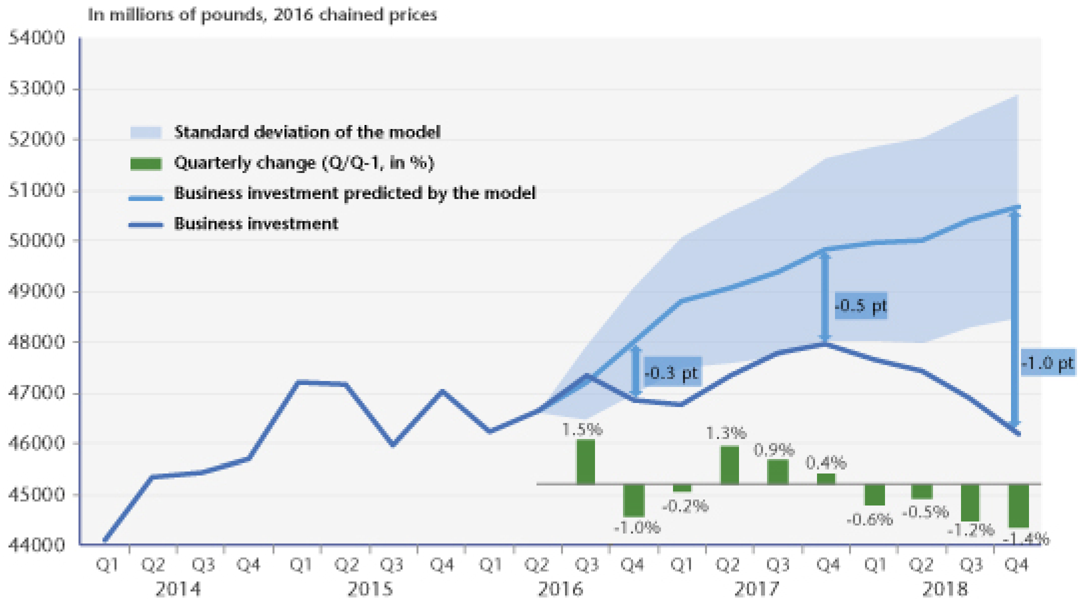
Business investment hurt by Brexit

By Magali Dauvin

At a time when the outlook for world trade outlook remains glum [1], British domestic demand is struggling to remain dynamic: household consumption has run out of steam at the end of the year, while investment fell by 1.4 points in 2018.
This latest fall can be attributed almost entirely to the investment of non-financial corporations [2] (55% of GFCF in volume), which fell consecutively during the four quarters of the year (Figure 1), for a total fall of -3.7% in 2018.
Investment can be predicted by an error-correction model [3], and the one used for the investment forecasts of non-financial firms in the United Kingdom benefits from an adjustment that can be considered "correct" in terms of its explanatory power (86%) over the pre-referendum period (1987Q2 – 2016Q2). If we simulate the trajectory of investment following the 2016 referendum (in light blue), we can see that it deviates systematically from the investment data reported by the ONS (dark blue) [4].
This result is consistent with the results found in the recent literature, which also show that the models have consistently tended to overestimate the investment rate of UK firms since 2016 [5]. The gap has steadily risen in 2018, from 0.5 percentage point of GDP in 2017, to almost one point of GDP in the last quarter.

Figure. Evolution and simulation of investment by non-financial corporations in the United Kingdom



Source: ONS, OFCE calculations.

What explains the gap? We interpret this deviation as the effect of the uncertainty arising from Brexit, particularly that on the future trade arrangements between the UK and the EU. Nearly half of Britain's foreign trade comes from or goes to the single market. Although the inclusion of an uncertainty indicator (Economic Policy Uncertainty – EPU, see Bloom et al., 2007) in the investment equation failed to identify it clearly, several studies on data from UK firms point in this direction. First, periods of heightened uncertainty moved in line with significantly lower investment after the 2008 crisis (Smietbanka, Bloom and Mizen, 2018). In a scenario without a referendum (no Brexit), the transition to a regime with renegotiated customs tariffs would have had the effect of:

– Reducing the number of companies entering the European market and increasing the number exiting (Crowley, Exton and Han, 2019);

– Weighing on business investment with the prospect of tariffs similar to those prevailing under WTO rules (Gornicka, 2018).

The reduction in investment "cost" 0.3 percentage points of GDP in 2018, and this cost could rise as second-round effects are taken into account (which is not the case here). If the uncertainties do not rise, the "Brexeternity" – an expression used to characterize the relationship between the United Kingdom and the European Union, that is to say, inextricable – could have a much more depressing effect on Britain's future growth and its citizens' standard of living.

[1] The WTO composite indicator has stayed below (96.3) its long-term trend (100) since mid-2018.

[2] Reported by the Office of National Statistics (ONS) as Business Investment. Non-financial corporations partially or wholly owned by the government are included in this field, but they account for less than 4% of the total. This measure of investment does not include spending on housing, land, existing buildings or the costs related to the transfer of ownership of non-produced assets.

[3] See the article by Ducoudré, Plane and Villemot (2015) in the *Revue de l'OFCE*, for more information on the strategy adopted.

[4] A slight gap can be seen from 2015, when the law on the referendum was adopted.

[5] In particular the work of Gornicka (2018).

Climate justice and the social-ecological transition

By Éloi Laurent

There is something deeply reassuring about seeing the growing scale of climate markets in numerous countries around the globe. A section of the youth are becoming aware of the injustice they will suffer as a result of choices over which they do not (yet) have a say. But the recognition of this *inter*-generational inequality is running up against the wall of *intra*-generational inequality: it will not be possible to implement a real ecological transition without dealing with the social question here and now, and in particular the imperative to reduce inequality. In other words, the ecological transition will be social-ecological – or it will not be. This is the case in France, where the national ecological strategy, currently 90% ineffective, needs to be thoroughly overhauled, as proposed in the new *OFCE Policy Brief (no. 52, 21 February 2019).*

This is also true in the United States, where a new generation of red-green politicians is taking part in one of the most decisive political struggles in the country's history against the ecological obscurantism of a President who is a natural disaster in his own right. In a concise text, which is remarkable for its precision, analytical clarity and political lucidity, the Democrat Alexandria Ocasio-Cortez has just proposed a "Green New Deal" to her fellow citizens.

The title may seem ill-chosen: the "New Deal" carried out by Franklin Delano Roosevelt from 1933 was aimed at reviving an economy devastated by the Great Depression. But isn't the American economy flourishing today? If we rely on the economic indicators of the twentieth century (growth rate, finance, profit), there's no doubt. But if we go beyond appearances, we can discern the recession in well-being that has been undermining the country for thirty years and which will only get worse with the ecological crisis (life expectancy is now structurally declining in the United States). Hence the first lever of the ecological transition: to break with growth and count on what really matters to improve people's well-being today and tomorrow.

The second lever: coordinating the approach to social realities and ecological challenges. The New Green Deal identifies as the root cause of America's malaise "systemic inequalities", both social and ecological. Accordingly, it intends to implement a "fair and equitable transition" that will benefit in priority "frontline and vulnerable communities", which one could call "ecological sentinels" (children, elderly people, the energy insecure). These are people who prefigure our common future if we allow the ecological crisis for which we bear responsibility to deteriorate further. It is this coordination between the social and ecological that lies at the heart of the proposal by several thousand economists to introduce "carbon dividends" (an idea originally proposed by James Boyce, one of the world's leading specialists in the political economy of the environment).

Which brings us to the third lever: to gain citizens' interest instead of terrorizing them. In this respect, the detailed report published by the Data for Progress think tank deploys an extremely effective argumentative sequence: the new ecological deal is necessary to preserve humanity's well-being; it will create jobs, it is desired by the community of citizens, and it will reduce social inequalities; and the country has the financial means to implement it. It's concrete, coherent, convincing.

In 1933, Europe and France were half a century ahead of the United States in terms of the "new deal". It was in Europe and France that the institutions of social justice were invented, developed and defended. It is in the United States that the social-ecological transition is being invented today. We should not wait too long to get hold of it.

On French corporate immaterial investment

By Sarah Guillou

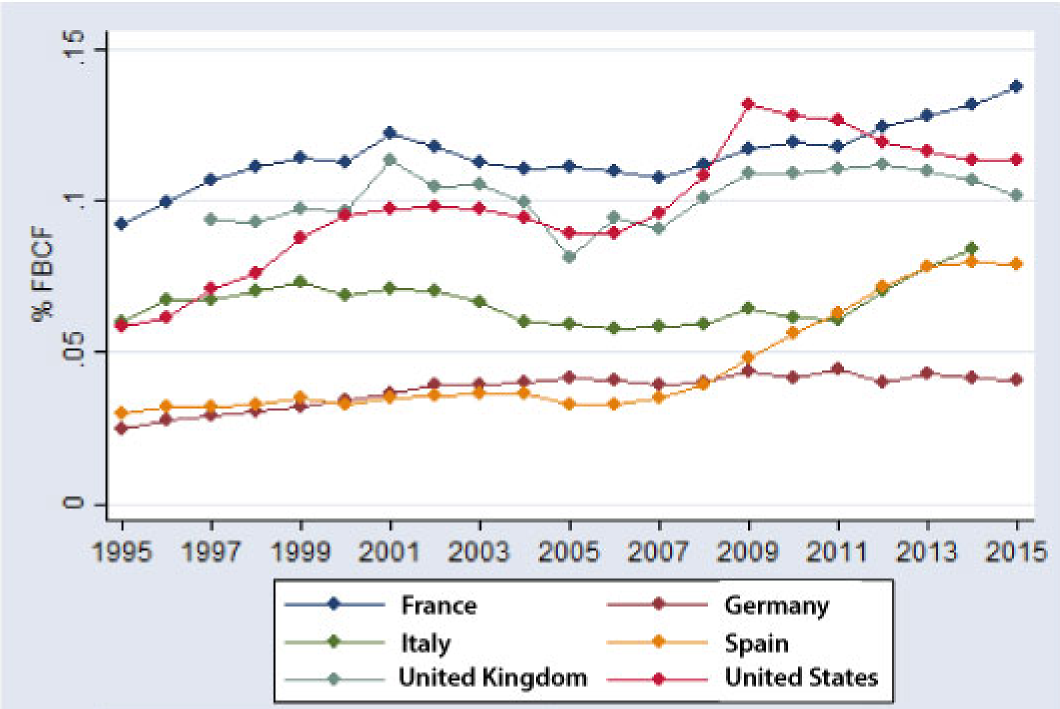
A note on the immaterial singularity of business investment in France from 26 October 2018 highlighted the significant scale of investment in intangible assets by companies in France. In comparison with its partners, who are similar in terms of productive specialization, the French economy invests relatively more in Research and Development, software, databases and other types of intellectual property. Looking at gross fixed capital formation (GFCF) excluding construction, the share of intangible investment reached 53% in 2015, compared to 45% in the United Kingdom, 41% in the United States, 32% in Germany and 29% in Italy and Spain.

These results are corroborated by statistics that evaluate other dimensions (INTAN basis), outside the national accounts, of intangible investments, such as those in organization, training and marketing. France is not lagging behind its partners in this type of asset either (see Guillou, Lallement and Mini, 2018).

As for the national accounts, these include two main intangible assets: R&D expenditure and expenditure on software and databases. In terms of R&D, French investment performance is consistent with the technological level and structure of its production specialization. If the French economy had a larger manufacturing sector, its spending on R&D would be much larger. What is less coherent is the extent and intensity of investment in software and databases, to such an extent that one cannot help but wonder whether this immaterial dimension of investment is almost unreal.

Figure 1 illustrates that "Software and databases" investment is larger in France than in the rest of the European countries. The share is, however, close to the levels observed in the United Kingdom and the United States. Of course, this share reflects the weakness of other targets for investment such as machinery and equipment specific to the manufacturing sector (see the earlier note on investment).

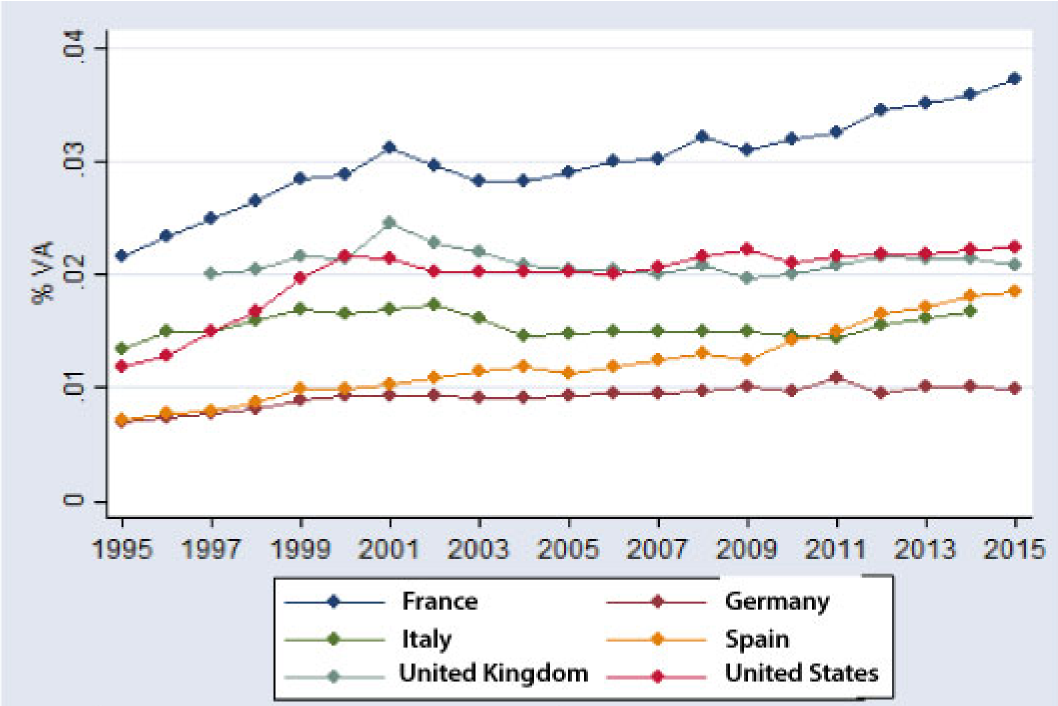
Figure 1. Share of GFCF in software and databases in total market sector GFCF



Source: EU KLEMS, Sarah Guillou calculations.

In terms of the rate of investment, that is to say, investment expenditure as a ratio of value added of the market economy, the dynamism of the French economy in terms of software and databases is confirmed: France clearly outdistances its partners.

Figure 2. Rate of investment in software and databases in the market sector



Source: EU KLEMS, Sarah Guillou calculations.

This also raises questions because it reveals a gap of 2 percentage points of the VA relative to the United States and 3 points relative to Germany. French companies invested 33 billion euros more in software and database than did German companies in 2015. Note that in 2015 total GFCF excluding construction was 285 billion euros in Germany and 197 billion in France. Moreover, the gap in the investment rate across all types of assets in France was 4 percentage points vis-à-vis Germany (see Guillou, 2018, page 20).

This gap can be explained only under the conditions, 1) that the production function of the French economy uses more software and databases than its partners, or 2) that the GFCF software and databases item is either artificially valued in relation to the current practices of France's partners, which may be the case, or because the value of the software asset is more important in France (companies may choose to put spending on software in current spending), either because the asset value is greater (which is possible because part of this value, that of software produced in-house, is up to the discretion of the companies).

Understanding this gap is of considerable importance, because it is decisive for making a diagnosis of the state of French corporate investment and the state of its digitization (see Gaglio and Guillou, 2018). The aggregate macroeconomic value of GFCF includes GFCF in software; if this is overestimated, it has implications for the macroeconomic balance and the contribution of GFCF to growth. The measurement of total factor productivity would also be affected, as the overestimation of capital (fuelled by investment) would lead to underestimating residual technical progress. So not only would the investment effort of French companies be overestimated, but the diagnosis of the nature of growth would also be off.

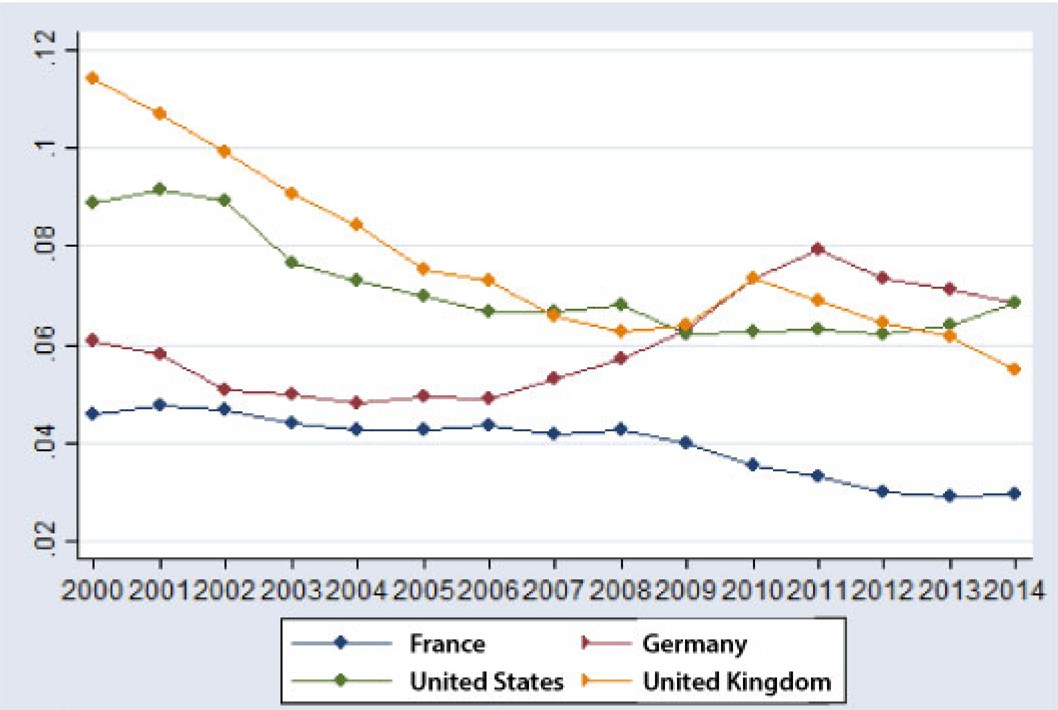
But there are reasons to question how real this gap is. In other words, shouldn't the immateriality of GFCF be viewed as a flaw in reality?

On the one hand, it is not clear that France's productive specialization justifies such overinvestment in software and databases. For example, the comparison with Germany, the United Kingdom, Italy, the United States and Spain shows specialization that is relatively close, with the exception of the manufacturing sector, which has a much greater presence in Germany. The share of the "Information and Communication" sector in which digital services are located correlates well with GFCF in software, but this sector is not significantly more present in France. It represents 6.5% of the value added of the market economy, compared to 6% in Germany and 8% in the United Kingdom (see Guillou, 2018, page 30).

On the other hand, the data from the input-output tables on consumption by branch of goods and services coming from the digital publishing sector (58) – a sector that concentrates the production of software – do not corroborate French superiority. The following graphs show that, whether considering domestic consumption (Figure 3) or imported (Figure 4), intermediaries' consumption of digital services in France does not confirm the French domination recorded for GFCF in software and databases. On the contrary, these two graphs show that the French economy's consumption of inputs from the digital publishing sector is not especially high and even that domestic consumption has fallen.

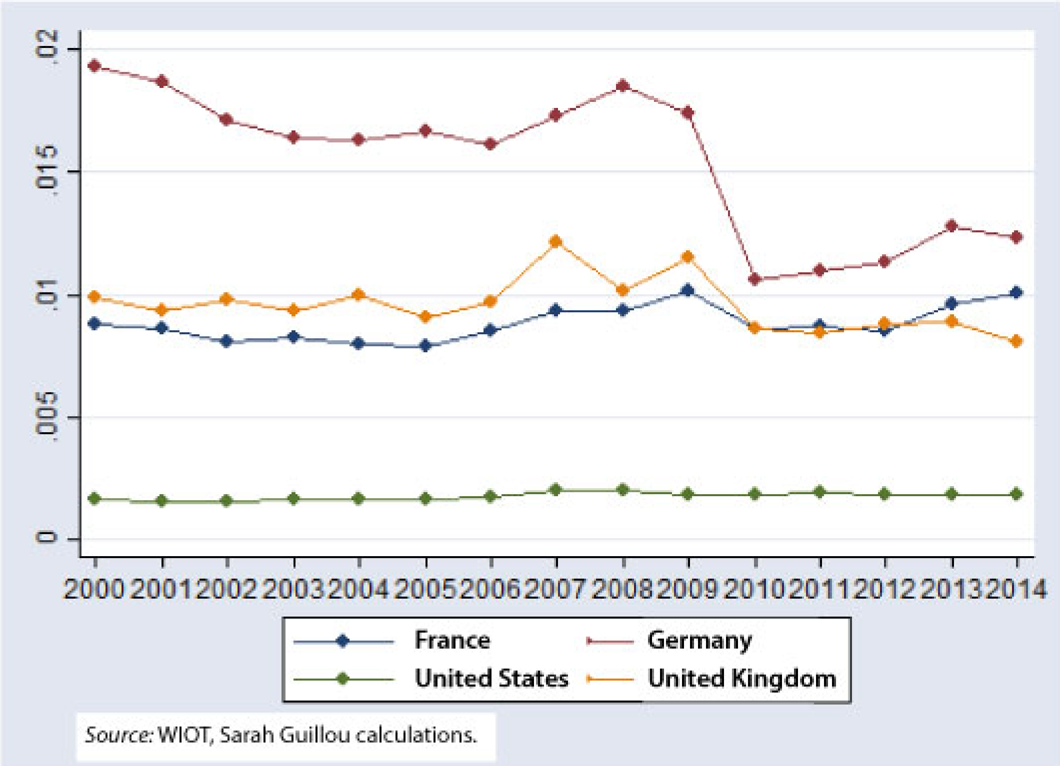
While the overlap between "software and databases" on the one hand and "digital publishing services" on the other is not perfect, there should not be a contradiction between the trends or the hierarchies between countries – unless software expenditure consists mainly of software produced in-house, in which case it will be recorded as assets rather than as consumption of inputs from other sectors.

Figure 3. Consumption of digital publishing companies of domestic services (per 1000 of value added)



Source: WIOT, Sarah Guillou calculations.

Figure 4. Consumption of digital publishing intermediaries of imported services (per 1000 of value added)



As a result, investment in software and databases would be mainly the result of in-house production, whose capital asset value (recorded as GFCF) is determined by the companies themselves. Should we conclude that GFCF is overvalued? This is a legitimate question. It calls for more specific investigation by investor and consumer sectors in order to assess the extent of overvaluation relative to economies comparable to France.

References

Gaglio C. and Guillou S., 2018, [Le tissu productif numérique en France] [The digital production system in France], July 12nd, *OFCE Policy Brief,* 36.

Guillou S., 2018[, En quoi la dépense des entreprises françaises est-elle énigmatique?] [The enigma behind French corporate expenditure], *Document de travail OFCE*, 2018-42.

Guillou S., P. Lallement and C. Mini, 2018, L'investissement des entreprises françaises est-il efficace? [Is French corporate investment effective?], *Les Notes de la Fabrique*, 26 October.

German women work less than French women

By Hélène Périvier and Gregory Verdugo

In terms of the employment rate, French women work less than German women: in 2017 the employment rate of women aged 15 to 64 was 67.2% in France against 75.2% in Germany. But this commonly used indicator does not take into account that to arrange their time German women are more likely to be in part-time work than French women. This is because underemployment and labour market regulations differ in the two countries, in particular as Germany has a plentiful supply of part-time mini-jobs that are held by women more than men. Moreover, the differences in terms of policies affecting the family life-work-life balance in the two countries make it possible to deal with early childhood more extensively in France than in Germany and lead German women to take up part-time work.

To compare the employment situation of women in France and Germany, we use indicators that take into account working time, which we calculate by age to illustrate a life cycle perspective [1]. The results confirm that German women are in part-time work more than their French counterparts, and this is particularly marked at the age of maternity. These differences in women's working hours explain why the gender pay gap is higher in Germany than in France.

Employment rate and employment rate in full-time equivalents by age

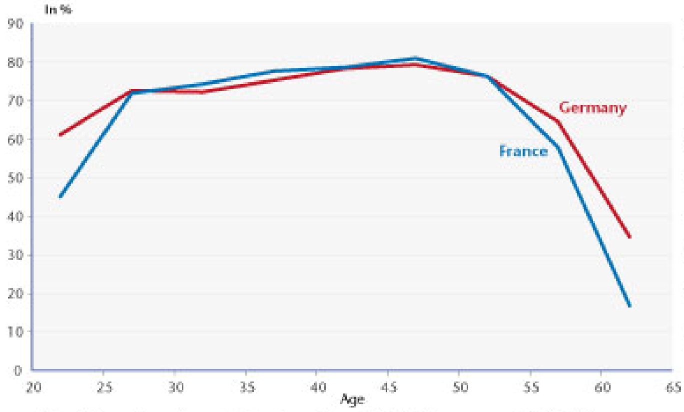
Comparing employment rates with employment rates in full-time equivalents over the life cycle highlights the significant differences between the two countries in terms of the reduction in women's working hours at the ages when the family constraint is the strongest, between 30 and 40 years old. Figures 1A and 1B show employment rates and full-time equivalent employment rates by age for women in 2010, the moment when European countries were to have reached a female employment rate of 60% according to the Stratégie européenne de l'emploi (EES). Figures 2A and 2B show these same indicators for men.

If we restrict ourselves to employment rates, the models seem similar in the two countries: changes in the employment rates over the life cycle for women are quite similar, as is the case for men (with the exception of the ages of entering and leaving working life, which differ between the two countries for both sexes). In Germany as in France, women's employment rate is high, but the gap with men increases between age 30 and 40 (solid lines).

Once part-time work is taken into account, the gender division of labour turns out to be much more marked in Germany than in France (dashed lines) [2].

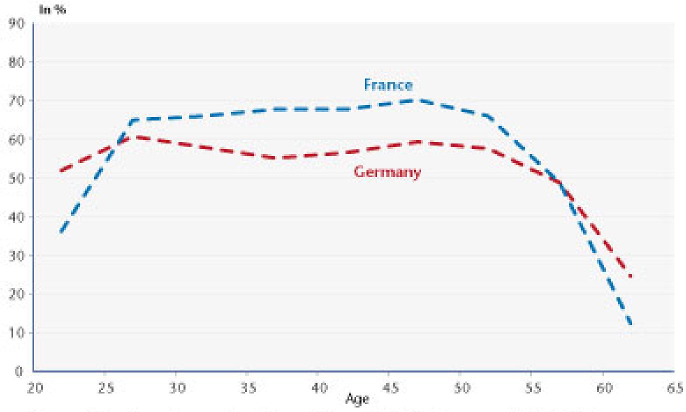
At all ages, the full-time equivalent employment rate for women is lower in Germany than in France (whereas for men it is close to the employment rate, for both countries). From the age of 30, the female full-time equivalent employment rate falls below 60% in Germany, while in France it is above 65%. This means that German women are adjusting their working time more as family constraints become stronger. For men, the full-time equivalent employment rates are close to the employment rates at all ages in both countries.

Figure 1a. Women's employment rate by age in Germany and in France, 2010



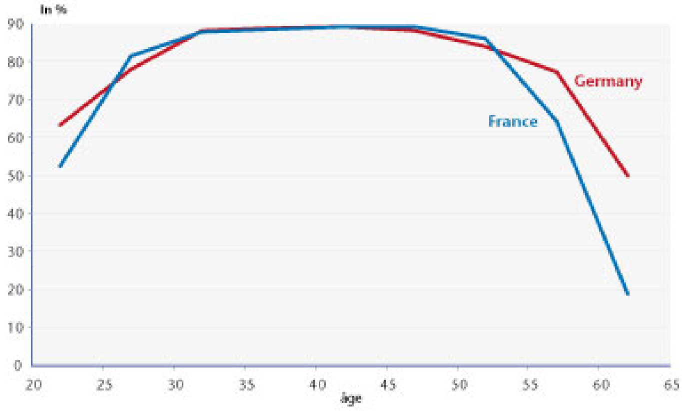
Lecture: Women's employment rate at age 42 was 78.3% in Germany and 78.7% in France.
Source: Labour force surveys, authors' calculations.

Figure 1b. Women's full-time equivalent employment rate by age in Germany and in France, 2010



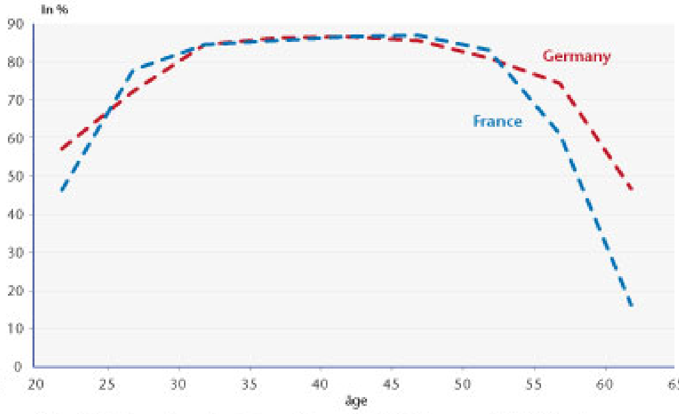
Lecture: Women's employment rate at age 42 was 56.6% in Germany and 67.7% in France.
Source: Labour force surveys, authors' calculations.

Figure 2a. Men's employment rate by age in Germany and in France, 2010



Lecture: Men's employment rate at age 42 was 89.3% in Germany and 89.3% in France..
Source: Labour force surveys, authors' calculations.

Figure 2b. Men's full-time equivalent employment rate by age in Germany and in France, 2010



Lecture: Men's employment rate at age 42 was 86.6% in Germany and 86.9% in France.
Source: Labour force surveys, authors' calculations.

The overall wage gap: the impact of working time

The massive use of part-time work by women in Germany compared to France explains a large part of the wage differentials, which are higher there. The global wage gap indicator calculated by Eurostat [3] shows that the overall wage gap is very high in Germany (45% compared to 31% in France), and that this is due mainly to differences in working time. On average German women work 122 hours a month against 144 for French women, with the average hourly wage rate being comparable (Table).

Table. Overall wage gap in 2014 in France and in Germany

	Average wage level		Average numberof paid hours per month		Employment rate in % (age 15-64)		Overall wage gap
	Men	Women	Men	Women	Men	Women	
France	18.8	15.9	154.0	140.0	67.3	60.4	31%
Germany	19.9	15.4	154.0	122.0	78.1	69.5	45%

Source : Eurostat, Structures of earnings survey (earn_ses_hourly) (earn_ses_monthly) (lfsa_ergaed) (tegges01).

Thus policies aimed at occupational equality cannot leave aside the issue of working time and the quality of the jobs held by women. It seems that from this point of view France is doing better than Germany, although much remains to be done in this area.

[1] This blog is taken from: « La stratégie de l'Union européenne pour promouvoir l'égalité professionnelle est-elle efficace ? », [Is the European Union's strategy for promoting occupational equality effective?], Périvier H. and G. Verdugo, *Revue de l'OFCE*, no. 158, 2018.

[2] Full-time equivalent employment rates were calculated from the European Labour Force Surveys. Each job is weighted by the number of hours worked. A full-time job is defined as a job where the number of hours worked is greater than or equal to 35. If the number of hours worked is between 25 and 34, we assign a weight of 75% of a full-time job, a weight of 50% if the number of hours is between 15 and 24, and a weight of 25% if the number of hours is less than 14 hours.

[3] The gap calculated by Eurostat corresponds to the average wage differential for the entire population.

The euro is 20 – time to grow up

By Jérôme Creel and Francesco Saraceno [1]

At age twenty, the euro has gone through a difficult adolescence. The success of the euro has not been aided by a series of problems: growing divergences; austerity policies with their real costs; the refusal in the centre to adopt expansionary policies to accompany austerity in the periphery countries, which would have minimized austerity's negative impact, while supporting activity in the euro zone as a whole; and finally, the belated recognition of the need for intervention through a quantitative easing monetary policy that was adopted much later in Europe than in other major countries; and a fiscal stimulus, the Juncker plan, that was too little, too late.

Furthermore, the problems facing the euro zone go beyond managing the crisis. The euro zone has been growing more slowly than the United States since at least 1992, the year the Maastricht Treaty was adopted. This is due in particular to the inertia of economic policy, which has its roots in the euro's institutional framework: a very limited and restrictive mandate for the European Central Bank, along with fiscal rules in the Stability and Growth Pact, and then in the 2012 Fiscal Compact, which leave insufficient room for stimulus policies. In fact, Europe's institutions and the policies adopted before and during the crisis are loaded down with the consensus that emerged in the late 1980s in macroeconomics which, under the assumption of efficient markets, advocated a "by the rules" economic policy that had a necessarily limited role. The management of the crisis, with its fiscal stimulus packages and increased central bank activism, posed a real challenge to this consensus, to such an extent that the economists who were supporting it are now questioning the direction that the discipline should take. Unfortunately, this questioning has only marginally and belatedly affected Europe's decision-makers.

On the contrary, we continue to hear a discourse that is meant to be reassuring, i.e. while it is true that, following the combination of austerity policies and structural reforms, some countries, such as Greece and Italy, have not even regained their pre-2008 level of GDP, this bitter potion was needed to ensure that they emerge from the crisis more competitive. This discourse is not convincing. Recent literature shows that deep recessions have a negative impact on potential income, with the conclusion that austerity in a period of crisis can have long-term negative effects. A glance at the World Economic Forum competitiveness index, as imperfect as it is, nevertheless shows that none of the countries that enacted austerity and reforms during the crisis saw its ranking improve. The conditional austerity imposed on the countries of the periphery was doubly harmful, in both the long and short terms.

In sum, a look at the policies carried out in the euro zone leads to an irrevocable judgment on the euro and on European integration. Has the time come to concede that the Exiters and populists are right? Should we prepare to manage European disintegration so as to minimize the damage?

There are several reasons why we don't accept this. First, we do not have a counterfactual analysis. While it is true that the policies implemented during the crisis have been calamitous, how certain can we be that Greece or Italy would have done better outside the euro zone? And can we say unhesitatingly that these countries would not have pursued free market policies anyway? Are we sure, in short, that Europe's leaders would have all adopted pragmatic economic policies if the euro had not existed? Second, as the result of two years of Brexit negotiations shows, the process of disintegration is anything but a stroll in the park. A country’s departure from the euro zone would not be merely a Brexit, with the attendant uncertainties about commercial, financial and fiscal relations between a 27 member zone and a departing country, but rather a major shock to all the European Union members. It is difficult to imagine the exit of one or two euro zone countries without the complete breakup of the zone; we would then witness an intra-European trade war and a race for a competitive devaluation that would leave every country a loser, to the benefit of the rest of the world. The costs of this kind of economic disorganization and the multiplication of uncoordinated policies would also hamper the development of a socially and environmentally sustainable European policy, as the European Union is the only level commensurate with a credible and ambitious policy in this domain.

To say that abandoning the euro would be complicated and/or costly, is not, however, a solid argument in its favour. There is a stronger argument, one based on the rejection of the equation “euro = neoliberal policies”. Admittedly, the policies pursued so far all fall within a neoliberal doctrinal framework. And the institutions for the European Union’s economic governance are also of course designed to be consistent with this doctrinal framework. But the past does not constrain the present, nor the future. Even within the current institutional framework, different policies are possible, as shown by the (belated) activism of the ECB, as well as the exploitation of the flexibility of the Stability and Growth Pact. Moreover, institutions are not immutable. In 2012, six months sufficed to introduce a new fiscal treaty. It headed in the wrong direction, but its approval is proof that reform is possible. We have worked, and we are not alone, on two possible paths for reform, a dual mandate for the ECB, and a golden rule for public finances. But other possibilities could be mentioned, such as a European unemployment insurance, a European budget for managing the business cycle, or modification of the European fiscal rules. On this last point, the proposals are proliferating, including for a rule on expenditures by fourteen Franco-German economists, or the replacement of the 3% rule by a coordination mechanism between the euro zone members. Reasonable proposals are not lacking. What is lacking is the political will to implement them, as is shown by the slowness and low ambitions (especially about the euro zone budget) of the decisions taken at the euro zone summit on 14 December 2018.

The various reforms that we have just mentioned, and there are others, indicate that a change of course is possible. While some policymakers in Europe have shown stubborn persistence, almost tantamount to bad faith, we remain convinced that neither European integration nor the euro is inevitably linked to the policies pursued so far.

[1] This post is an updated and revised version of the article "Le maintien de l'euro n'est pas synonyme de politiques néolibérales" [Maintaining the euro is not synonymous with neoliberal policy], which appeared in *Le Monde* on 8 April 2017.

Brexit: the November 25th agreement

By Catherine Mathieu and Henri Sterdyniak

The United Kingdom will leave the European Union on 29 March 2019 at midnight, two years after the UK government officially announced its wish to leave the EU. Negotiations with the EU-27 officially started in April 2017.

On 8 December 2017, the negotiators for the European Commission and the British government signed a joint report on the three points of the withdrawal agreement that the Commission considered to be a priority[1]: the rights of citizens, a financial settlement for the separation, and the absence of a border between Ireland and Northern Ireland. The European Council meeting of 14-15 December had accepted the British request for a transitional period, with the end set for 31 December 2020 (so as to coincide with the end of the programming of the current European budget). Thus, from March 2019 to the end of 2020, the United Kingdom will have to respect all the obligations of the single market (including the four freedoms and the competence of the European Court of Justice – CJEU), while no longer having a voice in Brussels. This agreement opened the second phase of negotiations.

These negotiations culminated on 14 November 2018 in a withdrawal agreement[2] (nearly 600 pages) and a political declaration on future relations between the EU-27 and the United Kingdom, which was finalized on 22 November 22 [3] (36 pages). The two texts were approved on 25 November at a special meeting of the European Council [4] (all 27 attending), which adopted three declarations on that occasion[5]. The withdrawal agreement and the political declaration must now be subject to the agreement of the European Parliament, which should not be a problem and, what is much more difficult, the British Parliament.

The withdrawal agreement corresponds to Article 50 of the Treaty on the Functioning of the European Union (TFEU). It is a precise international agreement, which has legal value; it must be enforced by the UK courts, under the authority of the CJEU as far as EU laws are concerned. It takes up the points already settled by the negotiations in December 2017: the rights of British citizens in EU countries and the rights of EU citizens in the UK; and the financial settlement. It has three protocols concerning Ireland, Cyprus and Gibraltar. Any disagreements on the interpretation of the agreement will be managed by a joint committee and, if necessary, by an arbitration tribunal. The latter will have to consult the CJEU if this involves a question that one of the parties considers to be relevant to EU law. In July 2020, a decision could be reached to extend the transition period beyond 31 December 2020: this would require a financial contribution from the UK.

A safeguard clause will be applied to avoid the re-establishment of a physical border between Northern Ireland and the Republic of Ireland (the “backstop”): the United Kingdom will remain a member of the Customs Union if no other agreement has been concluded before the end of the transition period, and for an indefinite period, until such an agreement is reached. This agreement must be approved by the joint committee. The Customs Union will cover all goods except fisheries (and aquaculture) products. The United Kingdom will not have the right to apply a trade policy that differs from that of the Union. British products will enter the single market freely, but the UK will align with EU rules on state aid, competition, labour law, social protection, the environment, climate change and taxation. In addition, Northern Ireland will continue to align with single market rules on VAT, excise duties, health rules, etc. Controls could be put in place on products entering Northern Ireland from the rest of the United Kingdom (in particular for agricultural products), but these controls would be carried out by the UK authorities.

Thus, trapped by the issue of the Irish border, the United Kingdom must forgo for an indefinite period any independent trade policy. It will have to align itself with European regulations in many areas, subject to the threat of recourse to the CJEU.

The 22 November Joint Political Declaration outlines the possible future relations between the UK and the EU-27. On the one hand, it clearly corresponds to the goal of the close, specific and balanced relationship that the British have demanded. On the other hand, the UK is making a number of commitments that rule out any possible strategy of being a "tax and regulatory haven".

Article 2, for instance, states that the two parties intend to maintain high standards for the protection of worker and consumer rights and the environment. Article 4 affirms respect for the integrity of the single market and the four freedoms for the EU-27, and for the United Kingdom the right to conduct an independent trade policy and to put an end to the free movement of persons.

In general, the Declaration states that both parties will seek to cooperate, to discuss, and to take concerted action; that the United Kingdom will be able to participate in Union programmes in the fields of culture, education, science, innovation, space, defense, etc., under conditions to be negotiated.

Article 17 announces the establishment of an ambitious, wide-ranging, comprehensive and balanced free trade agreement. Articles 20 to 28 proclaim the desire to create a free trade area for goods, through in-depth cooperation on customs and regulatory matters and provisions that will put all participants on an equal footing for open and fair competition. Customs duties (as well as border checks on rules on origin) will be avoided. The United Kingdom will strive to align with European rules in the relevant areas[6]. This kind of cooperation on technical and health standards will allow British products to enter the single market freely. In this context, the Declaration recalls the intention of the EU-27 and the UK to replace the Irish backstop with another device that ensures the integrity of the single market and the absence of a physical border in Ireland.

In terms of services and investment, the two parties are considering broad and ambitious trade liberalization agreements. Regulatory autonomy will be maintained, but this must be “transparent, efficient, compatible to the extent possible”. Cooperation and mutual recognition agreements will be signed on services, in particular telecommunications, transport, business services and internet commerce. The free movement of capital and payments will be guaranteed. In financial matters, equivalence agreements will be negotiated; cooperation will be established in the domain of regulation and supervision. Intellectual property rights will be protected, in particular as regards protected geographical indications. Agreements will be signed on air, sea, and land transport and on energy and public procurement. The parties pledge to cooperate in the fight against climate change and on sustainable development, financial stability, and the fight against trade protectionism. Travel for tourism or scientific, educational or business motives will not be affected. An agreement on fisheries must be signed before 1 July 2020.

Provisions will have to cover state aid and standards on competition, labour law, social protection, the environment, climate change and taxation in order to ensure open and fair competition on a level playing field.

The text provides for coordination bodies at the technical, ministerial and parliamentary levels. Every six months, a high-level conference will review the agreement.

Negotiations will continue on trade so as to ensure compatibility between the integrity of the single market and the Customs Union and the UK’s development of an independent trade policy.

On the one hand, the text provides for a close and special partnership, as requested by the United Kingdom; on the other hand, the UK pays for this by its commitment to respect European rules; finally, problematic issues still need to be negotiated, including fishing rights, an independent British trade policy, and avoiding the Irish backstop. On 25 November, the European Council wanted to adopt two declarations. The first emphasizes the importance of reaching an agreement on fisheries before the end of the transitional period and making it possible to maintain the access of EU-27 fishermen to British maritime waters. It also links the extension of the transitional period to compliance by the United Kingdom with its obligations under the Irish protocol. It recalls the conditions that the EU-27 had set on 20 March 2018 for an agreement: “The divergence in external tariffs and internal rules, as well as the absence of common institutions and a common legal system, require checks and balances and controls to safeguard the integrity of the EU single market and the UK market. Unfortunately, this will have negative economic consequences, particularly in the United Kingdom … A free trade agreement cannot offer the same advantages as the status of a Member State.” The second Declaration states that Gibraltar will not be included in the future trade agreement negotiated between the UK and the EU-27; a separate agreement will be necessary and subject to Spain’s prior approval. These declarations will not make it easy for Theresa May to win the approval of the UK Parliament.

It is necessary to highlight two points that were barely mentioned in the negotiations. This privileged partnership could serve as a model for relations with other countries. The EU has signed many customs union agreements with its neighbors, the countries of the European Economic Area (Norway, Iceland, Lichtenstein), as well as Switzerland, Ukraine, Georgia and Moldova. Five countries are candidates for entry (Albania, Montenegro, Serbia, Kosovo and Northern Macedonia). Perhaps these partnerships could be formalized in a third circle around the EU?

Does not the commitment to fair competition impose some level of tax harmonization in the EU-27, particularly with respect to the rates and terms of corporation tax? Was the EU-27 right to support the Irish Republic without some quid pro quo? It is unclear how the EU-27 could accuse the UK of practicing unfair competition when it tolerates the practices of Ireland, the Netherlands and Luxembourg. Likewise, the insistence on arrangements that prevent the UK from engaging in unfair tax and social competition contrasts with the EU's laxity both in its relations with third countries and in the control of the internal devaluation policies of certain member countries (e.g. Germany).

On balance, the United Kingdom gets to regain its national sovereignty, to cease being subject to the CJEU, and to no longer need to respect the freedom of establishment of workers from EU countries. In return, it will have no voice in Brussels.

The business community has welcomed the proposal as it avoids the risks of No Deal and announces a free trade agreement between the UK and the EU that would impose few restrictions on trade.

To date, there is no certainty that the UK parliament will approve the deal proposed by Theresa May and the EU-27 negotiators. Theresa May must find a majority for a compromise deal. She will encounter opposition from Conservative hard Brexiteers who are prepared to leave without an agreement so that the United Kingdom can "regain control", engage in trade negotiations with third countries, get out from under European regulations, and begin a policy of deregulation that would make the UK a tax and regulatory haven. But the UK is already one of the countries where the regulation of the goods and labor markets is the most flexible. A sharp cut in taxes would imply further cuts in social spending, contrary to the promises of the Conservative Party. And leaving with no deal would erect barriers to the UK's access to the single market for its products and services. Theresa May will clash with the Irish Unionist Party (DUP), which is opposed to any differences in the treatment of Northern Ireland, as well as with Scottish nationalists, who want Scotland to remain in the EU. She will also have to confront the Remainers (Conservatives, Labour and Liberal Democrats) who, buoyed by some recent polls, are calling for a new referendum. While Jeremy Corbyn is not calling into question the result of the referendum, many Labour MPs could vote against the text, even if they are supporters of a soft Brexit, as the Treaty organizes. They hope to provoke early elections that could allow them to return to power. They claim they will resume negotiations after that, making every effort to obtain a better deal for the United Kingdom, which would allow it to enjoy "the same advantages as at present as members of the Customs Union and the Single Market" and to control migration. But the EU-27 has clearly refused any resumption of negotiations, and some Labour forces want a new referendum … Theresa May's hope is that fear of a No deal will be strong enough to win approval for her compromise.

If, initially, Brexit seemed to weaken the EU, by showing that it was possible for a country leave, the EU has demonstrated its unity in the negotiations. It became clear quickly that leaving the EU was painful and expensive. The EU is a cage, more or less gilded, which it is difficult, if not impossible, to escape.

[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. See Catherine Mathieu and Henri Sterdyniak, "Brexit: Pulling off a success", *OFCE blog*, 6 December 2017.

[2] https://ec.europa.eu/commission/sites/beta-political/files/draft_withdrawal_agreement_0.pdf

[3]
https://www.consilium.europa.eu/media/37059/20181121-cover-political-declaration.pdf

[4]
https://www.consilium.europa.eu/media/37114/25-special-euco-final-conclusions-fr.pdf et

[5]
https://www.consilium.europa.eu/media/37137/25-special-euco-statement-fr.pdf

[6] The vagueness is in the text: "The United Kingdom will consider aligning with Union rules in relevant areas".

Non-performing loans – A danger for the Banking Union?

By Céline Antonin, Sandrine Levasseur and Vincent Touzé

The establishment of the third pillar of the Banking Union, namely the creation of a European deposit insurance scheme, has been blocked up to now. Some countries – like Germany and the Netherlands – are arguing that the risk of bank default is still too heterogeneous in the euro zone to allow deposit guarantees to be pooled.

Our article, **L'Union bancaire face au défi des prêts non 'performants'** ["The Challenge of Non-performing Loans for the Banking Union"], focuses on how to solve the "problem" of non-performing loans (NPLs) in a way that can break this deadlock and finally complete the Banking Union. This is a crucial step in order to restore confidence and allow the emergence of an integrated banking market.

Our review of the current situation shows that:

1. The level of NPLs is still worrying in some countries. The situation is alarming in Cyprus and Greece, where unprovisioned NPLs represent more than 20% of GDP, whereas the situation is “merely” worrying for Slovenia, Ireland, Italy and Portugal, where unprovisioned NPLs are between 5% and 8% of GDP;
2. In total, at end 2017, the amount of unprovisioned NPLs for the euro area came to 395 billion euros, which is equivalent to 3.5% of euro area GDP. On this scale, the “problem” of non-provisioned NPLs thus seems more modest.

Looking beyond private solutions such as debt forgiveness, provisioning, securitization and the creation of bad banks, our conclusion is that it is the public authorities at the European level who ultimately have the most effective means of action. They have multiple levers at their disposal, including the definition of the relevant regulatory and institutional framework; supervision by the ECB, which could be extended to more banks; and not least monetary and fiscal policies at the euro zone level, which could be mobilized to buy up doubtful debt or enter the capital of banks experiencing financial distress.

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

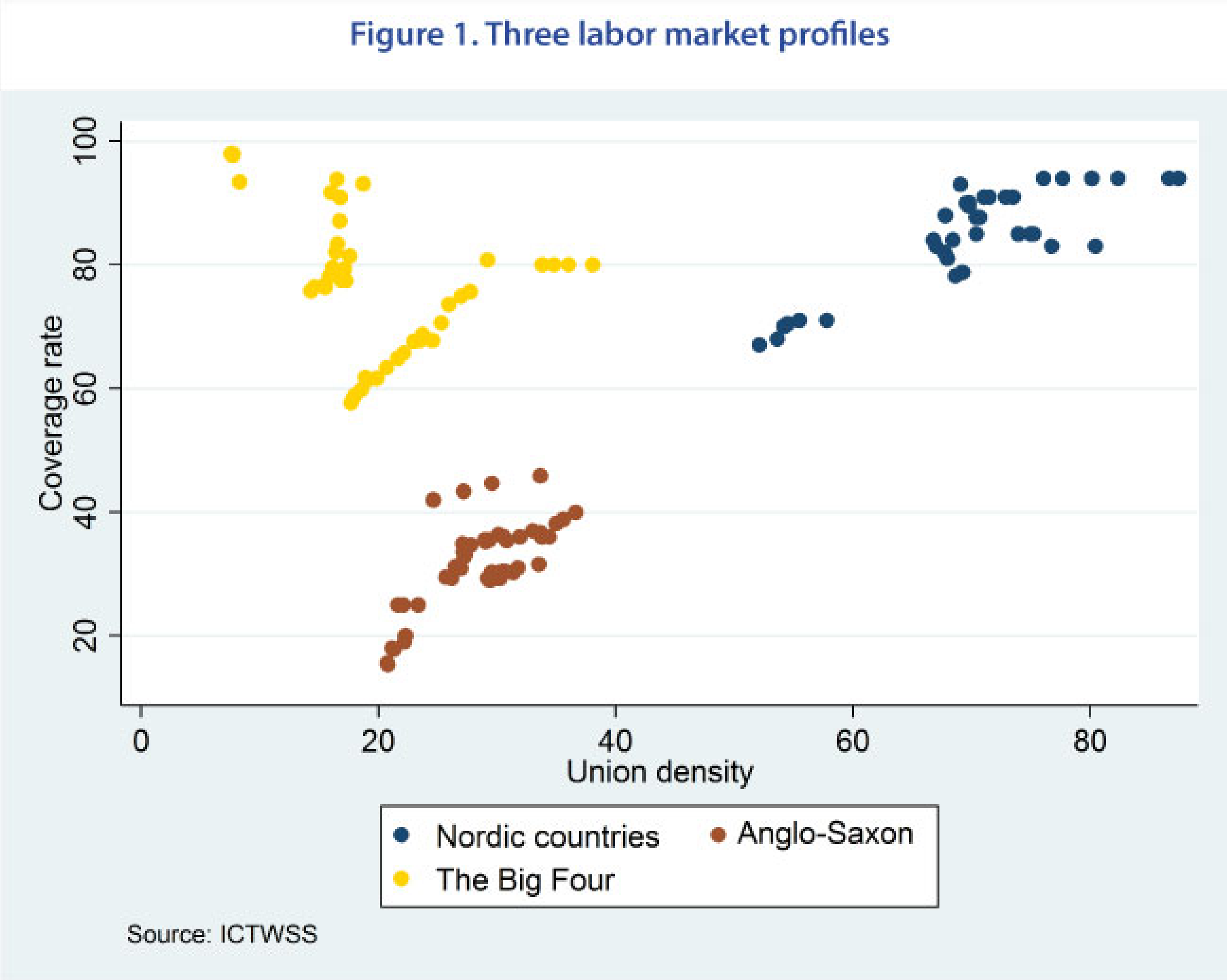
by Aizhan Shorman and Thomas Pastore

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).

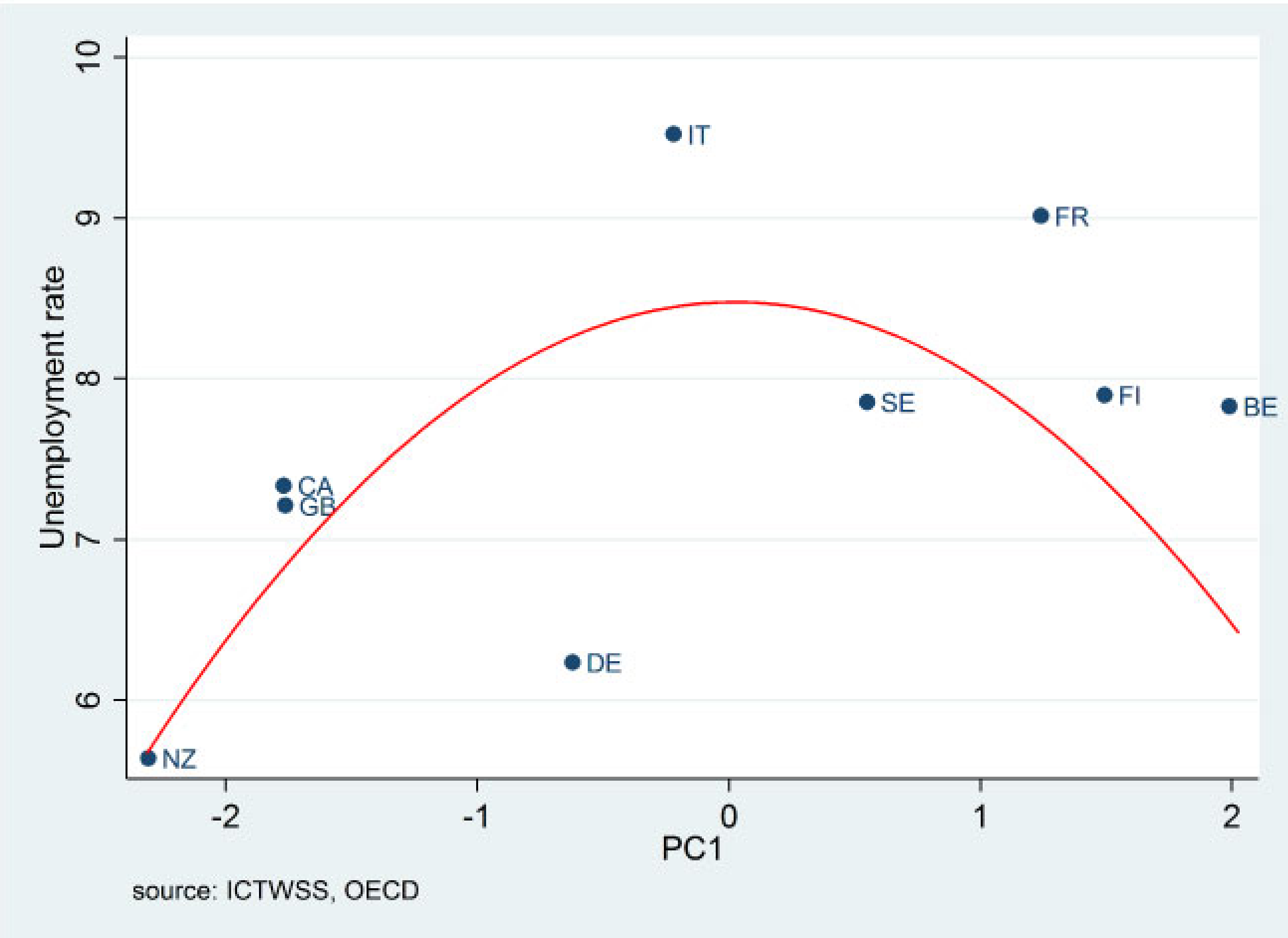


Calmfors-Driffill and the Great Recession

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)



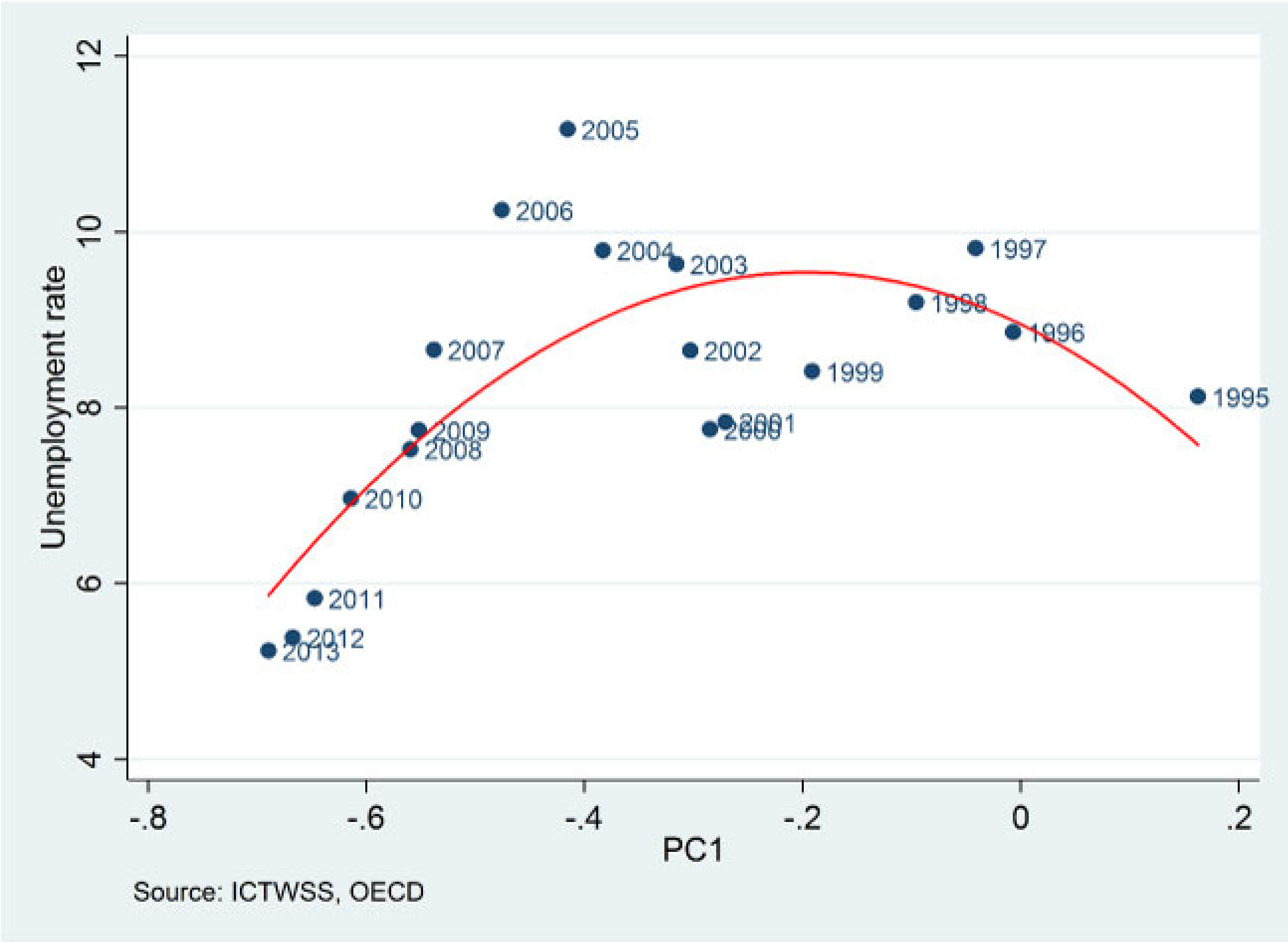
Note: PC1 axis is an aggregate measure of centralization obtained through the principal componentsanalysis; it includes measures of coverage rate, extension rate of collective bargaining agreements, and union density.

Di

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 componentsanalysis; it includes measures of coverage rate, extension rate of collective bargaining agreements, and union density.

In stitutions 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\

%3Aab48daa7af897d3f88f6703c80c13dd0

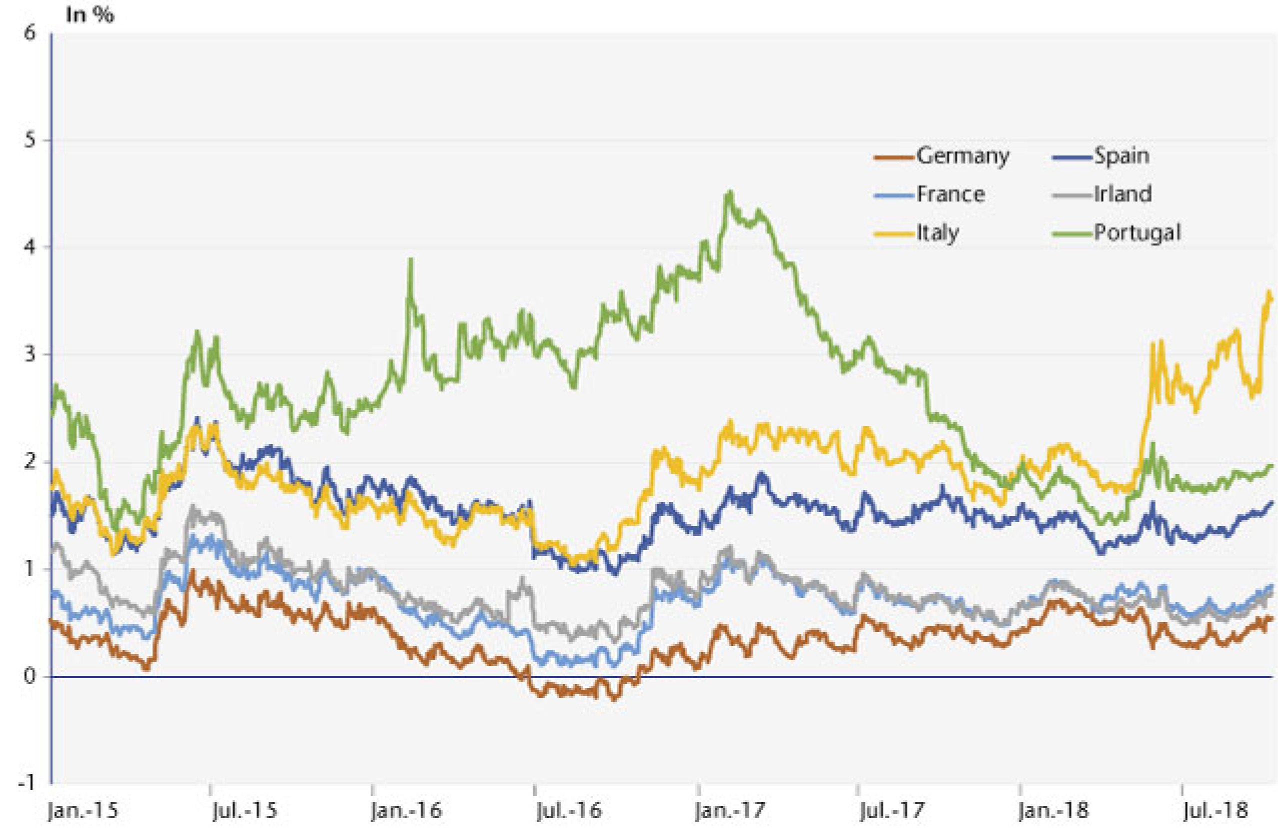
Italy's debt: Is the bark worse than the bite?

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.

A 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[3] 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%
GDP growth in volume	*1.6%*	*1.0%*	*1.1%*	*1.0%*
GDP deflator	*0.6%*	*1.1%*	*1.2%*	*1.1%*
Primary deficit in % of GDP (s_t)	1.5%	1.8%	1.5%	1.6%
Public deficit in % of GDP	*-2.3%*	*-1.8%*	*-2.4%*	*-2.4%*
Debt-service charge in % of GDP	*3.8%*	*3.6%*	*3.8%*	*4.0%*
Projected public debt/GDP (d_{t+1})	131.2%	130.3%	129.5%	129.1%
Apparent interest rate stabilizing the debt	*3.4%*	*3.4%*	*3.5%*	*3.3%*
Primary deficit stabilizing the debt	*0.9%*	*0.8%*	*0.8%*	*1.1%*
Public deficit stabilizing the debt	*-2.9%*	*-2.7%*	*-3.1%*	*-2.8%*

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: $d_{t+1} = d_t \frac{(1+i)}{(1+g)} - s_t$ *whith 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.

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[1]; this agreement was ratified at the European Council meeting of 14-15 December[2]. 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[3]. It proposes a “principled and practical Brexit”[4]. 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[7] 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.