

# Why some countries have fared better than other after the Great Recession

by Aizhan Shorman and Thomas Pastore

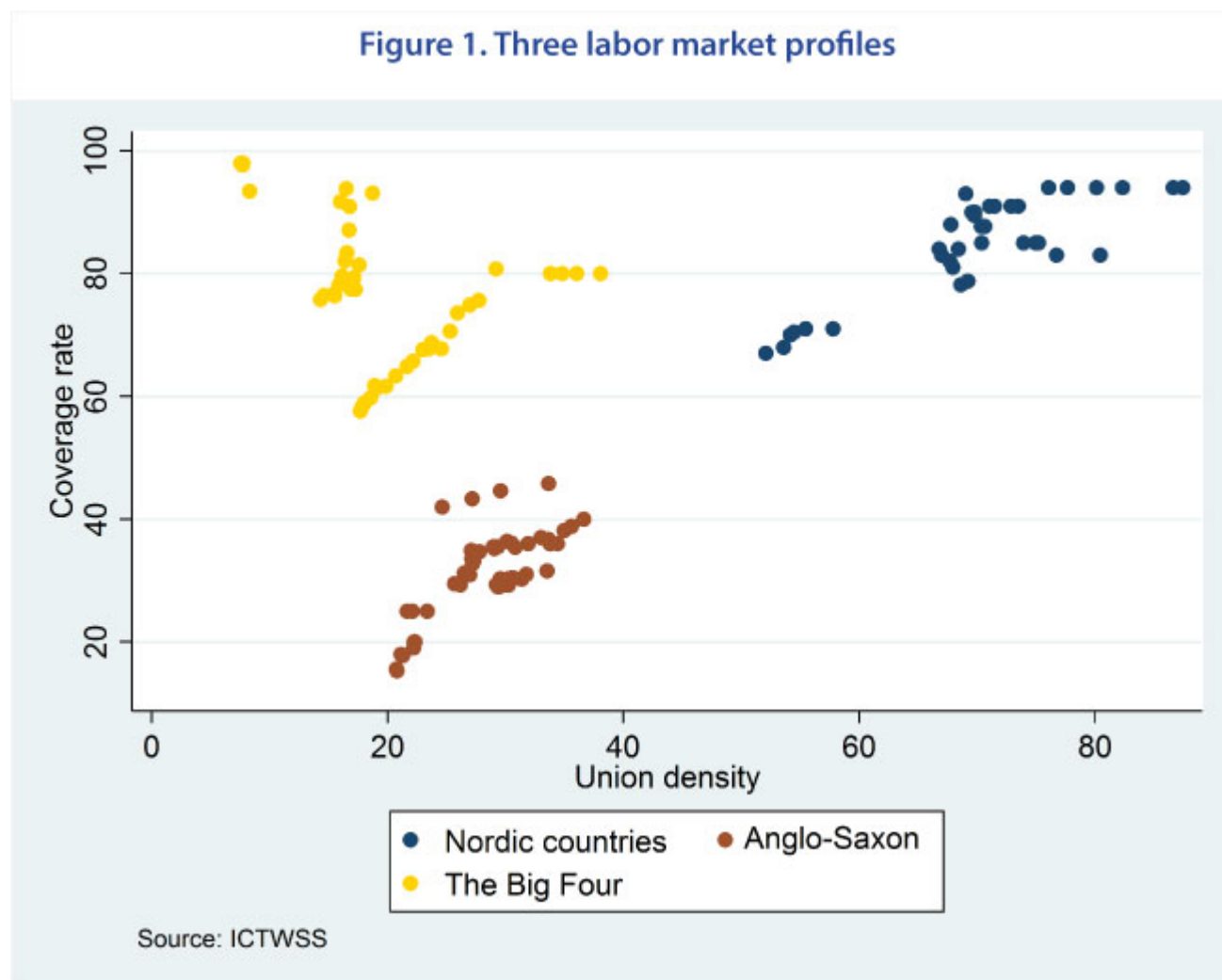
The European labor market is characterized by a great economical and institutional divergence. On the one hand, there is the German miracle constituted in part by a decrease in unemployment rate during the Great Recession. On the other, there is high unemployment in southern European countries. For example, 27% in Spain in comparison with 6% in Germany in 2013. Southern European countries tended to either increase or retain their higher measures of centralization, especially in wage bargaining practices. Therefore, some credit decentralization policies, such as the Hartz reforms, for Germany's success. However, this economic divergence cannot be explained solely by opposing centralization and decentralization, accentuating the benefits of flexibility in the latter and the drawbacks of rigidity in the former. The most evident counterexamples to this dichotomy are the Scandinavian countries that experience low unemployment with high centralization.

It is important to note that in our analysis we focus on centralization in wage bargaining. Our centralization measure relies on union density rate, coverage rate (percentage of all employees covered by collective bargaining agreements out of all wage and salary earners in employment with the right to bargaining), and extension rate (mandatory extension of collective agreements to non-organized employers).

## Three Profiles of the Labor market

Utilizing our definition of centralization consisting out of the three variables of measurement, we identified three

profiles of the labor market: decentralized, centralized, and intermediate. [1] As seen in Figure 1, the first group consists of mostly Anglo-Saxon countries, the second mostly of Scandinavian ones, and the third mostly of the four western European countries with the highest GDP in the EU (France, Germany, Spain, and Italy).



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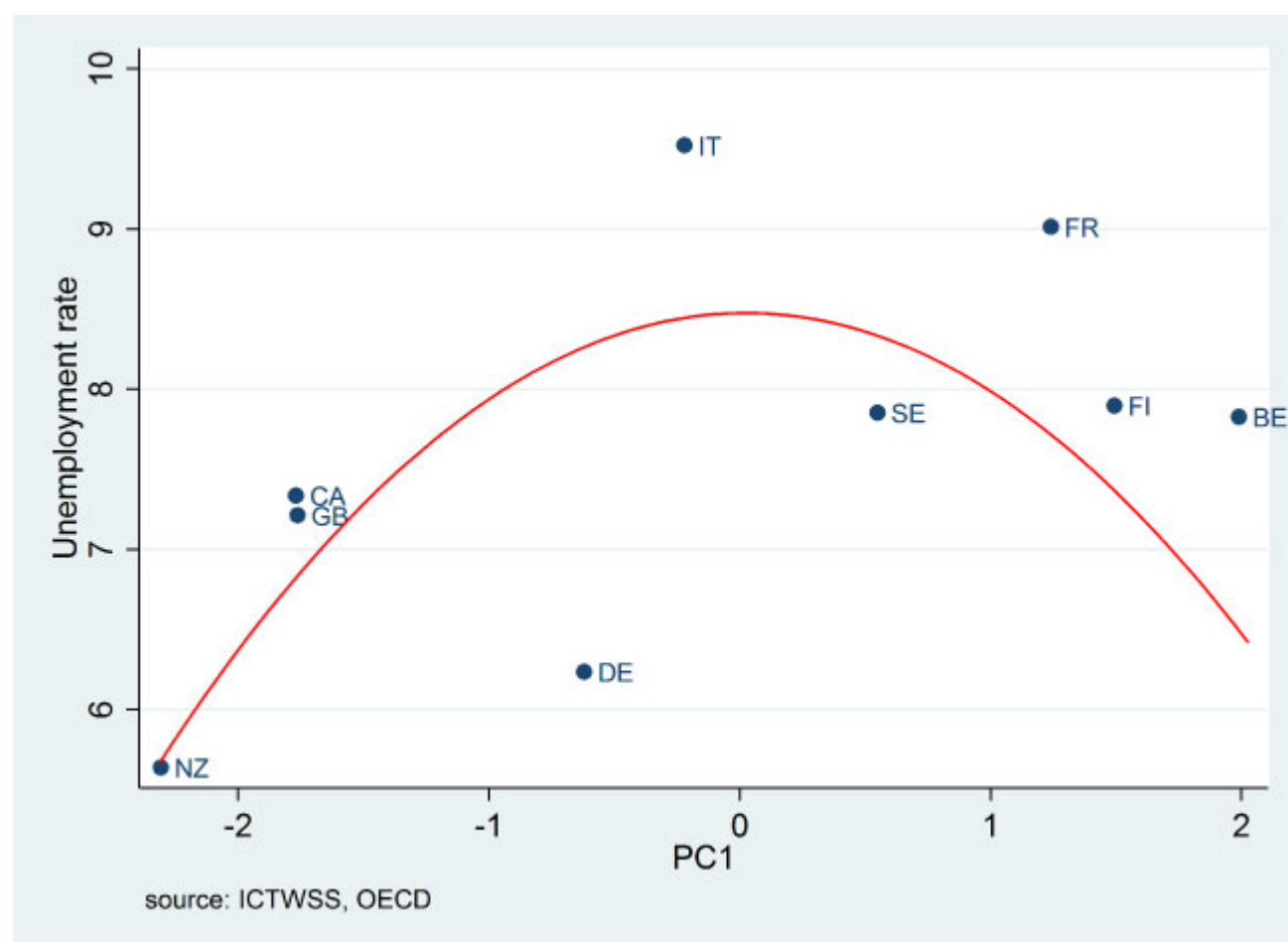
### Calmfors-Driffill and the Great Recession

Calmfors and Driffill (1988) presented their hypothesis of a concave non-monotonic relationship between wage bargaining centralization and macroeconomic performance. [2] The “hump-shaped” relationship hypothesized by the two authors proves itself true with our results and sheds light on the different economic and institutional trajectories of European countries.

On the left side of the curve of Figure 2, one finds Anglo-Saxon countries with low un-employment rates, due to flexible

real wage adjustments in financial shocks. On the right side of the curve, one finds Scandinavian countries with similar macroeconomic performance as that of the Anglo-Saxon countries but this group has very centralized wage setting practices for both employees and employers implemented at the national level. Between the two groups, the intermediate countries find themselves at the top of the hump with higher unemployment rates in comparison to the initial two groups. Consequently, the countries in the middle that aimed to strike a balance have become subject to the disadvantages of both centralized and decentralized systems: wage rigidity that restricts flexibility and adaptability needed in financial shocks, and security provided by collective or national wage setting practices.

Figure 2. The bell curve during the Great Recession (2008-2014)

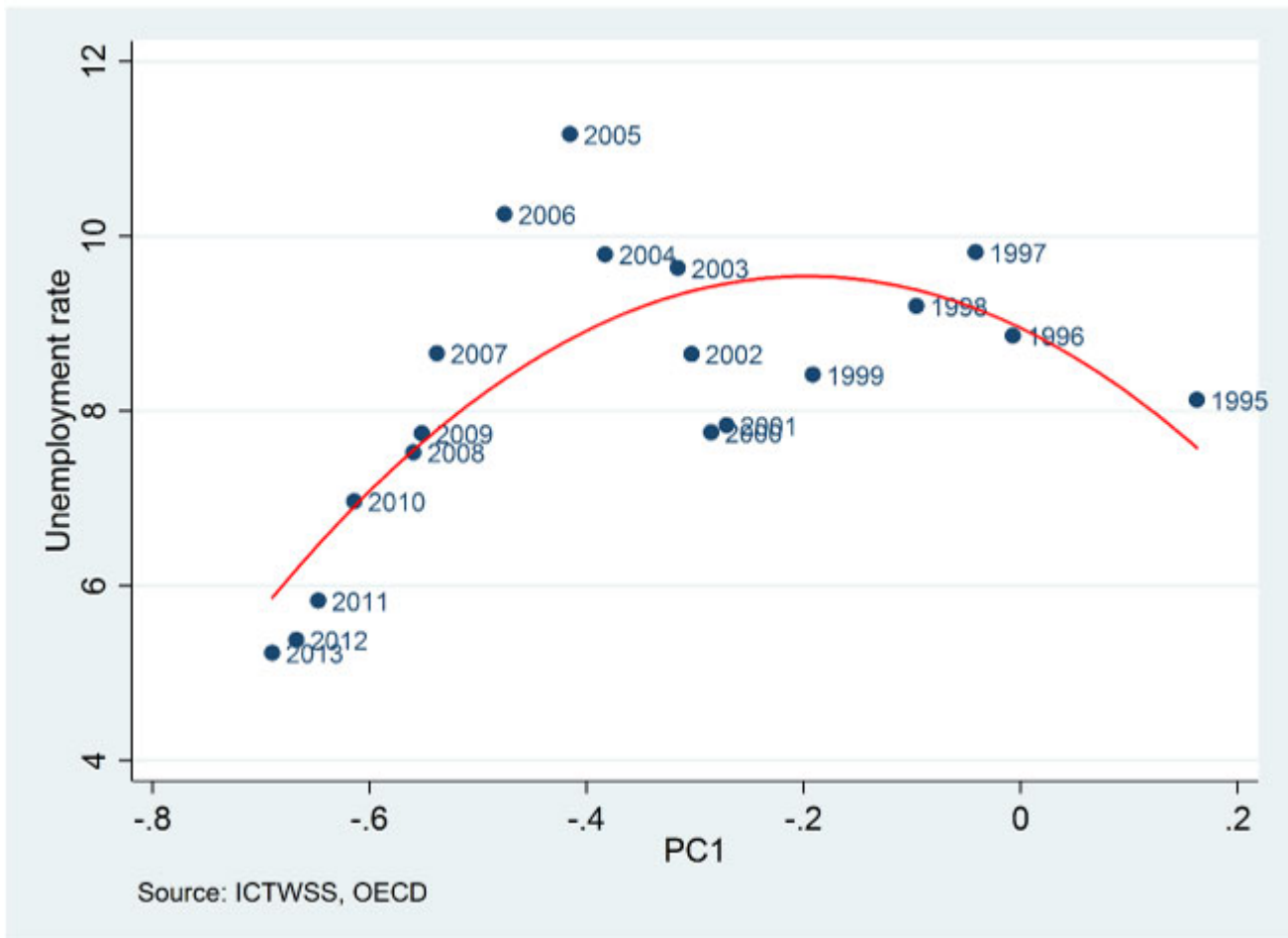


Note: PC1 axis is an aggregate measure of centralization obtained through the principal components analysis; it includes measures of coverage rate, extension rate of collective bargaining agreements, and union density.

## **fferent trajectories along the hump-shaped curve**

Our results render the Calmfors-Driffill hypothesis evermore pertinent in the context of the Great Recession. The two most striking countries as outliers on Figure 3 are Germany (DE) and Italy (IT). From the 1990's Germany's trajectory has been very unique as one can trace its movement along the curve over the years (Figure 3). Germany has left its group of the "Big Four" and moved along the curve toward the decentralized Anglo-Saxon group. This shift is due to the decentralization policies implemented after Reunification and reinforced by the Hartz laws (2003-2005). The country has experienced de-unionization and a sharp decline in union density over the last 20 years. Italy, on the other hand, has maintained high unemployment rates throughout the sampled period and is characterized by less ambitious decentralization. The data supports the notion of a non-monotonic concave relationship between centralization and macroeconomic performance.

Figure 3. Trajectory of Germany along the bell curve



Note: PC1 axis is an aggregate measure of centralization obtained through the principal components analysis; it includes measures of coverage rate, extension rate of collective bargaining agreements, and union density.

Institutions constitute an important component of countries' macroeconomic performances. Considering the idiosyncrasies of every country, it is impossible to prescribe any one centralized or decentralized policy, but our analysis shows that there are multiple different versions of economies that can be tailored to the differing characteristics of European countries and that could yield in the long-term favorable macroeconomic results.

[1] Thomas Pastore and Aizhan Shorman. "Calmfors and Driffill Revisited: Analysis of European Institutional and Macroeconomic Heterogeneity". In: *Sciences-Po OFCE Working Paper* (October 2018).

[2] Lars Calmfors and John Driffill. "Bargaining Structure, Corporatism and Macroeconomic Performance". In:

*Economic Policy* 3.6 (1988), pp. 13–61.  
<https://www.jstor.org/stable/pdf/1344503.pdf?refreqid=excelsior>

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# Italy's debt: Is the bark worse than the bite?

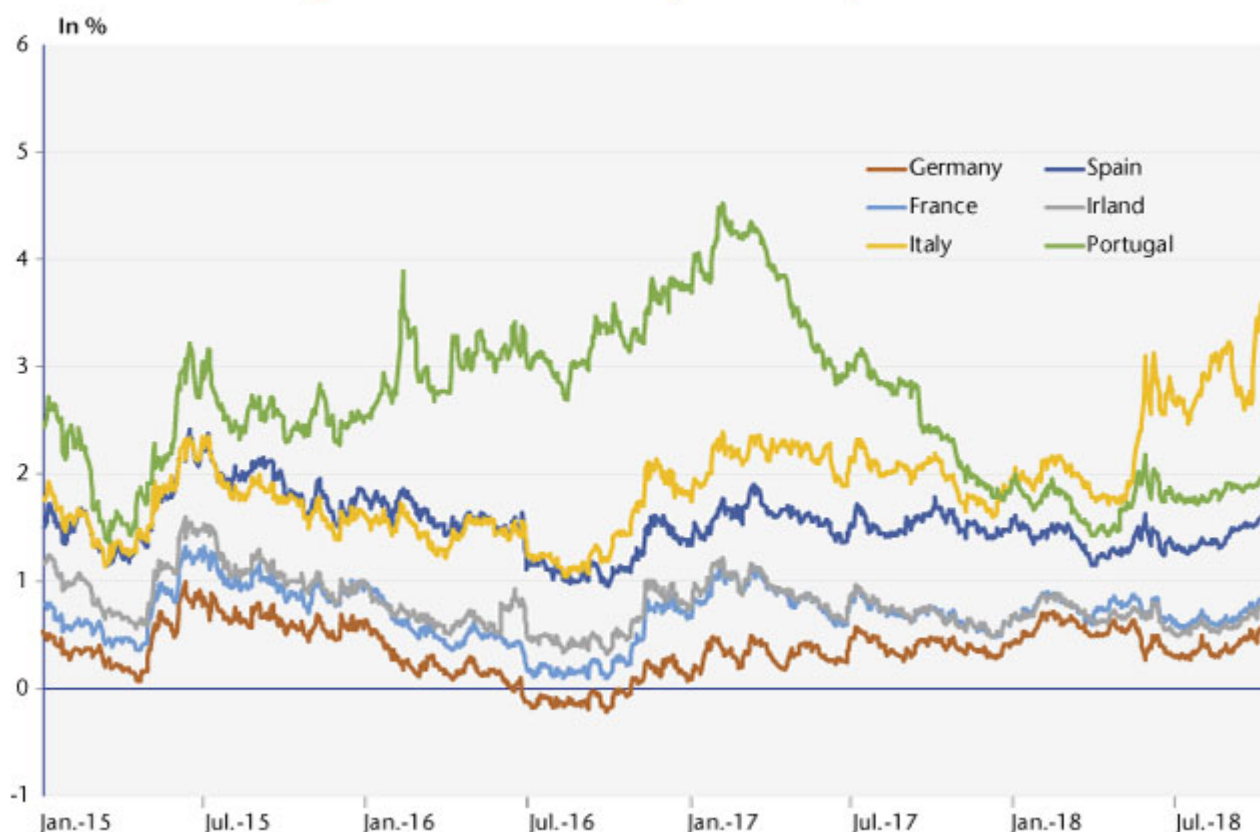
By [Céline Antonin](#)

The spectre of a sovereign debt crisis in Italy is rattling the euro zone. Since Matteo Salvini and Luigi di Maio came to power, their headline-catching declarations on the budget have proliferated, demonstrating their desire to leave the European budgetary framework that advocates a return to an equilibrium based on precise rules[1]. Hence the announcement of a further deterioration in the budget when the update of the [Economic and Financial Document](#) was published at the end of September 2018 frayed nerves on the financial markets and triggered a further hike in bond rates. ([graphic](#)).

But should we really give in to panic? The crucial question is just how sustainable the Italian public debt really is. Looking up to 2020, the situation of the euro zone's third-largest economy is less dramatic than it might appear. Stabilizing interest rates at the level of end September 2018 would leave the public debt largely sustainable. It will decline in 2019, from 131.2% to 130.3% of GDP. Given our assumptions[2], only a very sharp, long-lasting rise in bond interest rates in excess of 5.6 points would lead to an

increase in the public debt ratio. In other words, the bond rate would have to exceed the level reached at the peak of the 2011 sovereign debt crisis. Should such a situation occur, it's hard to believe that the ECB would not intervene to reassure the markets and avoid a contagion spreading through the euro area.

Figure. Interest rate on 10-year sovereign bonds



Source: Datastream.

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### very strong fiscal stimulus in 2019

Changes in the public debt ratio depend heavily on the assumptions adopted. The ratio varies with the general government balance, the GDP growth rate, the deflator, and the apparent interest rate on the public debt (see calculation formula below).

In budgetary matters, despite their differing views, the two parties making up the Italian government (La Ligue and the 5 Star Movement) seem to agree on at least one point: the need to loosen budget constraints and boost demand. In any case the

government contract, published in May 2018, was unequivocal. It announced a fiscal shock amounting to approximately 97 billion euros over 5 years, or 5.6% of GDP over the five-year period. But although the measures have been gradually reduced, the draft presented to the Italian Parliament plans for a public deficit of 2.4% of GDP for 2019, far from the original target of 0.8% set in the Stability and Growth Pact forwarded to the European Commission on 26 April 2018. We assume that the 2019 budget will be adopted by the Parliament, and that the deficit will indeed be 2.4% of GDP. We therefore anticipate a positive fiscal impulse of 0.7 GDP point in 2019. This stimulus breaks down as follows:

- A decrease in compulsory taxation of 5 billion, or 0.3 GDP point, linked to the gradual introduction of the “flat tax” of 15% for SMEs, a measure supported by the League. The extension of the flat tax to all businesses and households was postponed until later in the mandate, without further clarification;

- An increase in public spending, calculated roughly at 7 billion euros, or 0.4 GDP point. Let’s first mention the flagship measure of the 5 Stars Movement, the introduction of a citizens’ pension (in January 2019) and a citizens’ income (in April 2019), for an estimated total amount of 10 billion euros. The citizens’ pension will supplement the pension of all pensioners, bringing it to 780 euros per month. For the working population, the principle is similar – supplementing the salary up to 780 euros – but subject to conditions: recipients will have to take part in training and accept at least one of the first three job offers that are presented to them by the Job Centre. The revision of the pension reform, which provides for the “rule of 100”, will also allow retirement when the sum between a person’s age and the years worked reaches 100, in certain conditions. This should cost 7 billion euros in 2019. Finally, an investment fund of 50 billion euros is planned over 5 years; we are expecting an increase in public investment of 4 billion euros in 2019. To



finance the spending increase without pushing the public deficit above 2.4%, the government will have to save 14 billion euros, equivalent to 0.8 GDP point. For the moment, these measures are very imprecise (further rationalization of spending and tax amnesty measures).

For 2020, the Italian government has declared that the public deficit will fall to 2.1% of GDP. However, to arrive at this figure, given our growth assumptions, would require tightening up fiscal policy somewhat, which is not very credible. We therefore assume a quasi-neutral fiscal policy in 2020, which means that the deficit would remain at 2.4% of GDP.

With a very positive fiscal stimulus in 2019, annual growth (1.1%) should be higher than in 2018. This acceleration is more visible year-on-year: growth in Q4 of 2019 will be 1.6%, compared with 0.6% in Q4 of 2018. Although low, this level is nevertheless higher than the potential growth rate (0.3%) in 2019 and 2020. The output gap is in fact still large and leads to 0.4 GDP point of catch-up per year. Spontaneous growth<sup>[3]</sup> thus amounts to 0.7 GDP point in 2019 and 2020. In addition, we anticipate a much stronger fiscal impulse in 2019 (0.7 GDP point) than in 2020 (0.1 GDP point). Other shocks, such as oil prices or price competitiveness, will be more positive or less negative in 2020 than in 2019.

Changes in the public debt ratio also depend on developments in the GDP deflator. However, prices should remain stable in 2019 and 2020, due in particular to wage moderation. Thus, nominal growth should be around 2% in 2019 and 2020.

Finally, we assume that the interest rate on the debt will stay at the level of the beginning of October 2018. Given the maturity of the public debt (seven years), the rise in rates forecast for 2019 and 2020 will be very gradual.

### **Reducing the public debt up to 2020**

Under these assumptions, the public debt should decline

continuously until 2020, falling from 131.2% of GDP in 2018 to 130.3% in 2019 and then to 129.5% in 2020 (table). In light of our assumptions, the public debt will fall in 2019 if the apparent interest rate remains below 3.5% of GDP, i.e. if the debt-service charge relative to GDP is less than 4.5%.

**Table. Changes in the public debt to GDP ratio based on our hypotheses**

	2017	2018	2019	2020
Public debt /GDP ( $d_t$ )	131.8%	131.2%	130.3%	129.5%
Apparent interest rate on the debt ( $i$ )	2.9%	2.7%	2.9%	3.0%
GDP growth in value ( $g$ )	2.2%	2.1%	2.3%	2.1%
<i>GDP growth in volume</i>	<i>1.6%</i>	<i>1.0%</i>	<i>1.1%</i>	<i>1.0%</i>
<i>GDP deflator</i>	<i>0.6%</i>	<i>1.1%</i>	<i>1.2%</i>	<i>1.1%</i>
Primary deficit in % of GDP ( $s_t$ )	1.5%	1.8%	1.5%	1.6%
<i>Public deficit in % of GDP</i>	<i>-2.3%</i>	<i>-1.8%</i>	<i>-2.4%</i>	<i>-2.4%</i>
<i>Debt-service charge in % of GDP</i>	<i>3.8%</i>	<i>3.6%</i>	<i>3.8%</i>	<i>4.0%</i>
Projected public debt/GDP ( $d_{t+1}$ )	131.2%	130.3%	129.5%	129.1%
<i>Apparent interest rate stabilizing the debt</i>	<i>3.4%</i>	<i>3.4%</i>	<i>3.5%</i>	<i>3.3%</i>
<i>Primary deficit stabilizing the debt</i>	<i>0.9%</i>	<i>0.8%</i>	<i>0.8%</i>	<i>1.1%</i>
<i>Public deficit stabilizing the debt</i>	<i>-2.9%</i>	<i>-2.7%</i>	<i>-3.1%</i>	<i>-2.8%</i>

Sources: AMECO, author's calculations..

Note : Changes in the public debt depend not only on the primary deficit, but also on the apparent interest rate and the growth rate, according to the formula:  $d_{t+1} = d_t \frac{(1+i)}{(1+g)} - s_t$  which  $g$  = growth rate of nominal GDP,  $i$  = apparent interest rate on the debt,  $s$  = primary public deficit / GDP,  $d$  = public debt / GDP.

Reading note: the public debt/GDP ratio in 2017 was 131.8% and should fall to 131.2% in 2018.

However, for the apparent interest rate to rise from 2.7% in 2018 to 3.5% in 2019, given the 7-year maturity on the debt, the interest rate charged by markets would have to rise by about 5.6 points on average over the year, for one year. While this scenario cannot be excluded, it seems certain that the ECB would intervene to allow Italy to refinance at lower cost and avoid contagion.

Still, even if interest rates do not reach this level, any additional rise in interest rates will further limit the

Italian government's fiscal manoeuvring room, or it will lead to a larger-than-expected deficit. Also, the deficit forecast by the government is based on an optimistic assumption for GDP growth of 1.5% in 2019; if growth is weaker, the deficit could widen further, unsettling nerves on the market and among investors and jeopardizing the sustainability of the debt.

[1] L. Clément-Wilz (2014), "Les mesures 'anti-crise' et la transformation des compétences de l'Union en matière économique" ["'Anti-crisis' measures and the transformation of the competences of the EU in economic matters"], *Revue de l'OFCE*, 103.

[2] For more information, see the forthcoming 2018-2020 forecast for the global economy, *Revue de l'OFCE*, (October 2018).

[3] Spontaneous growth for a given year is defined as the sum of potential growth and the closing of the output gap.

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## **Brexit: Roads without exits?**

By [Catherine Mathieu](#) and [Henri Sterdyniak](#)

The result of the referendum of 23 June 2016 in favour of leaving the European Union has led to a period of great economic and political uncertainty in the United Kingdom. It is also raising sensitive issues for the EU: for the first time, a country has chosen to leave the Union. At a time when populist parties are gaining momentum in several European countries, Euroscepticism is rising in others (Poland, Hungary, Czech Republic, Slovenia, Slovakia), and the migrant crisis is dividing the Member States, the EU-27 must negotiate

Britain's departure with the aim of not offering an attractive alternative to opponents of European integration. There can be no satisfactory end to the UK-EU negotiations, since the EU's goal cannot be an agreement that is favourable to the UK, but, on the contrary, to make an example, to show that leaving the EU has a substantial economic cost but no significant financial gain, that it does not give room for developing an alternative economic strategy.

According to the current timetable, the UK will exit the EU on 29 March 2019, two years after the official UK government announcement on 29 March 2017 of its departure from the EU. Negotiations with the EU officially started in April 2017.

So far, under the auspices of the European Commission and its chief negotiator, Michel Barnier, the EU-27 has maintained a firm and united position. This position has hardly given rise to democratic debates, either at the national level or European level. The partisans of more conciliatory approaches have not expressed themselves in the European Council or in Parliament for fear of being accused of breaking European unity.

The EU-27 are refusing to question, in any respect, the way that the EU is functioning to reach an agreement with the UK; they consider that the four freedoms of movement (goods, services, capital and persons) are inseparable; they are refusing to call into question the role of the European Court of Justice as the supreme tribunal; they are rejecting any effort by the UK to "cherry pick", to choose the European programmes in which it will participate. At the same time, the EU-27 countries are seizing the opportunity to question the status of the City, Northern Ireland (for the Republic of Ireland) and Gibraltar (for Spain).

### **Difficult negotiations**

On 29 April 2017, the European Council adopted its negotiating

positions and appointed Michel Barnier as chief negotiator. The British wanted to negotiate as a matter of priority the future partnership between the EU and the UK, but the EU-27 insisted that negotiations should focus first and foremost on three points: the rights of citizens, the financial settlement for the separation, and the border between Ireland and Northern Ireland. The EU-27 has taken a hard line on each of these three points, and has refused to discuss the future partnership before these are settled, banning any bilateral discussions (between the UK and a member country) and any pre-negotiation between the UK and a third country on their future trade relations.

On 8 December 2017, an agreement was finally reached between the United Kingdom and the European Commission on the three initial points<sup>[1]</sup>; this agreement was ratified at the European Council meeting of 14-15 December<sup>[2]</sup>. However, strong ambiguities persist, especially on the question of Ireland.

The European Council accepted the British request for a transitional period, with this to end on 31 December 2020 (so as to coincide with the end of the current EU budgeting). Thus, from March 2019 to the end of 2020, the UK will have to respect all the obligations of the single market (including the four freedoms and the competence of the CJEU), even though it no longer has a voice in Brussels.

The EU-27 agreed to open negotiations on the transition period and the future partnership. These negotiations were to culminate at the European summit in October 2018 in an agreement setting out the conditions for withdrawal and the rules for the transition period while outlining in a political statement the future treaty determining the relations between the United Kingdom and the EU-27, so that the European and British authorities have time to examine and approve them before 30 March 2019.

However, both the EU-27 and the UK have proclaimed that “there

is no agreement on anything until there is an agreement on everything”, meaning that the agreements on the three points as well as on the transition period are subject to agreement on the future partnership.

### **Negotiations for the British side**

The members of the government formed by Theresa May in July 2016 were divided on the terms for Brexit from the outset: on one side were supporters of a hard Brexit, including Boris Johnson, who was then in charge of foreign affairs, and David Davis, then tasked to negotiate the UK’s departure from the EU; on the other side were members who favoured a compromise to limit Brexit’s impact on the British economy, including Philip Hammond, Chancellor of the Exchequer. The proponents of a hard Brexit had argued during the campaign that leaving the EU would mean no more financial contributions to the EU, so the savings could be put to “better use” financing the UK health system; that the United Kingdom could turn to the outside world and freely sign trade agreements with non-EU countries, which would be beneficial for the UK economy; and that getting out of the shackles of European regulations would boost the economy. The hard Brexiteers argue against giving in to the EU-27’s demands, even at the risk of leaving without an agreement. The goal is to get free of Europe’s constraints and “regain control”. For those in favour of a compromise with the EU, it is essential to avoid a no-deal Brexit – “going over the cliff” would be detrimental to British business and jobs. In recent months, it has been this camp that has gradually strengthened its positions within the government, leading Theresa May to ask the EU-27 for a transitional period during her Florence speech of September 2017, which also responded to the demands of British business representatives (including the Confederation of British Industrialists, the CBI). On 6 July 2018, Theresa May held a government meeting in the Prime Minister’s Chequers residence to agree on British proposals on the future relationship between the United

Kingdom and the European Union. The concessions made in recent months by the British government together with the Chequers proposals led David Davis and Boris Johnson to resign from the Cabinet on 8 July 2018.

On 12 July 2018, the British government published a White Paper on the future partnership<sup>[3]</sup>. It proposes a “principled and practical Brexit”<sup>[4]</sup>. This must “respect the result of the 2016 referendum and the decision of the UK public to take back control of the UK’s laws, borders and money”. It is about building a new relationship between the UK and the EU, “broader in scope” than the current relationship between the EU and any third country, taking into account the “deep history and close ties”.

The White Paper has four chapters: economic partnership, security partnership, cross-cutting and other cooperation, and institutional arrangements. As far as the economic partnership is concerned, the agreement must allow for a “broad and deep economic relationship with the rest of the EU”. The United Kingdom proposes the establishment of a free trade area for goods. This would allow British and European companies to maintain production chains and avoid border and customs controls. This free trade area would “meet the commitment” of maintaining the absence of a border between Northern Ireland and the Republic of Ireland. The UK would align with the relevant EU rules to allow friction-free trade at the border; it would participate in the European agencies for chemicals, aviation safety and medicines. The White Paper proposes applying EU customs rules to the imports of goods arriving in the UK on behalf of the EU and collecting VAT on these goods also on its behalf.

For services, the UK would regain its regulatory freedom, agreeing to forego the European passport for financial services, while referring to provisions for the mutual recognition of regulations, which would preserve the benefits of integrated markets. It wishes to maintain cooperation in

the fields of energy and transport. In return, the UK is committed to maintaining cooperative provisions on competition regulation, labour law and the environment. Freedom of movement would be maintained for citizens of the EU and the UK.

The security partnership would include the maintenance of cooperation on police and legal matters, the UK's participation in Europol and Eurojust, and coordination on foreign policy, defence, and the fight against terrorism.

The White Paper proposes close cooperation on the circulation and protection of personal data as well as agreements for scientific cooperation in the fields of innovation, culture, education, development, international action, and R&D in the defence and aerospace sector. The UK wishes to continue to participate in European programmes on scientific cooperation, with a corresponding financial contribution. Finally, the United Kingdom would no longer participate in the common fisheries policy, but proposes negotiations on the subject.

In institutional matters, the UK proposes an Association Agreement, with regular dialogue between EU and UK Ministers, in a Joint Committee. The UK would recognize the exclusive jurisdiction of the CJEU to interpret EU rules, but disputes between the UK and the EU would be settled by the Joint Committee or by independent arbitration.

Up to now Theresa May has tried to assuage both the hard Brexiteers – the UK will indeed leave the EU – and supporters of a flexible Brexit – the UK wants a deep and special partnership with the EU. Theresa May regularly repeats that the UK is leaving the EU but not Europe, but her compromise position is not satisfying supporters of a net Brexit. In September 2018, Boris Johnson has been accusing Theresa May of capitulating to the EU: “At every stage in the talks so far, Brussels gets what Brussels wants.... We have wrapped a suicide vest around the British Constitution – and handed the



detonator to Michel Barnier. We have given him a jemmy with which Brussels can choose – at any time – to crack apart the union between Great Britain and Northern Ireland” [5]. According to Johnson, the Chequers plan loses all the benefits of Brexit. The Remainers, those in favour of staying in the EU, are campaigning for a new referendum. This is nevertheless unlikely. Theresa May rejects it out of hand as a “betrayal of democracy”.

The Conservative Party’s annual convention, to be held from September 30 to October 3, could see Boris Johnson or Jacob Rees-Mogg [6] run for head of the Party. They do not have majority support, however, and the polls show Theresa May with greater popularity than her challengers. Barring a dramatic twist, Theresa May will continue to lead the Brexit negotiations in the coming months.

The British Parliament decided last December 13 that it will have a vote on any agreement with the European Union. So Theresa May must also find a parliamentary majority concerning the UK’s orderly withdrawal, in the face of opposition from both Remainers and hard Brexiteers, which will require the support of some Labour MPs and will therefore be difficult.

The proposals of the July White Paper were not deemed acceptable by Michel Barnier. In August, Jeremy Hunt, the UK’s new Foreign Minister, estimated the risks of a lack of agreement at 60%. On 23 August 2018, the government published 25 technical notes (out of 80 planned) that spell out the government’s measures to be taken in case of a no-deal exit in March 2019. Their objective is to reassure businesses and households about the risks of shortages of imported products, including certain food products and medicines. At the time these notes were published, Dominic Raab, the new Minister in charge of the Brexit negotiations, took care to recall that the government does want an agreement be signed and that the negotiators agree on 80% of the provisions of the withdrawal agreement.

If the EU-27 remains inflexible, the British government will face a choice between leaving without an agreement, which the “hard” Brexiteers are ready to do, and making further concessions. Philip Hammond recalled the risks of failing to reach an agreement. But Theresa May is sticking to her line that the lack of an agreement would be preferable to a bad deal. On 28 August, she echoed the words of WTO Director-General Roberto Azevedo, that leaving without an agreement would not be “the end of the world”, but nor would it be “a walk in the park”. In an opinion column in the *Sunday Telegraph* of 1 September 2018, she reaffirmed her desire to build a United Kingdom that is stronger, more daring, based on meritocracy, and adapted to the future, outside the EU.

### **The negotiations from the EU viewpoint**

The EU-27 is refusing that the UK could stay in the single market and the customs union while choosing which rules it wants to apply. It does not want the UK to benefit from more favourable rules than other third countries, in particular the current members of the European Economic Area (the EEA: Norway, Iceland, Liechtenstein) or Switzerland. EEA members currently have to integrate all the single market legislation (in particular the free movement of persons) and contribute to the European budget. They benefit from the European passport for financial institutions, while Switzerland does not.

In December 2017, Michel Barnier made it clear that lessons had to be drawn from the United Kingdom’s refusal to respect the four freedoms, its regaining of its commercial sovereignty, and its termination of its recognition of the authority of the European Court of Justice. This rules out any possibility of its participation in the single market and the customs union. The agreement with the UK will be a free trade agreement, along the lines of the agreements signed with Canada (the CETA), South Korea and more recently Japan. It will not concern financial services.

During the 2018 negotiations, the EU-27 was not particularly conciliatory about a series of issues: the UK's obligation to apply all EU rules and the guarantee of the freedom of establishment of people until the end of the transitional period; the Irish border (arguing that the absence of physical borders was not compatible with the UK's withdrawal from the customs union, demanding that Northern Ireland remain in the single market as long as the UK does not come up with a solution guaranteeing the integrity of the internal market without a physical border with Ireland); the role of the CJEU (which must have jurisdiction to interpret the withdrawal agreement); the EU's decision-making autonomy (refusing the establishment of permanent joint decision-making bodies with the UK); and even Gibraltar and the British military bases in Cyprus.

Thus, on 2 July 2018, Michel Barnier<sup>[7]</sup> accepted the principle of an ambitious partnership, but refused any land border between the two parts of Ireland, while indicating that a land border is necessary to protect the EU (this would mean that the only acceptable deal would involve a border crossing between Northern Ireland and the rest of the UK, which is unacceptable to the UK). He refused that the EU "loses control of its borders and its laws". Barnier therefore rejected the idea that the UK would be responsible for enforcing European customs rules and collecting VAT for the EU. He insisted that future cooperation with the UK could not rely on the same degree of trust as between EU member countries. He called for precise and controllable commitments from the United Kingdom, particularly with respect to health standards and the protection of Geographical indications. He wanted the agreement to be limited to a free trade agreement, with UK guarantees on regulations and state subsidies, and with cooperation on customs and regulations.

The UK would have to renegotiate all trade agreements, both with the EU and with third countries. These agreements will

probably take a long time to set up, and in any case more than two years. The lack of preparation and the disorganization with which the UK has tackled the Brexit negotiations augurs poorly for its ability to negotiate such agreements quickly. The matter of re-establishing customs controls is crucial and delicate, whether in Ireland, Gibraltar or Calais. Many multinational corporations will relocate their factories and headquarters to continental Europe. The loss of the financial passport is a given. It is on this point that the British could see further losses, given the weight of the City's business (7.5% of British GDP). The United Kingdom will have to choose between abiding by European rules to maintain some access to European markets and entering into confrontation by a policy of liberalization. The EU-27 could seize the opportunity of the UK's departure to return to a Rhine-based financial model, centred on banks and credit rather than on markets or, on the contrary, it could try to supplant the City's market activities through liberalization measures. It is the second branch of these alternative that will prevail.

### **Choosing between three strategies**

So far, the EU-27 countries have taken a position that is tough but easy to hold: since it is the UK that has chosen to leave the Union, it is up to it to make acceptable proposals for the EU-27, with regard both to its withdrawal and to subsequent relations. This is the approach that led to the current stagnant situation. The EU-27 now has to choose between three strategies:

– Not to make proposals acceptable to the British and resign themselves to a no-deal Brexit: relations between the UK and the EU-27 would be managed according to WTO principles; and the financial terms of the divorce would be decided legally. The United Kingdom would regain full sovereignty. There are two reasons to fear this scenario: trade would be disrupted by the re-erection of customs barriers in ports and in Ireland; and this "hard Brexit" would encourage the UK to become a tax

and regulatory haven, meaning that the EU would be faced with the alternative either of following along or retaliating, both of which would be destructive;

– Face the issue head on and establish a third circle for countries that want to participate in a customs union with the EU countries in the short term, i.e. the United Kingdom and the EEA countries. It is within this framework that agreements on technical regulations and standards for goods and services would be negotiated. Thus, “freedom of trade” issue would be dissociated from issues of political sovereignty. However, this poses two problems: these agreements would need to be negotiated in technical committees where public opinion and national parliaments such as the European Parliament would have little voice. The fields of the customs union are problematic, in particular for fiscal matters, financial regulations, and the freedom of movement of persons and services;

– Choose the “special and deep partnership” solution, which would entail reciprocal concessions. This would necessarily be able to serve as a model for relations between the EU and other countries. It would include a customs union limited to goods, committees for harmonizing standards, piecemeal agreements for services, the right of the UK to limit the movement of persons, undoubtedly a court of arbitration (which would limit the powers of the CJEU), and a commitment to avoid fiscal and regulatory competition. As is clear, this would satisfy neither supporters of a hard Brexit nor supporters of an autonomous and integrated European Union.

[\[1\]](#) See: *Joint report from the negotiators of the EU and the UK government on progress during phase 1 of negotiations under Article 50 on the UK’s orderly withdrawal from the EU*, 8 December 2017.

[2] See Catherine Mathieu and Henri Sterdyniak: Brexit, réussir sa sortie, *Blog de l'OFCE*, 6 December 2017.

[3] HM Government: “The future relationship between the United Kingdom and the European Union”, July 2018.

[4] The expression is in the original text: “A principled and practical Brexit”. Translations of the summary note in the 25 languages of the EU are available on the web site of the Department for Exiting the European Union. The French version uses the term: “Brexit vertueux et pratique”.

[5] Opinion column by Boris Johnson, *Mail on Sunday*, 9 September 2018.

[6] Favourable to a hard Brexit – from Eton-Oxford, a traditionalist Catholic who is opposed to abortion, public spending and the fight against climate change.

[7] See [Un partenariat ambitieux avec le Royaume-Uni après le Brexit](#), 2 July 2018.

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## **Spain: a 2018 budget on target, if the Commission likes it or not**

By [Christine Rifflart](#)

With a deficit of 3.1% of GDP in 2017, Spain has cut its deficit by 1.4 points from 2016 and has been meeting its

commitments to the European Commission. It should cross the 3% threshold in 2018 without difficulty, making it the latest country to leave the excessive deficit procedure (EDP), after France in 2017. The 2018 budget was first presented to the European Commission on April 30 and then approved by Spain's Congress of Deputies on May 23 amidst a highly tense political situation, which on June 1 led to the dismissal of Spain's President Mariano Rajoy (supported by the Basque nationalist representatives of the PNV Party who had approved the 2018 budget a few days earlier). It should be passed in the Senate soon by another majority vote. The expansionary orientation of the 2018 budget, backed by the government of the new Socialist President Pedro Sanchez, does not satisfy the Commission, which considers the adjustment of public finances insufficient to meet the target of 2.2% of GDP included in the 2018-2021 Stability and Growth Pact (SGP). According to the hypotheses of the previous government, not only would the deficit fall below 3% but the nominal target would be respected.

Admittedly, while, given the strong growth expected in Spain in 2018, the public deficit will easily be below 3% in 2018 and therefore meet the requirements set in the EDP, the new budget act is not in line with the fiscal orthodoxy expected by Brussels. The lack of a People's Party majority in Congress led ex-President Mariano Rajoy into strategic alliances with Ciudadanos and the PNV to get the 2018 budget adopted (with the hope, in particular, of avoiding early parliamentary elections), at the price of significant concessions:

- An increase in civil servants' salaries of 1.75%[\[1\]](#) in 2018 and at least 2.5% in 2019, with a larger increase if GDP grows by more than 2.5% (estimated cost of 2.7 billion euros in 2018 and 3.5 billion in 2019 according to the outgoing government);
- Lower taxes for low-income households (via the increase in the minimum tax threshold from 12,000 to 14,000 euros income per year, tax credits for childcare expenses, assistance for disabled people and large families, and a reduction in tax on

gross wages between 14,000 and 18,000 euros) (cost 835 million in 2018 and 1.4 billion in 2019);

– The revaluation of pensions by 1.6% in 2018 and by 1.5% in 2019 (cost of 1.5 and 2.2 billion), in addition to a rise of up to 3% in the old age and non-taxpayer minimum, and between 1% and 1.5% for the lowest pensions (cost 1.1 billion in 2018).

According to the former government, these measures will cost a little more than 6 billion euros in 2018 (0.5% of GDP) and nearly 7 billion in 2019 (0.6% of GDP). The revaluation of pensions should be partly covered by the introduction of a tax on digital activities (Google tax) in 2018 and 2019, with revenues of 2.1 billion euros expected. In the end, spending, which was expected to fall by 0.9 GDP point in 2018 based on the undertakings made in the previous 2017-2020 SGP, would fall by only 0.5 GDP point in the 2018-2021 SGP (to 40.5% of GDP) (Table). But above all, despite the tax cuts just introduced, the extra revenue expected from the additional growth should represent 0.1 GDP point (to 38.3% of GDP). In fact, the budget's redistributive character, combined with the downward revision of the impact of the Catalan crisis on the economy (0.1% of GDP according to the AIReF [\[2\]](#)) led all the institutes (Bank of Spain, the Government, the European Commission) to raise their 2018 growth forecasts from last winter by 0.2 or 0.3 GDP point to bring it slightly below 3% (2.6% for the OFCE according to our April forecasts [\[3\]](#)).



Table. Breakdown of Spanish public finances

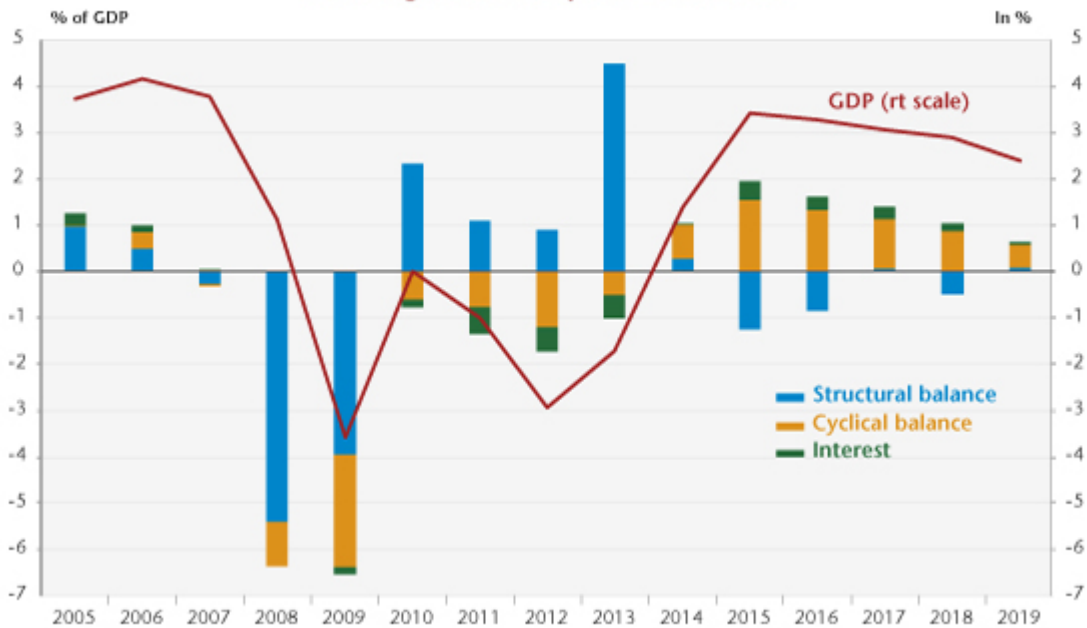
% of GDP	2017			2018			2019*		
	Gvt	EC	OFCE	Gvt	EC	OFCE	Gvt	EC	OFCE
GDP	3.1	3.1	3.1	2.7	2.9	2.6	2.4	2.4	1.9
Potential GDP	1.0	1.0	0.9	1.0	1.2	1.1	1.3	1.4	1.1
Output gap	-1.6	-0.2	-2.9	0.1	1.4	-1.4	1.2	2.3	-0.6
Budget balance	-3.1	-3.1	-3.1	-2.2	-2.6	-2.3	-1.3	-1.9	-1.5
Revenue	37.9	37.9		38.3	38.1		38.5	38.1	
Spending	41.0	41.0		40.5	40.7		39.8	40.0	
Cyclical balance	-0.8	-0.1	-1.5	0.0	0.8	-0.7	0.6	1.3	-0.3
Interest	2.6	2.6	2.6	2.4	2.4	2.4	2.3	2.4	2.3
Primary balance adjusted for cycle	0.3	-0.4	1.0	0.2	-1.0	0.8	0.4	-0.8	1.1

\* In 2019, the cyclically-adjusted primary balance should improve by 0.2 GDP point due to the elimination of exceptional measures, estimated by the government at 0.2 GDP point.

Sources: European Commission; OFCE – April 2018 forecasts.

Nevertheless, beyond the shared optimism about Spanish growth, the calculations of the cost of the new measures differ between the Spanish authorities and the Commission. According to the government, the increase in growth should, as we have said, boost tax revenues and neutralize the expected cost of new spending. In 2018, the 0.9 percentage point reduction in the deficit (from 3.1% to 2.2%) would therefore be achieved by the 0.8 GDP point growth in the cyclical balance, combined with the 0.2 point fall in debt charges, with the structural balance remaining stable (fiscal policy would become neutral rather than restrictive as set out in the earlier version of the Pact). But this scenario is not shared by Brussels<sup>[4]</sup>, for whom the cost of the measures, and in particular of the increase in civil servants' salaries, is underestimated. Expenditures are expected to be 0.2 GDP point higher and revenue 0.2 GDP point higher than the government has announced. According to the Commission, the cyclical balance is expected to improve by 0.9 GDP point, but the fiscal impulse would worsen the structural balance by 0.6 GDP point. In these conditions, the deficit would bypass the 3% mark, but fiscal policy would clearly become expansionary and the 2.2% target would not be hit. The public deficit stood at 2.6% in 2018 (Figure 1).

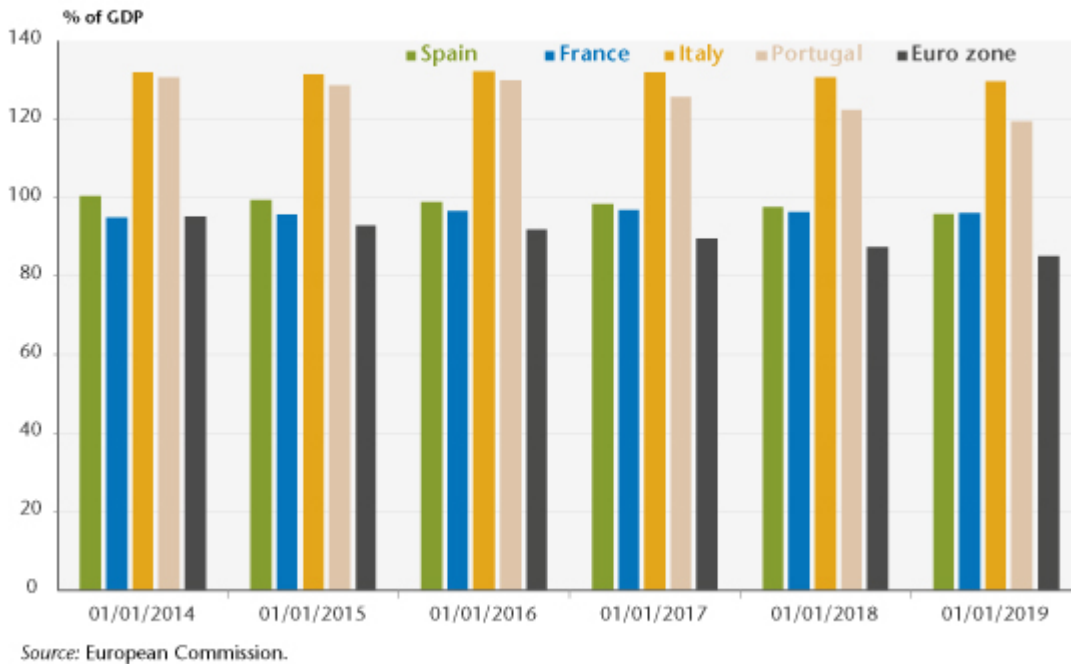
Figure 1. Breakdown of the public balance, as % of GDP, according to the European Commission



Source: European Commission.

This more expansionary orientation of the 2018 budget results above all from the political considerations of the former Rajoy government and its effort to deal with the impossibility of governing (facts have demonstrated the fragility of this position). Nevertheless, the timing is ideal – because the only budget commitment required in 2018 is to cross the 3% deficit threshold in order to get out of the corrective arm of the SGP. The year 2018 therefore makes it possible to implement a generous fiscal policy, while crossing the 3% mark, without exposing the country to sanctions. The situation will be more delicate in 2019, when EU rules aimed at reducing a debt that is still well above 60% of GDP will be applied, notably by adjusting the structural balance (Figure 2).

Figure 2. The public debt in the euro zone



[1] <https://www.boe.es/boe/dias/2018/03/26/pdfs/B0E-A-2018-4222.pdf>

[2] [https://elpais.com/economia/2018/04/17/actualidad/1523949570\\_477094.html?rel=str\\_articulo#1526464987471](https://elpais.com/economia/2018/04/17/actualidad/1523949570_477094.html?rel=str_articulo#1526464987471)

[3] See the Spain part of the dossier: <https://www.ofce.sciences-po.fr/pdf/revue/11-1550FCE.pdf> , pp 137-141.

[4] Nor by the AIREF.

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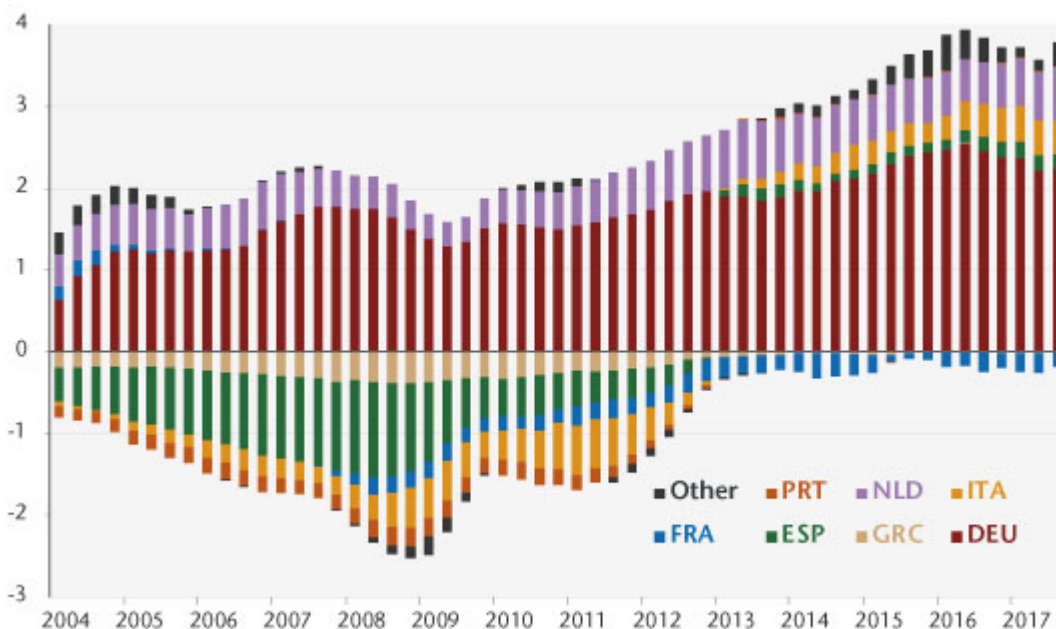
**Major adjustments are**

# 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

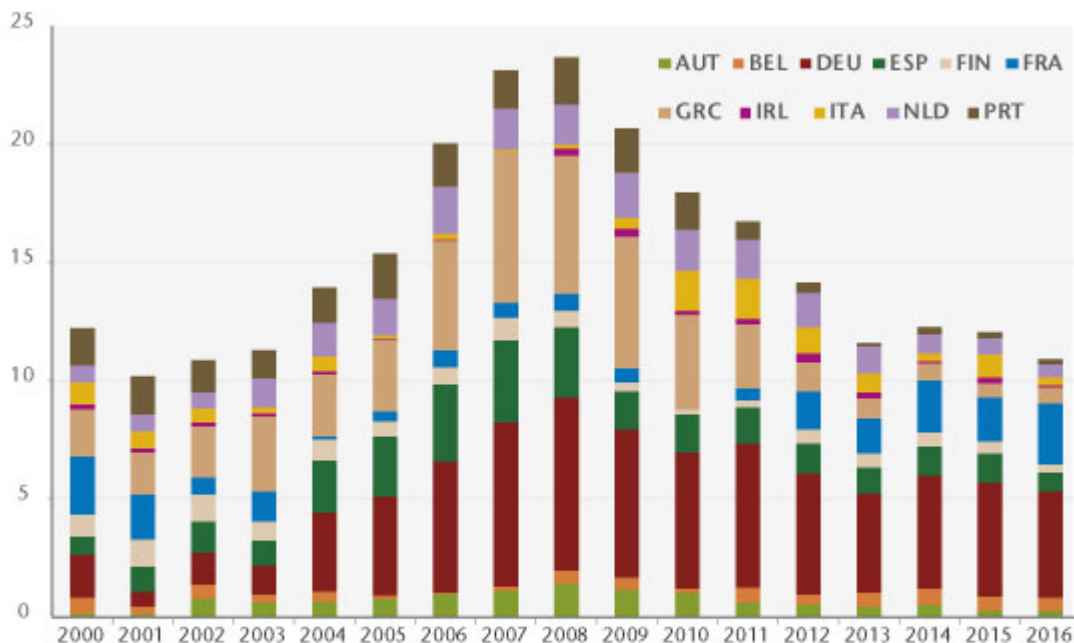
3.3% of GDP in 2016. In other words, the imbalance that was internal to the euro zone has shifted into an external imbalance between the euro zone and the rest of the world, in particular the United States and the United Kingdom. This imbalance is feeding Donald Trump's protectionism and putting pressure 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).

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## **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.

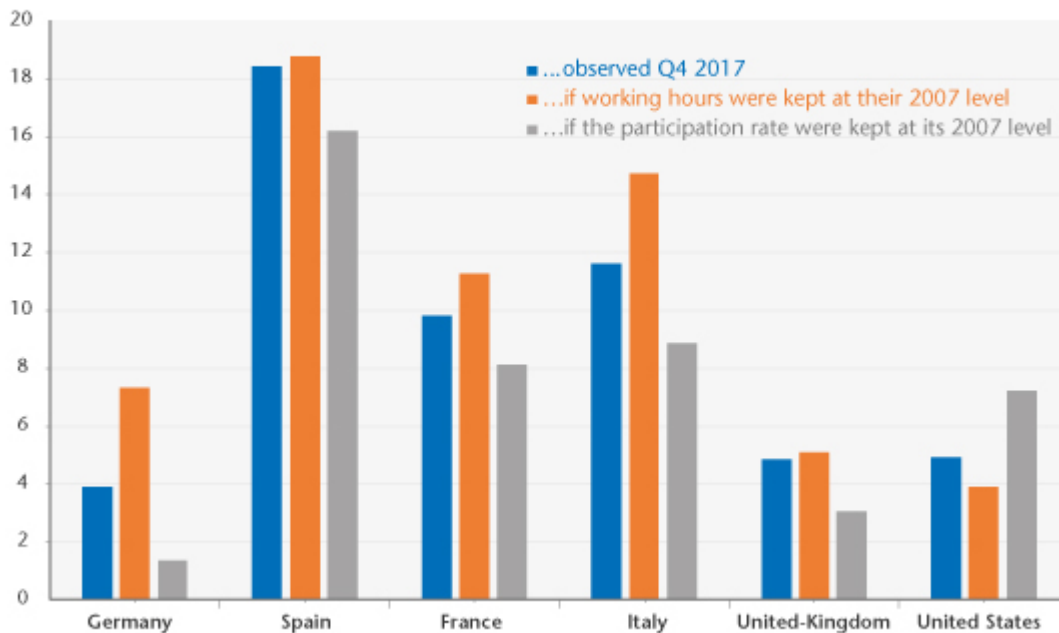
If the participation rate had remained at its 2007 level, the unemployment rate would be lower by 2.3 points in France, 3.1 points in Italy and 2 points in the United Kingdom (see figure). On the other hand, without the sharp contraction in the US labour force, the unemployment rate would have been more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

## What can be deduced from the figures on inflation?

By [Eric Heyer](#)

In May, inflation in the euro area moved closer to the ECB target. The sharp rise in inflation, from 1.2% to 1.9% per annum in the space of one month, did not nevertheless provoke a reaction, since the main reason for it was well known and common to all the countries: the surge in oil prices. After having plummeted to 30 dollars a barrel at the beginning of

2016, the price per barrel now stands at around 77 dollars, the highest level since 2014. Even after adjusting for the exchange rate – the euro has appreciated against the dollar – the price of a barrel has increased by almost 40% (18 euros) over the last 12 months, directly causing prices in the net oil importing countries to rise at an accelerating pace. In addition to this common effect, for France the impact of the hike in indirect taxes on tobacco and fuels, which came into force at the beginning of the year, will, [according to our estimates](#), add 0.4 point to the price index.

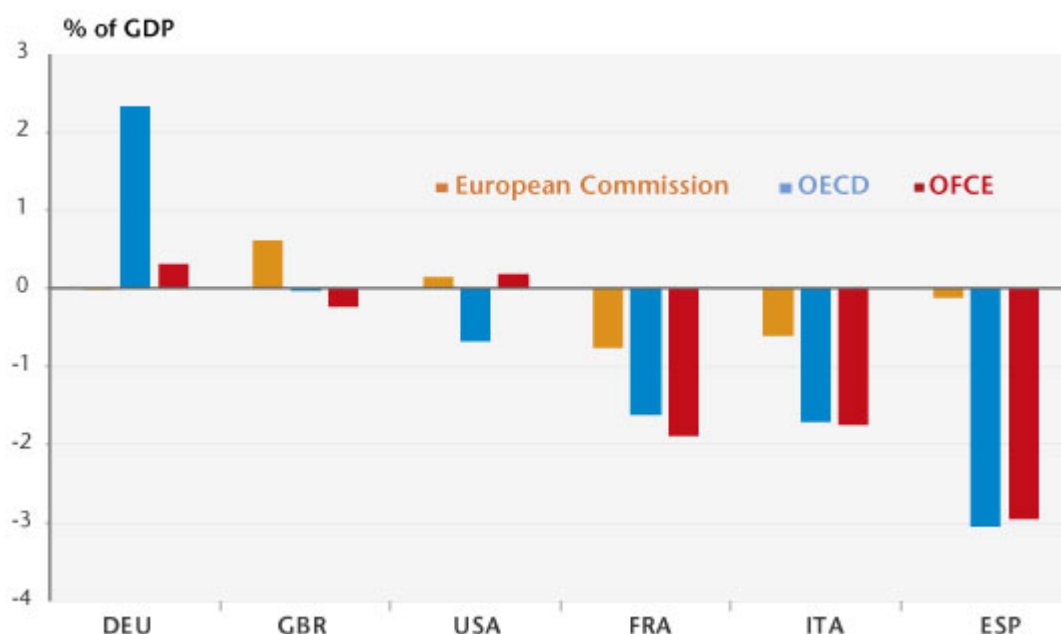
At the same time, the underlying inflation (or core inflation) index, excluding products with volatile prices (such as oil and fresh produce) as well as prices subject to state intervention (electricity, gas, tobacco, etc.), is still not picking up pace and is staying below 1%. The second-round effect of an oil shock, which passes through a rise in wages, does not seem to be very significant, since consumers are absorbing most of the shock by reducing their purchasing power. This explains part of the observed slowdown in household consumption at the beginning of the year as well as the general lack of reaction of the monetary authorities to the announcement of the inflation figures.

There remains the question of the weakness of trend inflation and its link with the state of the economy. Have we already caught up with the output gap that arose since the Great Depression of 2008 (an output gap of close to zero), or are there still production capacities that can be mobilized in the event of additional demand (positive output gap)? In the first case, this would mean that the link between growth and inflation has been significantly broken; in the second case, this would indicate that the low level of inflation is not surprising and that the normalization of monetary policy needs to be gradual.

In 2017, even though the process of recovery was consolidating and spreading, most developed economies were still lagging

behind their pre-crisis trajectory. Only a few seem to have already overcome the lag in growth. Thus, two categories of countries seem to be emerging: the first – in particular Germany, the United States and the United Kingdom – includes countries that have caught up with their potential level of production and are at the top of the cycle; the second – which includes France, Italy and Spain, for example – includes countries that are still experiencing a lag in production which, according to the economic analysis institutes, lies between 1 and 2 points of GDP for France and Italy and 3 points of GDP for Spain (Figure 1).

Figure 1. Output gap in 2017 according to various institutes



Sources: European Commission, OECD, OFCE.

The presence of developed countries in both categories should logically result in the appearance of inflationary pressures in the countries listed in the first group and an inflation gap in those in the latter. However, these two phenomena were not apparent in 2017: as shown in Figure 2, the link between the level of the output gap and the underlying inflation rate is far from clear, casting doubt on the interpretation to be made with respect to the level of the output gap: to uncertainties relating to this notion is added that associated with the level of this gap in the past, in 2007 for example.

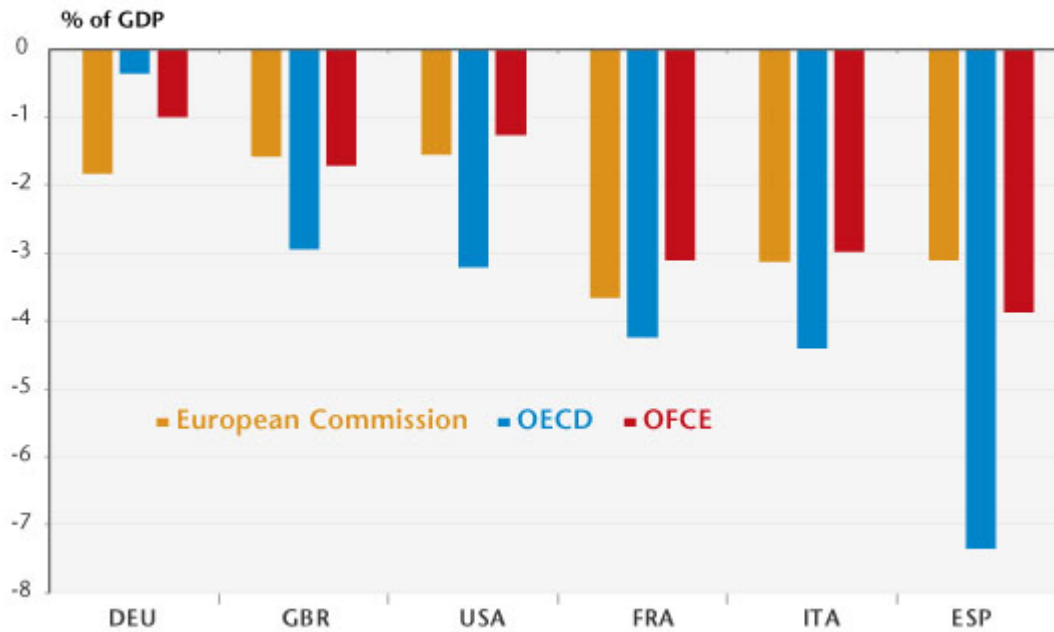
Figure 2. Level of output gap and underlying inflation rate in 2017



Source: OECD.

Given this high level of uncertainty, it seems appropriate to make a diagnosis based on how this output gap has varied since 2007. Such an analysis leads to a clearer consensus between the different institutes and to the disappearance of the first category of countries, those with no additional growth margin beyond their own potential growth. Indeed, according to these, in 2017 none of the major developed countries would have come back to its output gap level of 2007, including Germany. This gap would be around 1 GDP point for Germany, 2 GDP points for the United Kingdom and the United States, more than 3 GDP points for France and Italy and around 5 GDP points for Spain (Figure 3).

Figure 3. Level of output gap in 2017 relative to 2007 according to various institutes



Sources: European Commission, OECD, OFCE

This

analysis is more in line with the diagnosis of the renewal of inflation based on the concept of underlying inflation: the fact that the economies of the developed countries had not in 2017 recovered their cyclical level of 2007 explains that inflation rates were lower than those observed during the pre-crisis period (Figure 4). This finding is corroborated by an analysis based on criteria other than the output gap, notably the variation in the unemployment rate and the employment rate since the beginning of the crisis and in the rate of increase in working hours during this same period. Figure 5 illustrates these different criteria. On the basis of these latter criteria, the qualitative diagnosis of the cyclical situation of the different economies points to the existence of relatively high margins for a rebound in Spain, Italy and France. This rebound potential is low in Germany, the United States and the United Kingdom: only an increase in working time in the former or in the employment rate for the latter two could make this possible.

Figure 4. Level of output gap and underlying inflation rate from 2007 to 2017

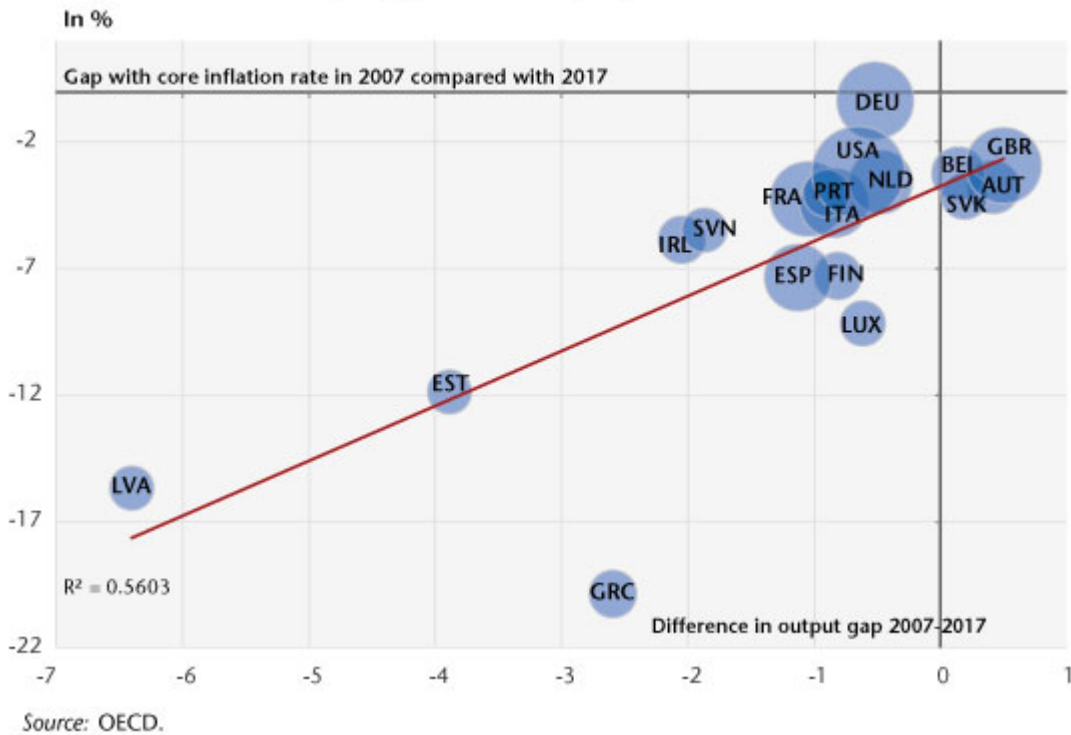
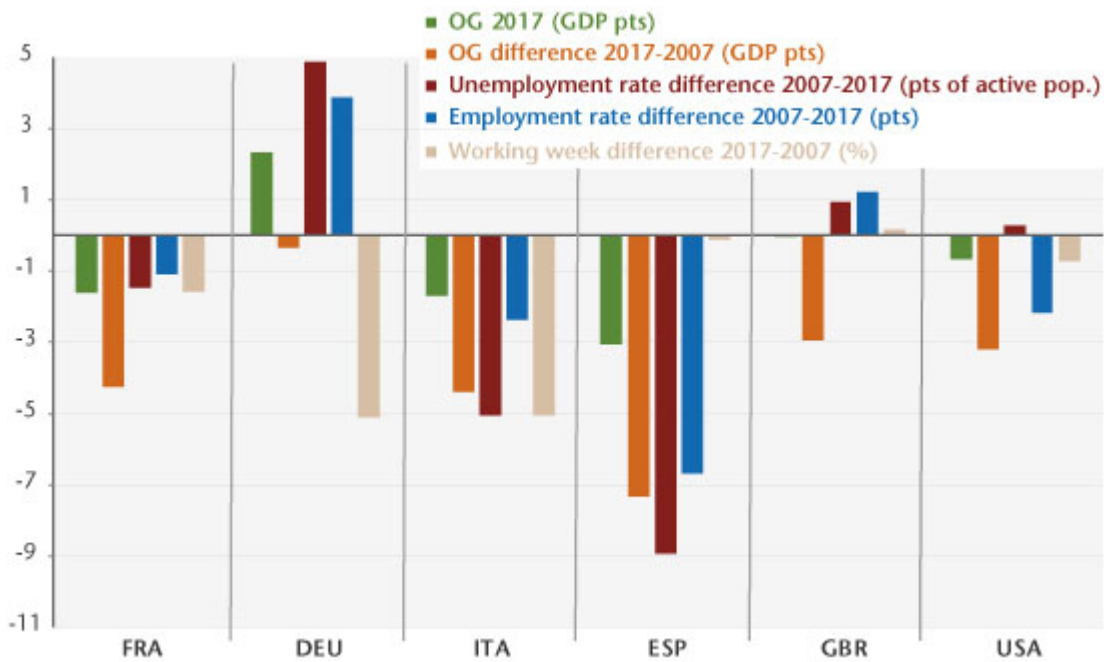


Figure 5. Several measures of output gap in 2017





# Measuring precautionary savings related to the risk of unemployment

By [Céline Antonin](#)

The question of how disposable income is shared between savings and consumption involves trade-offs that take place at the household level and has direct implications at the aggregate level. For example, if the propensity to save is higher among wealthy households, a consumer stimulus will be more effective if it targets low incomes. Another example concerns how progressive the income tax system is: if the savings rate rises with income, then making income tax more progressive will have a more than proportional effect on the decline in national savings, with consequences for investment. Other issues such as tax incentive schemes to encourage savings (life insurance, Livret A accounts) or the question of the relevant tax base (work versus consumption, income versus wealth) depend on this trade-off. The measurement of precautionary savings is essential, especially to understand the implications of rising unemployment during a shock such as the 2008 crisis. So if the increase in unemployment affects all households equally, and if rich households have a stronger precautionary motive than others, then the recession will be more violent.

Historically, the models of the life cycle and permanent income, which originated with Modigliani and Brumberg (1954) and Friedman (1957), provided one of the first theoretical frameworks for thinking about savings behaviours. Friedman (1957) introduced the notion of permanent income, defined as the constant income over time that gives the household the same discounted income as its future income, and showed that the permanent consumption (and thus the savings) is

proportional to the permanent income over the lifetime. Thus, households should save during their working lives and start dis-saving upon retirement. These models have been enriched by the precautionary savings theory, which shows that savings also serves as insurance against contingencies that might affect the household, particularly with respect to income (unemployment, loss of wages, etc.). As a result, households are saving not only to offset lower future income, but also to insure against all kinds of risks, including risk to income. The main difficulty when trying to evaluate this precautionary behaviour is to find an accurate measure of the risk to income. The most convincing approach involves the use of subjective household survey data about trends in income and in the likelihood of unemployment (Guiso *et al.*, 1992; Lusardi, 1997; Lusardi, 1998; Arrondel, 2002; Carroll *et al.*, 2003; Arrondel and Calvo-Pardo, 2008). This approach quantifies the share of wealth accumulation that is related to the precautionary motive.

What is the amplitude of the precautionary motive? Do all households exhibit precautionary behaviour, or does it depend on their income? The working paper on [The Linkages between Savings Rates, Income and Uncertainty. An illustration based on French data](#) ["Les liens entre taux d'épargne, revenu et incertitude. Une illustration sur données françaises"] first seeks to test the homogeneity of savings rates empirically according to the level of income. It is also interested in the existence of precautionary savings behaviour related to income and tries to quantify this, based on the French INSEE 2010-2011 Family Budget survey. The precautionary motive is assessed by means of the subjective measure of the likelihood of unemployment that is expected by household members over the next five years.

The precautionary motive exists for all French households: the extra savings linked to the risk of unemployment is around 6-7%, and the proportion of precautionary holdings

attributable to the risk of unemployment comes to around 7% of total wealth. The precautionary motive can be differentiated according to the level of income: middle-income households accumulate the most precautionary savings. Their savings represents 11-12% of the total household wealth of the second, third and fourth income quintiles, compared with about 5% for households in the income quintiles at the extremes.

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## Trump's budget policy: Mortgaging the future?

By [Christophe Blot](#)

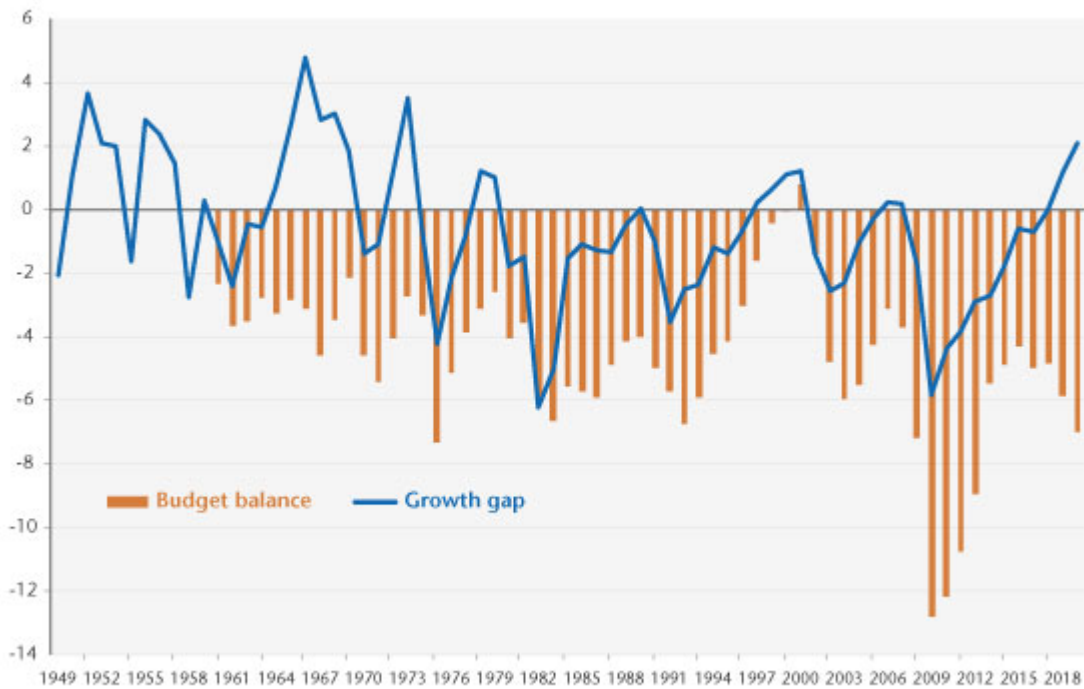
While the momentum for growth has lost steam in [some countries](#) – Germany, France and Japan in particular – GDP in the United States is continuing to rise at a steady pace. Growth could even pick up pace in the course of the year as a highly expansionary fiscal policy is implemented. In 2018 and 2019, the fiscal stimulus approved by the Trump administration – in December 2017 for the revenue component, and in February 2018 for the expenditure side – would amount to 2.9 GDP points. This level of fiscal impulse would come close to that implemented by Obama for 2008. However, Trump's choice has been made in a very different context, since the unemployment rate in the United States fell back below the 4% mark in April 2018, whereas it was accelerating 10 years ago, peaking at 9.9% in 2009. The US economy should benefit from the stimulus, but at the cost of accumulating additional debt.

Donald Trump had made fiscal shock one of the central elements of his presidential campaign. Work was begun in this direction

at the beginning of his mandate, and came to fruition in December 2017 with the passing of a major tax reform, the Tax Cuts and Jobs Act [\[1\]](#), which provided for a reduction in household income tax – in particular by reducing the maximum marginal income tax rate – and corporation tax, whose effective rate would fall from 21% to 9% by 2018 [\[2\]](#). In addition to this initial stimulus, expenditure will also rise in accordance with the agreement reached with the Democrats in February 2018, which should lead to [raising federal spending](#) by USD 320 billion (1.7 GDP points) over two years. These choices will push up domestic demand through boosting household disposable income and corporate profitability, which should stimulate consumption and investment. The multiplier effect – which measures the impact on GDP of a one dollar increase in public spending or a one dollar cut in taxes – will nevertheless be relatively small (0.5) because of the US position in the cycle.

Moreover, the public deficit will expand sharply, to reach a historically high level outside a period of crisis or war (graph). It will come to 5.8% of GDP in 2018 and 7.0% in 2019, while the growth gap will become positive [\[3\]](#). While the risk of overheating seems limited in the short term, the fact remains that the fiscal strategy being implemented could push the Federal Reserve to tighten monetary policy more quickly. However, an excessive rise in interest rates in a context of high public debt would provoke a snowball effect. Above all, by choosing to re-launch the economy in a favourable environment, the government risks being forced to make adjustments later when the economic situation deteriorates. This pro-cyclical stance in fiscal policy risks amplifying the cycle by accelerating growth today while taking the risk of accentuating a future slowdown. With a deficit of 7% in 2019, fiscal policy's manoeuvring room will actually shrink.

Figure. A pro-cyclical budget policy



Sources: CBO and NIPA, OFCE April 2018 forecasts.

[1] See the section on Budget policy: Crisis-free acceleration ["Politiques budgétaires : accélération sans crise"] in our [April 2017 forecast](#) for greater detail.

[2] See [here](#) for more on this.

[3] The growth gap expresses – as a % of potential GDP – the difference between observed GDP and potential GDP. Recall that potential GDP is not observed but estimated. The method of calculation used by the Congressional Budget Office (CBO) is explained [here](#).

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# The end of a cycle?

OFCE Analysis and Forecasting Department

*This text is based on the 2018-2019 outlook for the world economy and the euro zone, a full version of which is available [here](#) [in French].*

Global growth remained buoyant in 2017, allowing both the recovery and the reduction in unemployment to continue, especially in the advanced countries where growth rose to 2.3%, up from 1.6% the previous year. Although there are still a few countries where GDP has not recovered to its pre-crisis level, this improvement will gradually erase the stigma of the Great Recession that hit the economy 10 years ago. Above all, activity seemed to be gathering pace at the end of the year as, with the exception of the United Kingdom, annual GDP growth continued to pick up pace (Figure 1). However, the gradual return of the unemployment rate to its pre-crisis level and the closing of growth differentials, particularly in the United States and Germany, which had widened during the crisis, could foreshadow a coming collapse of growth. The first available estimates of growth in the first quarter of 2018 seem to lend credence to this assumption.

After a period of improvement, euro zone growth stalled in the first quarter of 2018, falling from 2.8% year-on-year in the fourth quarter of 2017 to 2.5%. While the slowdown has been more significant in Germany and France, it can also be seen in Italy, the Netherlands and, to a lesser extent, Spain (Figure 2). As for the United Kingdom, the slowdown is continuing as the prospect of Brexit draws nearer, while the country's budgetary policy is also more restrictive than in the other European countries. Japan is experiencing rather more than a slowdown, with quarterly GDP growth even falling in the first quarter. Finally, among the main advanced economic countries, growth is still gathering steam only in

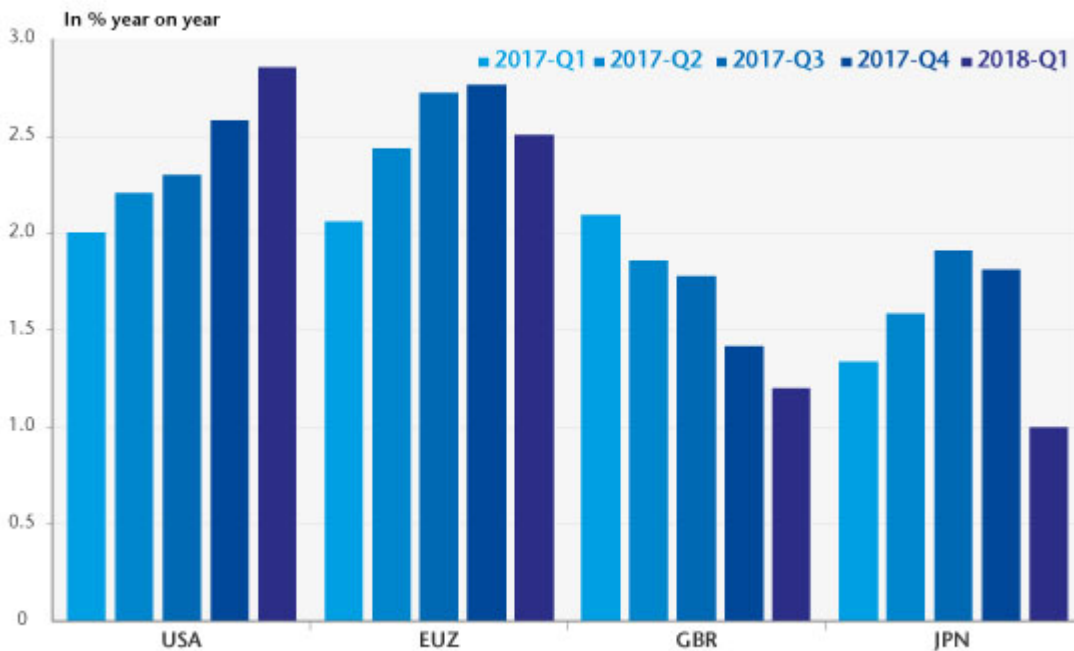
the United States, where GDP rose 2.9% year-on-year in the first quarter of 2018.

Does the slowdown testify to the end of the growth cycle? Indeed, the gradual closing of the gaps between potential GDP and actual GDP would steadily lead countries towards their long-term growth paths, with estimates converging at what is indicated to be a lower level. In this respect, Germany and the United States would be representative of this situation since the unemployment rate in the two countries is below its pre-crisis level. In these conditions, their growth would be slowed. It is clear that this has not been the case in the United States. We must therefore refrain from any generalized conclusion. In fact, despite the fall in unemployment, other indicators – the employment rate – provide a more nuanced diagnosis of the improvement in the state of the labour market in the US. Furthermore, in the case of France this performance is mainly the consequence of the fiscal calendar, which caused a decrease in household purchasing power in the first quarter and therefore a slowdown in consumption [\[1\]](#). This would therefore amount more to an air pocket than the sign of a lasting slowdown in French growth.

Above all, the factors that have supported growth will not generally be reversed. Monetary policy will remain expansionary even if a normalization is already underway in the United States, with the euro zone to start in 2019. On the fiscal side, the focus is more often neutral and should become highly expansionary for the United States, pushing growth above its potential. Finally, there are many uncertainties about estimates of the growth gap, meaning that maneuvering room might not necessarily be exhausted in the short term. An economic recovery is in fact still not being accompanied by a return of inflationary pressures or sharp wage increases, which would then indicate that the labour market is overheating. We anticipate continued growth in the industrialized countries in 2018 and accelerating growth in

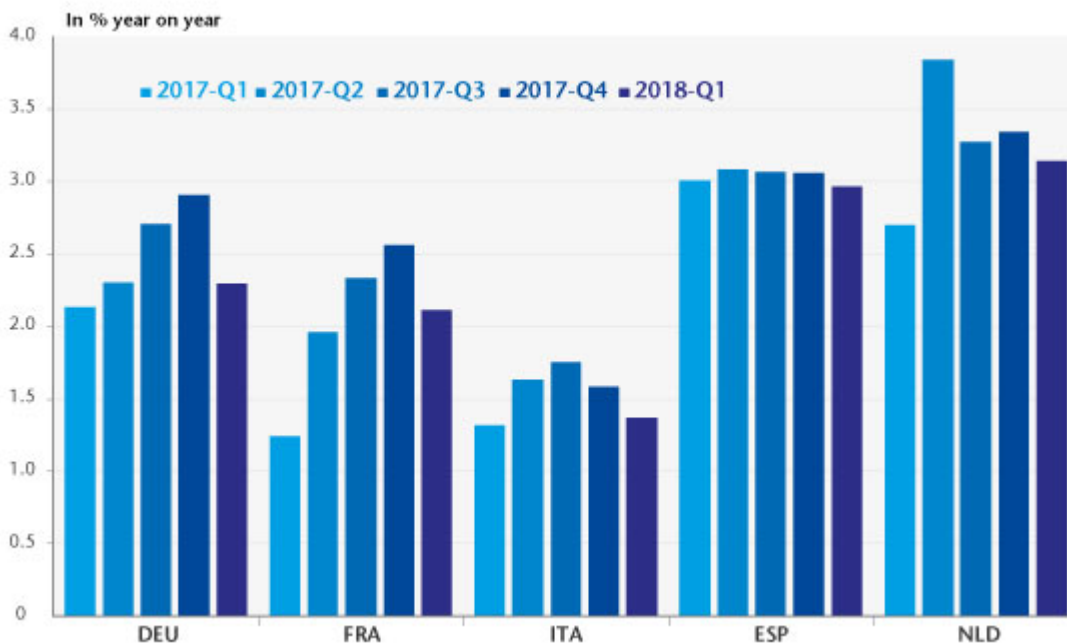
the emerging countries, bringing global growth to 3.7% in 2018. Growth should then peak, slowing down very slightly in 2019 to 3.5%. In the short term, the growth cycle would not then be over.

**Figure 1. Growth in the advanced countries**



Source: National accounts.

**Figure 2. Growth in eurozone**



Source: National accounts.