active à l'horizon 2070 », Insee, *Document de travail*, n° F1702.

[3] Le défaut de bouclage provient de l'utilisation de sources différentes pour décomposer la population active entre emploi (source comptabilité nationale) et chômage (source enquête emploi). Ce défaut de bouclage est nul en moyenne sur la période 2002-2016.

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.

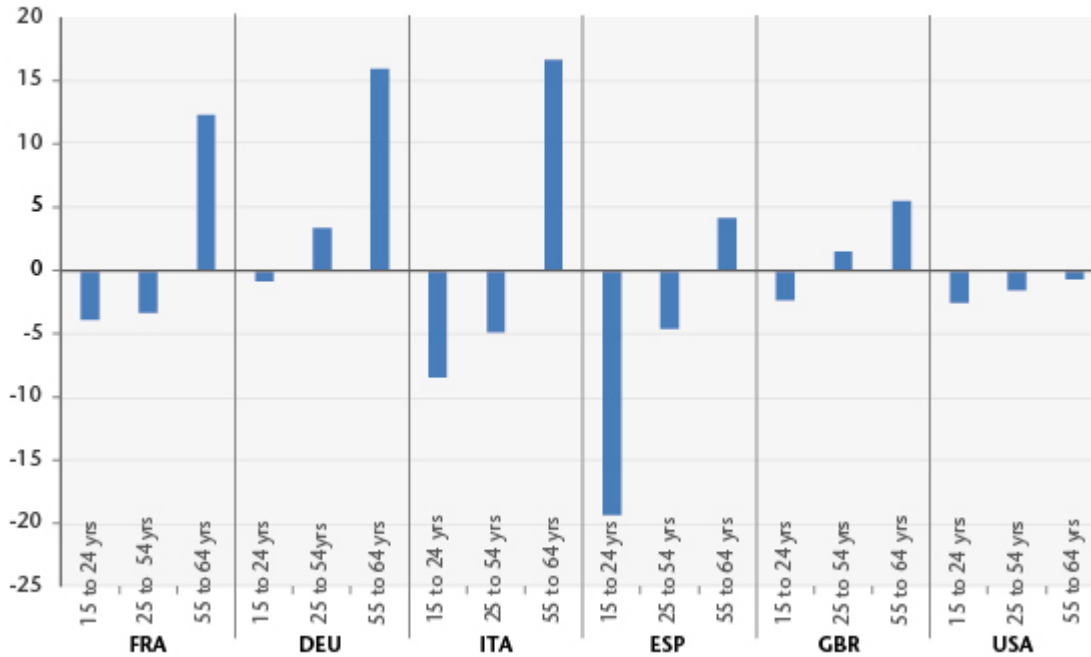
Since 2008, employment trends have differed significantly within the OECD countries. Unemployment rates in the United States, Germany and the United Kingdom are now once again close to those seen before the onset of the crisis, while the rates in France, Italy and particularly Spain still exceed their 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



Sources: OECD, OFCE calculations.

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

Source: 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.

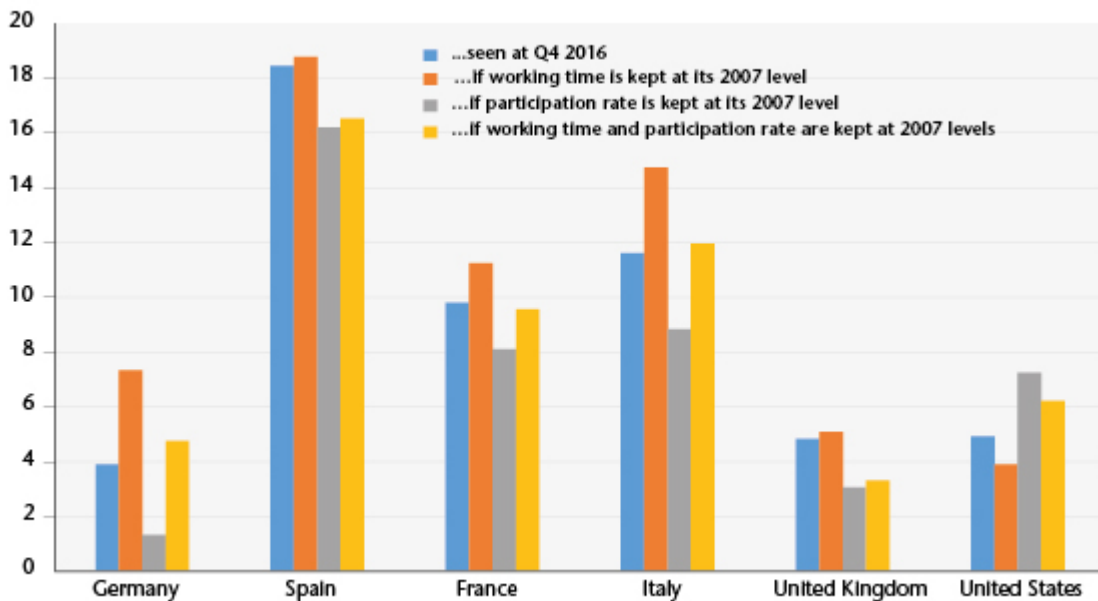
Table 3. Difference between the unemployment rate seen at Q4 2016 and the unemployment rate in case of ... (in % points)

	...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.

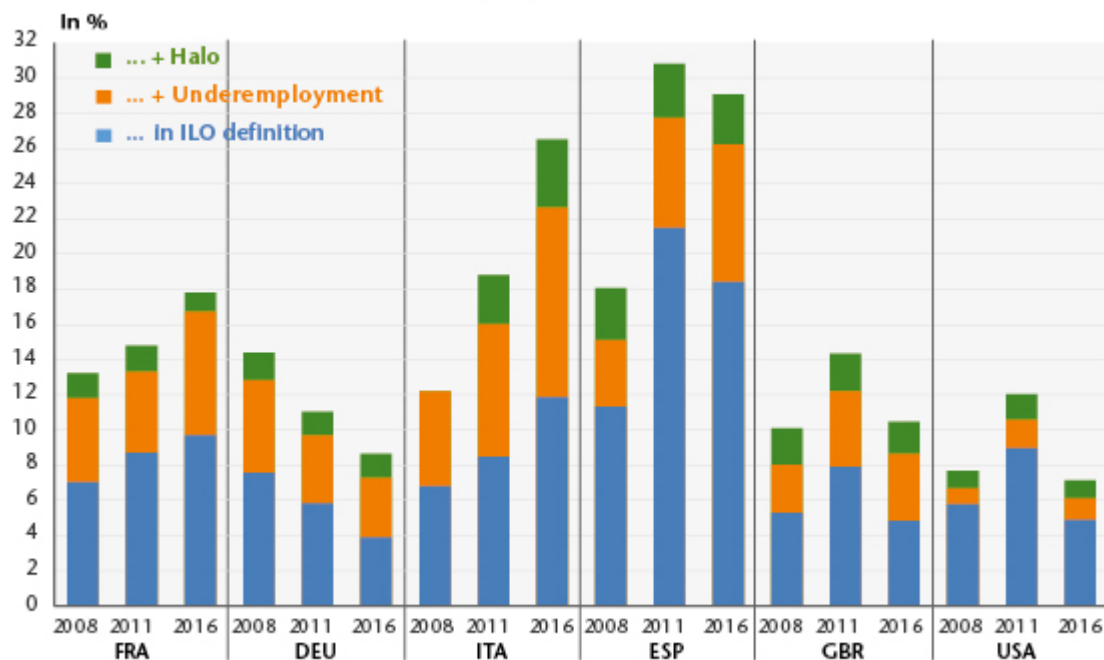
Beyond the “unemployment rate”

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.

The labour market on the road to recovery

By [Bruno Ducoudré](#)

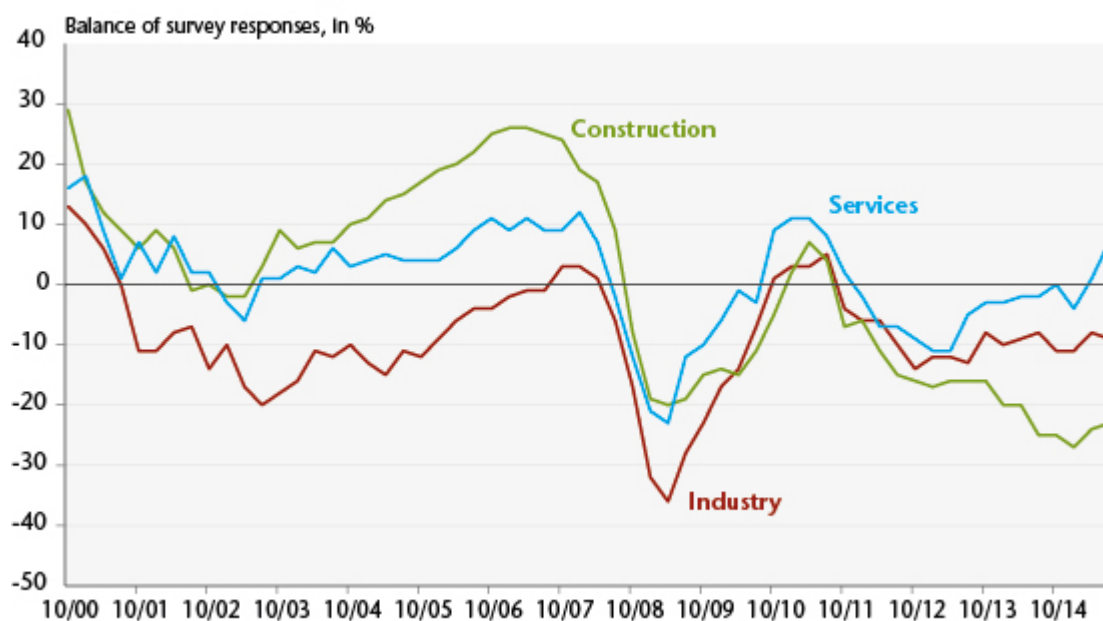
A look at the figures just published by France's Pôle Emploi job centre for the month of September 2015 shows that the number of job seekers who were registered and inactive (category A) has declined significantly (-23,800), following an increase in August (+20,000). While this is encouraging news, the decrease has to be compared with the increases seen in categories B and C (+25,600). So while employment has indeed picked up, this has not resulted in the numbers of people exiting unemployment as measured by the job centre, *i.e.* it has not put a stop to the continuing rise in the number of long-term unemployed (+10.4% in one year). Nevertheless, these trends do support the conclusions drawn from current analysis which indicate that [a recovery has indeed begun](#).

After seeing 76,000 jobs created in France in 2014 due to growth in non-commercial jobs, the first half of 2015 was marked by an increase in the workforce in the commercial sector (+26,000), which resulted in an acceleration of job creation in the economy overall (+45,000) over the first half of the year. The recently released statistics on employment confirm the accelerating trend in the third quarter of 2015: hence, over a year, declarations on job hires of over one month recorded by ACOSS rose by 3.7%, following 0.7% in the previous quarter. Business surveys also point to an increase in hiring intentions in the third quarter; these have turned positive in the service sector since the year started, which is also when the low point seen in construction was probably

reached (see Figure 1).

Our analysis of the labour market up to 2017, which was spelled out in the latest OFCE forecasts of October 2015, indicates that the commercial sector will continue to generate jobs up to the end of 2015 (+0.1% in the third and fourth quarters). The pace of job creation will nevertheless remain too low to foresee a fall in the unemployment rate by year end, particularly in light of our forecast for the GDP growth rate (0.3% in Q3 2015 and 0.4% in Q4) and the existence of overstaffing in companies, which we estimate at 100,000 in Q2 2015. The unemployment rate should remain stable at 10% until year end. With GDP growth of 1.8% in 2016, job creation will pick up markedly in the commercial sector once the overstaffing has been absorbed by companies, allowing the unemployment rate to fall starting in the second quarter of 2016. This decline will continue until the end of 2017.

Figure 1. Forecast of labour force trends



Sources: INSEE, business surveys.

The last three years of weak growth have hurt employment in the commercial sector (-73,000 jobs between the start of 2012 and the end of 2014, cf. the Table). The strength of employment in the non-commercial sector, supported by the ramp-up of subsidized contracts (the “jobs for the future”

programme and non-commercial job integration contracts) helped to offset the loss of commercial sector jobs, with total employment rising by 164,000 over the same period, which slowed the increase in the ILO unemployment rate: this figure for mainland France rose from 9% of the labour force in late 2011 to 10.1% at end 2014, i.e. a 1.1 point increase.

Tableau. Employment and unemployment

Annual change in 1000s, at last quarter						
Year on year	2012	2013	2014	2015*	2016*	2017*
Observed labour force	265	46	203	62	134	139
Total employment	31	57	76	103	193	242
- Commercial sector	0	-38	-35	73	238	245
Employed	-63	-58	-43	60	209	216
Unemployed	63	20	8	14	28	29
- Non commercial sector	31	95	111	29	-45	-3
Subsidized jobs	5	60	21	17	-54	-4
Non-subsidized jobs	26	35	90	12	10	1
Unemployment	234	-11	127	-41	-58	-103
Unemployment rate at Q4 (%)	9,7	9,7	10,1	10,0	9,8	9,4
GDP growth rate (%)	0,3	0,8	0,2	1,1	1,8	2,0

* OFCE forecast

Sources : INSEE and Ministry of Labour, OFCE forecasts, e-mod.fr 2015-2017, October 2015.

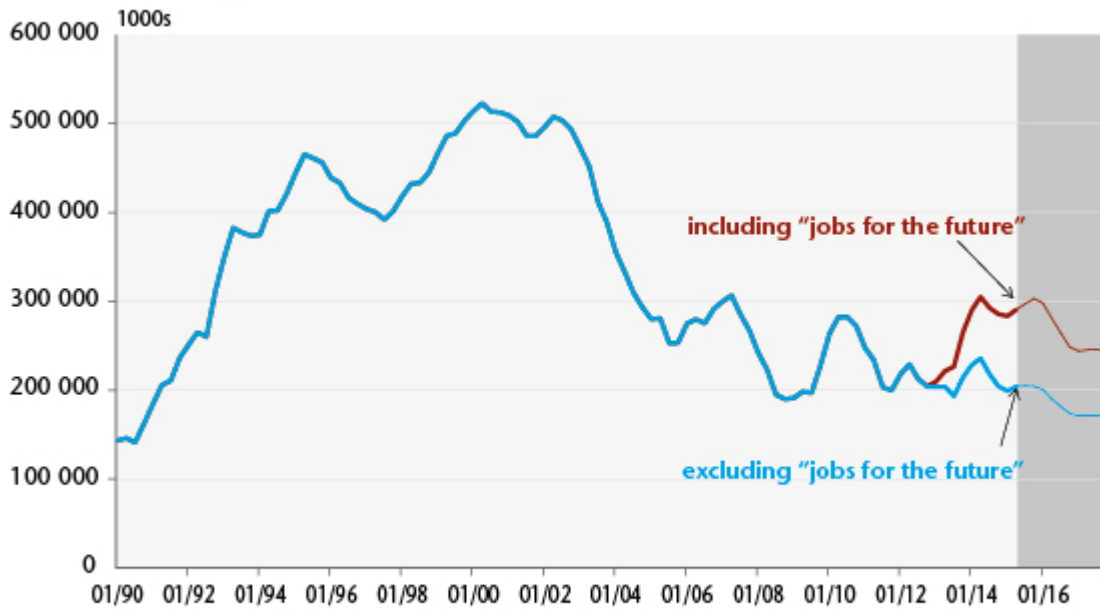
2015 is a year of transition, with a resumption of job creation in the commercial sector (+73,000 expected for the year as a whole) but less dynamic job creation in the non-commercial sector. For the full year, job creation will be boosted by the acceleration of growth (an annual average of +1.1% expected in 2015 but 1.4% yoy) and the implementation of policies to cut labour costs (CICE tax credit and the Responsibility Pact). The cumulative impact of the CICE and the Responsibility Pact, after taking into account the effect of financing, will create or save 42,000 jobs in 2015. However, job creation will be hampered by the presence of overstaffing^[1]: as economic activity picks up pace, companies typically absorb underutilized labour before increasing the volume of employment.

As for the non-commercial sector, employment policy is continuing to support the labour market in 2015 through the increase in subsidized job contracts. This increase has

nevertheless been slower than in previous years, with the number of “jobs for the future” contracts peaking in 2015 (Figure 2). Ultimately, total employment will increase by 103,000 in 2015, with the unemployment rate remaining stable at 10% till year end.

For 2016 and 2017, the acceleration of growth (at respectively 1.8% and 2%) combined with the ongoing implementation of policies to cut labour costs and the closing of the productivity cycle in the course of 2016 will lead to accelerating job creation in the commercial sector. This will increase, year on year, to 238,000 in 2016 and 245,000 in 2017 for the commercial sector alone, a rate comparable to what was seen between mid-2010 and mid-2011 (234,000 jobs created). However, in 2016, the number of subsidized contracts in the non-commercial sector set out in the 2016 Finance Bill will be down from previous years (200,000 CUI-CAE jobs and 25,000 “jobs for the future” in 2016, compared with 270,000 and 65,000 respectively for 2015). For 2017, we are assuming stability in the stock of subsidized non-commercial job contracts (see Figure 2). Overall, the long-term return of job creation by business will trigger a decline in the unemployment rate starting in the second quarter of 2016. Although sluggish, this fall should be sustainable, with the unemployment rate down to 9.8% of the labour force at end 2016 and 9.4% by end 2017.

Figure 2. Subsidized contracts in the non-commercial sector



Note :The fall in CUI-CAE contracts seen in the second half of 2014 comes from the switch from CAE job Integration contracts to CDD fixed-term contracts.

Scope: Mainland France.

Sources : DARES, OFCE forecasts *emod.fr* 2015-2017, October 2015.

[1] The presence of overstaffing in businesses derives from the gap between labour productivity and its long-term trend, called the productivity cycle. This reflects the time employment takes to adjust to economic activity. See Ducoudré and Plane, 2015, « [Les demandes de facteurs de production en France](#) » [The demand for production factors in France], *Revue de l'OFCE*, no.142.

2015-2017 forecasts for the French economy

By [Mathieu Plane](#), [Bruno Ducoudré](#), [Pierre Madec](#), Hervé Péléraux and Raul Sampognaro

This text summarizes the [OFCE's economic forecast for the French economy for 2015-2017](#)

After a hesitant upturn in the first half of 2015 (with growth rates of 0.7% and 0% respectively in the first and second quarter), the French economy grew slowly in the second half year, with GDP rising by an average of 1.1% for the year as a whole. With a GDP growth rate of 0.3% in the third quarter of 2015 and 0.4% in the fourth quarter, which was equal to the pace of potential growth, the unemployment rate stabilized at 10% at year end. Household consumption (+1.7% in 2015) was boosted by the recovery in purchasing power due in particular to lower oil prices, which will prop up growth in 2015, but the situation of investment by households (-3.6%) and the public administration (-2.6%) will continue to hold back activity. In a context of sluggish growth and moderate fiscal consolidation, the government deficit will continue to fall slowly, to 3.7% of GDP in 2015.

With GDP growth in 2016 of 1.8%, the year will be marked by a recovery, in particular by rising corporate investment rates. Indeed, all the factors for a renewal of investment are coming together: first, a spectacular turnaround in margin rates since mid-2014 due to a fall in the cost of energy supplies and the impact of the CICE tax credit and France's Responsibility Pact; next, the historically low cost of capital, which has been helped by the ECB's unconventional monetary policy; and finally, an improvement in the economic outlook. These factors will lead to an acceleration of business investment in 2016, which will increase by 4% on

average over the year. Household consumption should remain strong in 2016 (+1.6%), driven by job creation in the market sector and by a slight fall in the savings rate. Fuelled by the rise in housing starts and building permits, housing investment will pick up (+3%), after shrinking for four years in a row. Foreign trade will be boosted by the impact of the euro's depreciation and the government's competitiveness policies, and will make a positive contribution to growth (+0.2 GDP point in 2016, the same as in 2015). Once the impact of the downturn in oil prices has fed through, inflation should be positive in 2016, but still low (1% on an annual average, after two years of virtual stagnation), a rate that is close to underlying inflation. The pace of quarterly GDP growth in 2016 will be between 0.5% and 0.6%: this will trigger a gradual closing of the output gap and a slow fall in the unemployment rate, which will end the year at 9.8%. The public deficit will be cut by 0.5 GDP point, due to savings in public spending, notably through the contraction of public investment (-2.6%), low growth in government spending (+0.9%), and the impact of the rise in tax revenues as the economy recovers.

Assuming that the macroeconomic environment remains favourable, the output gap is expected to continue to close in 2017. With GDP growth of 2%, the government deficit will fall further to 2.7% of GDP, passing below the 3% bar for the first time in 10 years. Under the impact of the government's employment policies and the absorption of the overstaffing by companies, the unemployment rate will continue to fall, to 9.4% of the active population by the end of 2017.

Investment behaviour during the crisis: a comparative analysis of the main advanced economies

By [Bruno Ducoudré](#), [Mathieu Plane](#) and [Sébastien Villemot](#)

This text draws on the special study, [Équations d'investissement : une comparaison internationale dans la crise](#) [Investment equations : an international comparison during the crisis], which accompanies the 2015-2016 Forecast for the euro zone and the rest of the world.

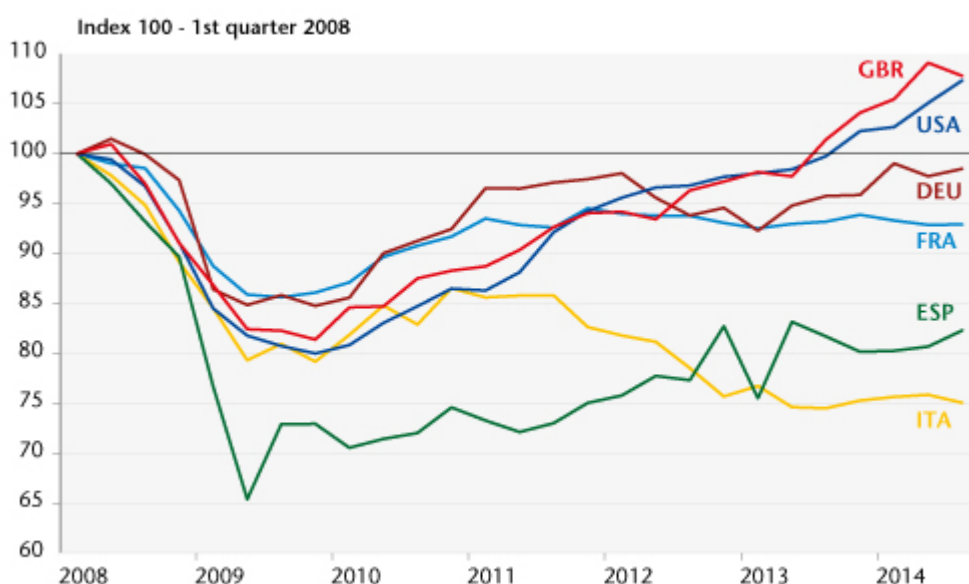
The collapse in growth following the subprime crisis in late 2008 resulted in a decline in corporate investment, the largest since World War II in the advanced economies. The stimulus packages and accommodative monetary policies implemented in 2009-2010 nevertheless managed to halt the collapse in demand, and corporate investment rebounded significantly in every country up to the end of 2011. But since 2011 investment has followed varied trajectories in the different countries, as can be seen in the differences between, on the one hand, the United States and the United Kingdom, and on the other the euro zone countries, Italy and Spain in particular. At end 2014, business investment was still 27% below its pre-crisis peak in Italy, 23% down in Spain, 7% in France and 3% in Germany. In the US and the UK, business investment was 7% and 5% higher than the pre-crisis peaks (Figure).

Our study estimates investment equations for six major countries (Germany, France, Italy, Spain, the UK and USA) in an effort to explain trends in investment over the long term, while paying particular attention to the crisis. The results

show that using the traditional determinants of corporate investment – the cost of capital, the rate of profit, the rate of utilization of production capacity and business expectations – it is possible to capture the main developments in investment for each country in recent decades, including since 2008.

Thus, since the onset of the crisis, differences in decisions on taxation and on how tight to make fiscal policy and how expansive to make monetary policy have led to differences between countries in terms of the dynamics of the economy and real capital costs and profit rates, which account for the current disparities in corporate investment.

Investment by non-financial corporations



Sources: National accounts, authors' calculations.