Negative interest rates: Challenge or opportunity for Europe's banks?

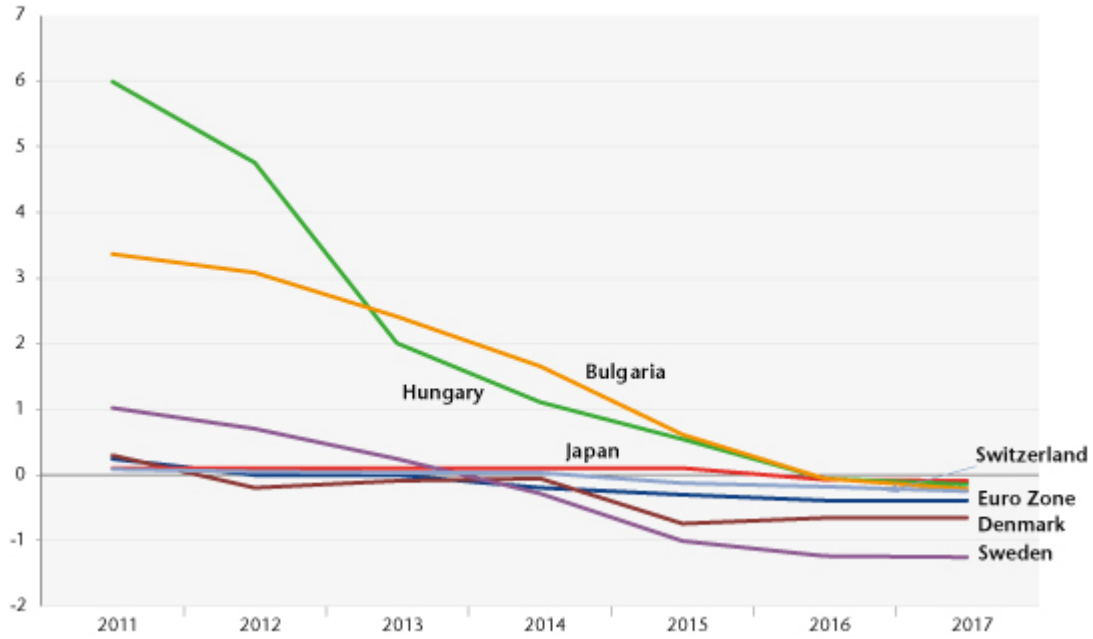
By Whelsy Boungou

It has been five years since commercial banks, in particular those in the euro zone, have faced a new challenge, that of continuing to generate profit in an environment marked by negative interest rates.

At the onset of the 2007-2008 global financial crisis, several central banks implemented new "unconventional" monetary policies. These consisted mainly of massive asset purchase programmes (commonly known as Quantitative Easing, QE) and forward guidance on interest rates. They aimed to lift the economies out of crisis by promoting better economic growth while avoiding a low level of inflation (or even deflation). Since 2012, six central banks in Europe (Bulgaria, Denmark, Hungary, Sweden, Switzerland and the European Central Bank) and the Bank of Japan have gradually introduced negative interest rates on bank deposits and reserves, in addition to the unconventional measures already in force. For example, the ECB's deposit facility rate now stands at -0.40% (see Figure 1). Indeed, as indicated by Benoît Cœuré [1], the implementation of negative rates aim to tax banks' excess reserves to encourage

them to use these to boost the credit supply.

Figure 1. Changes in central bank deposit rates



However, the implementation of negative rates has raised at least two concerns about the potential effects on bank profitability and risk-taking. First, the introduction of negative rates could hinder the transmission of monetary policy if this reduces banks' interest margins and thus bank profitability. In addition, the lowering of credit rates for new loans and the revaluation of outstanding loans (mainly at variable rates) reduces banks' net interest margin when the deposit rate cannot fall below the Zero Lower Bound. Second, in response to the impact on margins, the banks could either reduce the share of nonperforming loans on their balance sheets or look for other assets that are more profitable than loans ("Search-for-yield").

In a recent article

[2], we used panel data from 2442 banks from the 28 member countries of the European Union over the period 2011-2017 to analyse the effects of negative rates on bank behaviour with respect to profitability and risk-taking. Specifically, we asked ourselves three questions: (1) What is the impact of negative rates on banks' profitability? (2) Would negative rates encourage banks to take more risks? (3) Would the pressure on net interest margins from negative rates encourage banks to take more risk?

At the conclusion of our analysis, we highlight the presence of a threshold effect when interest rates fall below the zero bar. As can be seen in Figure 2, a 1% reduction in the central bank deposit rate reduced banks' net interest margins by 0.429% when rates are positive, and by 1.023% when they are negative. Thus, negative rates have a greater impact on banks' net interest margins than do positive rates. This result points to the presence of a threshold effect at zero. In addition, in response to this negative effect on margins (and in order to offset losses), the banks responded by expanding their non-interest rate activities (account management fees, commissions, etc.). As a result, in the short and medium term there was no indication that the banks resorted to riskier positions. However, the issue of risk-taking may eventually arise if negative rates persist for a long time and the banks

continue to suffer losses on net interest margins.

Figure 2. The impact of central bank deposit rates on banks' interest margins

Note: This figure presents the results of our analysis of the impact of interest rates on the margins of 2442 banks operating in the European Union over the period 2011-2017. The element "positive rates" refers to the impact on the banks' interest margins of a reduction in the central bank deposit rate when this is positive. "Negative rates" refers to the impact on the banks' interest margins of a reduction in the central bank deposit rate when it is negative.

[1] Coeuré B. (2016). Assessing the implication of negative interest rates. Speech at the Yale Financial Crisis Forum in New Haven. July 28, 2016.

[2] Boungou W. (2019). Negative Interest Rates, Bank Profitability and Risk-taking. Sciences Po OFCE Working Paper no. 10/2019.

The impact on redistribution of the ECB's monetary policy

By Jérôme Creel and Mehdi El Herradi

A few weeks before Christine Lagarde assumes the

presidency of the European Central Bank (ECB), it may be useful to examine the balance sheet of her predecessors, not only on macroeconomic and financial matters but also with respect to inequality. In recent years, the problem of the redistributive effects of monetary policy has become an important issue, both academically and at the level of economic policy discussions.

Interest in this subject has grown in a context marked by the conjunction of two factors. First there has been a persistent level of inequality in wealth and income, which has been hard to reduce. Then there are the activities of the central banks in the advanced economies following the 2008 crisis to support growth, particularly through the implementation of so-called “unconventional” measures [1]. These measures, mainly manifested in quantitative easing (QE) programmes, are suspected to have increased the prices of financial assets and, as a result, favoured wealthier households. At the same time, the low interest rate policy could have resulted in a reduction in interest income on assets with fixed yields, most of which are held by low-income households. On the other hand, the real effects of monetary policy, particularly on changes in the unemployment rate, could help keep low-income households in employment. The ensuing debate, which initially broke out in the United States, also erupted at the level of the euro

zone after the ECB launched its QE programme.

In a recent study focusing on 10 euro zone countries between 2000 and 2015, we analysed the impact of the ECB's monetary policy measures – both conventional and unconventional – on income inequality. To do this, we drew on three key indicators: the Gini coefficient, both before and after redistribution, and an interdecile ratio (the ratio between the richest 20% and the poorest 20%).

Three main results emerge from our study. On the one hand, a restrictive monetary policy has a modest impact on income inequality, regardless of the indicator of inequality used. On the other hand, this effect is mainly due to the southern European countries, especially in the period of conventional monetary policy. Finally, we found that the redistributive effects of conventional and unconventional monetary policies do not differ significantly.

These results thus suggest that the monetary policies pursued by the ECB since the crisis have probably had an insignificant and possibly even favourable impact on income inequality. The forthcoming normalization of the euro zone's monetary policy could, on the contrary, increase inequality. Although this increase may be limited, it is important that decision-makers anticipate it.

[1] For an analysis of the expected impact of the ECB's unconventional policies, see Blot *et al.* (2015).

The OFCE optimistic about growth – "As usual"?

By Magali Dauvin and Hervé Péléraux

In the spring of 2019, the OFCE forecast real GDP growth of 1.5% for 2019 and 1.4% for 2020 (i.e. cumulative growth of 2.9%). At the same time, the average forecast for the two years compiled by Consensus Forecasts[1] was 1.3% each year (i.e. 2.6% cumulative), with a standard deviation around the average of 0.2 points. This difference has led some observers to describe the OFCE forecasts as "optimistic as usual", with the forecasts of the Consensus or institutes with less favourable projections being considered more "realistic" in the current economic cycle.

A growth forecast is the result of a research exercise and is based on an assessment of general trends in the economy together with the impact of economic policies (including budget, fiscal and monetary policies) and exogenous shocks (such as changes in oil prices, social disturbances, poor weather, geopolitical tensions, etc.). These evaluations are themselves based on econometric estimations of the behaviour of economic agents that are used to quantify their response to these shocks. It is therefore difficult to comment on or compare the growth figures issued by different institutes without clearly presenting their analytical underpinnings or going into the main assumptions about the trends and

mechanisms at work in the economy.

However, even if the rigour of the approach underlying the OFCE's forecasts cannot be called into question, it is legitimate to ask whether the OFCE has indeed produced chronic overestimations in its evaluations. If such were the case, the forecasts published in spring 2019 would be tainted by an optimistic bias that needs to be tempered, and the OFCE should readjust its tools to a new context in order to regain precision in its forecasts.

No systematic overestimation

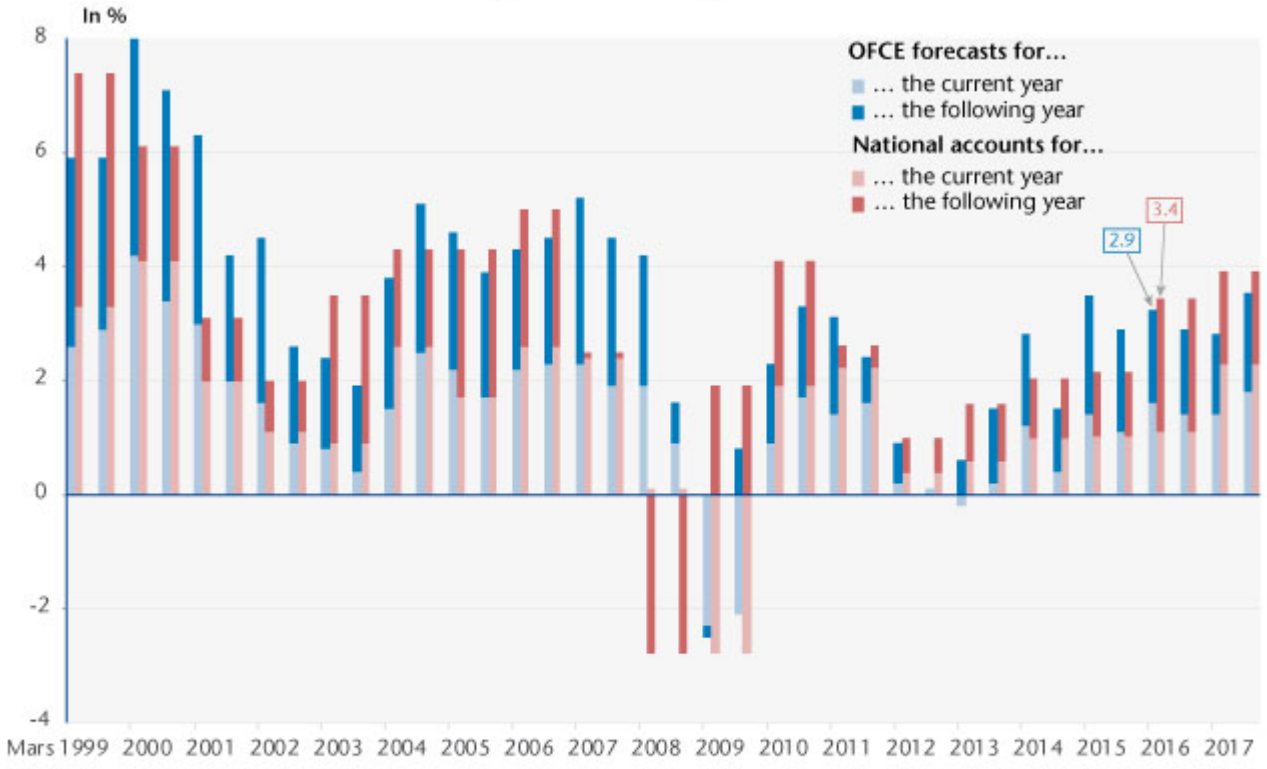
Figure 1 shows the cumulative forecasts of French GDP by the OFCE for the current year and the following year and then compares these with the cumulative results of the national accounts for the two years. In light of these results, it can be seen that the OFCE's forecasts do not suffer from a systematic bias of optimism. For the forecasts conducted in 2016 and 2017, the growth measured by the national accounts is higher than that anticipated by the OFCE, which, while revealing an error in forecasting, does not constitute an overly optimistic view of the recovery.

The opposite can be seen in the forecasts in 2015 for 2015 and 2016; the favourable impact of the oil counter-shock and of the euro's depreciation against the dollar during the second half of 2014 was indeed slower to materialize than the OFCE expected. The year 2016 was also marked by one-off factors such as spring floods, strikes in refineries, the tense environment created by the wave of terrorist attacks and the announcement that certain tax depreciation allowances for industrial investments would end.

In general, there is no systematic overestimation of growth by the OFCE, although some periods are worth noting, such as the years 2007 and 2008 when the negative repercussions of the financial crisis on real activity were not anticipated by our

models during four consecutive forecasts. Ultimately, of the 38 forecasts conducted since March 1999, 16 show an overestimate, or 40% of the total, with the others resulting in an underestimation of growth.

Figure. The OFCE's growth forecasts for the current year and the following year and actual growth



Note: This figure shows the OFCE's forecasts for the current year and the following year, cumulated over two years, with respect to the actual figures published by the national accounts. In October 2016, for example, the OFCE forecast cumulative GDP growth of 2.9% from 2015 to 2017, which broke down into growth of 1.4% from 2015 to 2016 and 1.5% from 2016 to 2017. The latest version available of the national accounts on 29 May 2019 shows economic growth of 1% from 2015 to 2016 and 2.4% from 2016 to 2017, i.e. cumulative growth of 3.4% over the two years, which was 0.4 point higher than the OFCE forecast. Hence, a red bar (national accounts) rising higher than the blue bar (OFCE forecast) reflects an "overly pessimistic" GDP growth forecast on the part of the OFCE, and vice versa.
Sources: INSEE, OFCE calculations and forecasts.

Forecasts relatively in line with the final accounts

Furthermore, the accuracy of the forecasts should not be evaluated solely in relation to the provisional national accounts, as INSEE's initial estimates are based on a partial knowledge of the real economic situation. They are revised as and when the annual accounts and tax and social information updates are constructed, which leads to a final, and therefore definitive, version of the accounts two-and-a-half years after the end of the year[2].

Table 1 compares the forecasts made by the OFCE and the participating institutions in the spring of each year for the current year and assesses their respective errors first vis-à-vis the provisional accounts and then vis-à-vis the revised accounts. On average since 1999, the OFCE's forecasts have overestimated the provisional accounts by 0.25 points. The forecasts from the Consensus appear more precise, with an error of 0.15 point vis-à-vis the provisional accounts. On the other hand, compared to the definitive accounts, the OFCE's forecasts appear to be right on target (the overestimation disappears), while those from the Consensus ultimately underestimate growth by an average of 0.1 points.

Statistical analysis conducted over a long period thus shows that, while there is room for improvement, the OFCE's forecasts are not affected by an overestimation bias when assessing their accuracy with respect to the final accounts.

Table. OFCE / Consensus forecasts in the spring of the current year and the provisional and revised national accounts

					OFCE error on...		Consensus error on...	
	OFCE	Consensus	Provisional account	Revised account	... Provisional account	... Revised account	... Provisional account	... Revised account
1999	2.6	2.3	2.7	3.3	-0.14	-0.69	-0.44	-0.99
2000	4.2	3.7	3.2	4.1	1.01	0.14	0.51	-0.36
2001	3.0	2.8	2.0	2.0	0.97	0.99	0.77	0.79
2002	1.6	1.4	1.2	1.1	0.44	0.49	0.24	0.29
2003	0.8	1.2	0.2	0.8	0.63	-0.04	1.03	0.36
2004	1.5	1.7	2.3	2.6	-0.82	-1.12	-0.62	-0.92
2005	2.2	1.9	1.4	1.7	0.81	0.49	0.51	0.19
2006	2.2	1.9	2.0	2.6	0.24	-0.41	-0.06	-0.71
2007	2.3	2.0	1.9	2.4	0.42	-0.12	0.12	-0.42
2008	1.9	1.5	0.7	0.1	1.18	1.78	0.78	1.38
2009	-2.3	-2.5	-2.2	-2.8	-0.11	0.48	-0.28	0.31
2010	0.9	1.4	1.5	1.8	-0.59	-0.94	-0.07	-0.42
2011	1.4	1.7	1.7	2.2	-0.31	-0.84	-0.06	-0.59
2012	0.2	0.3	0.0	0.4	0.21	-0.17	0.33	-0.05
2013	-0.2	-0.1	0.3	0.6	-0.47	-0.80	-0.37	-0.70
2014	1.2	0.9	0.4	1.0	0.84	0.21	0.58	-0.05
2015	1.4	1.1	1.1	1.0	0.30	0.36	0.00	0.06
2016	1.6	1.3	1.1	1.0	0.51	0.56	0.22	0.26
2017*	1.4	1.3	1.9	2.4	-0.52	-0.98	-0.61	-1.07
2018*	2.0	2.1	1.6	1.7	0.42	0.28	0.52	0.38
				1999-2018 Average	0.25	-0.02	0.15	-0.11

* : the latest definitive accounts are those for 2016. The national accounts for 2017 and 2018 are, respectively, semi-definitive and provisional. The "provisional account" column shows the GDP growth rate as an annual average as it is calculated from knowledge of the quarterly growth rates once they are published in the fourth quarter of every year. Compared with this version, the 2018 account has already been subject to a first adjustment on the annual provisional account published in mid-May 2019, with an upwards revision of growth from 1.6% to 1.7%.

Sources: INSEE, OFCE calculations and forecasts.

[1] The Consensus Forecast is a publication of Consensus Economics that compiles the forecasts of the world's leading forecasters on a large number of economic variables in about 100 countries. About 20 institutes participate for France.

[2] At the end of January 2019, the INSEE published the accounts for the 4th quarter of 2018, which provided a first assessment of growth for 2018 as a whole. At the end of May 2019, the accounts for the year 2018, calculated based on the provisional annual accounts published mid-May 2019, were revised a first time. A new revision of the 2018 accounts will take place in May 2020, and then a final one in 2021 with the

publication of the definitive accounts. For more details on the National Accounts revision process, see Péléraux H., « Comptes nationaux : du provisoire qui ne dure pas », [The national accounts : provisional accounts that don't last], *Blog de l'OFCE*, 28 June 2018.

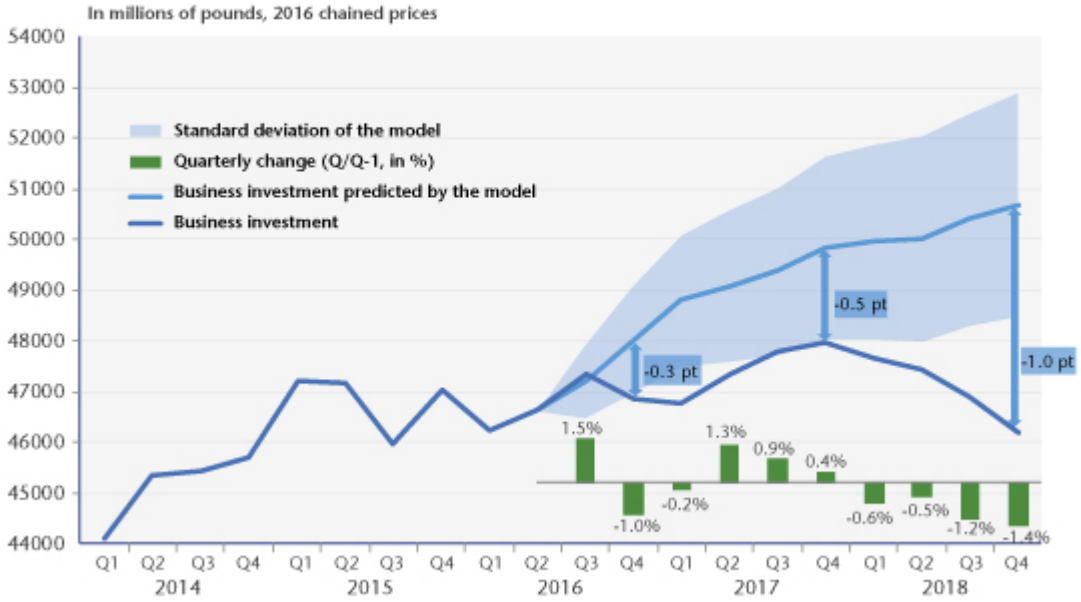
Business investment hurt by Brexit

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.

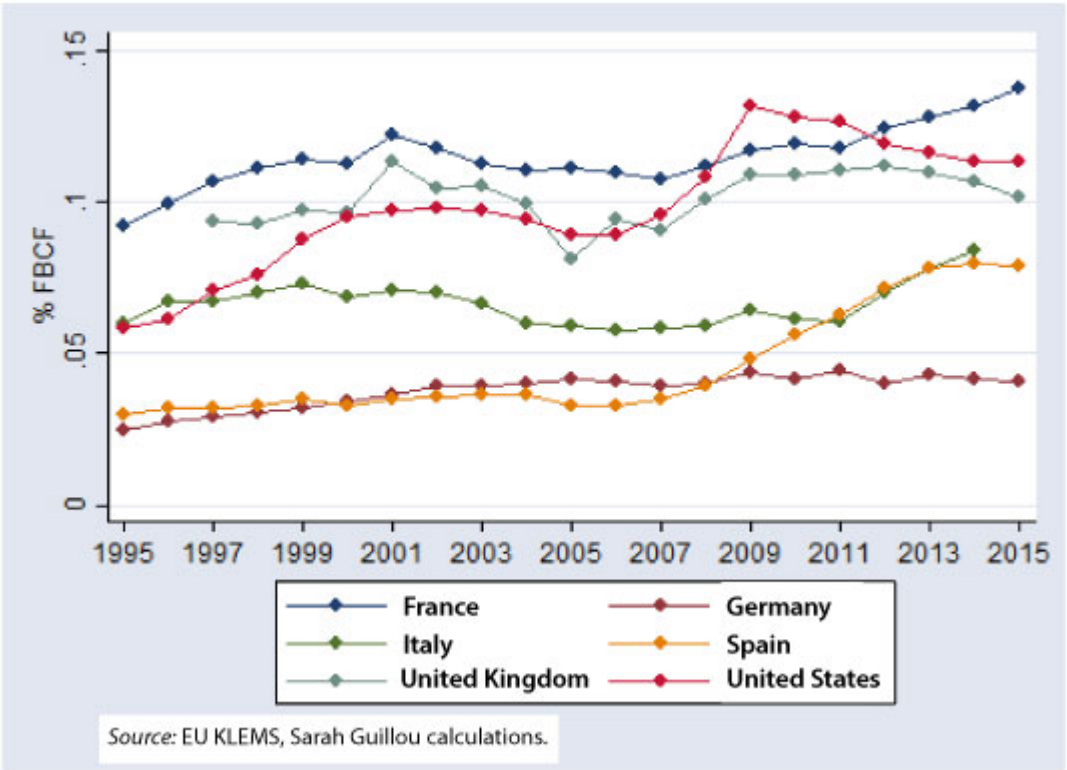
These results are corroborated by statistics that evaluate other dimensions (INTAN basis), outside the national accounts, of intangible investments, such as those in organization, training and marketing. France is not lagging behind its partners in this type of asset either (see Guillou, Lallement and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

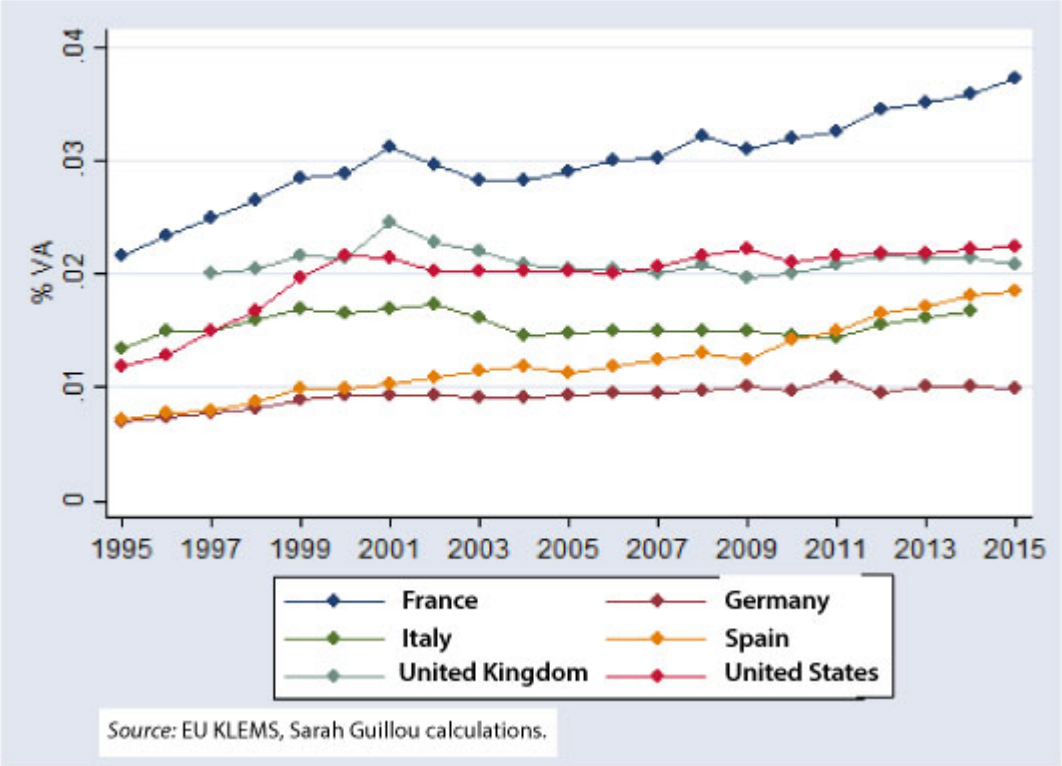
Figure 1 illustrates that “Software and databases” investment is larger in France than in the rest of the European countries. The share is, however, close to the levels observed in the United Kingdom and the United States. Of course, this share reflects the weakness of other targets for investment such 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



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



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?

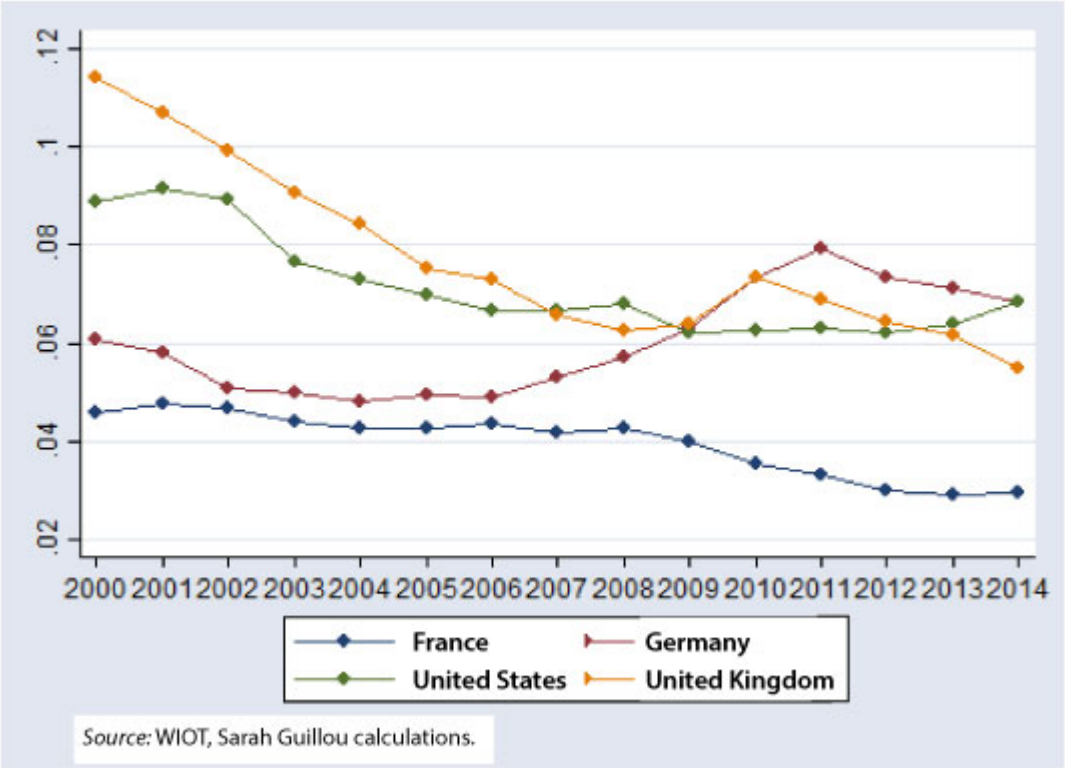
On the one hand, it is not clear that France's productive specialization justifies such overinvestment in software and databases. For example, the comparison with Germany, the United Kingdom, Italy, the United States and Spain shows specialization that is relatively close, with the exception of the manufacturing 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.

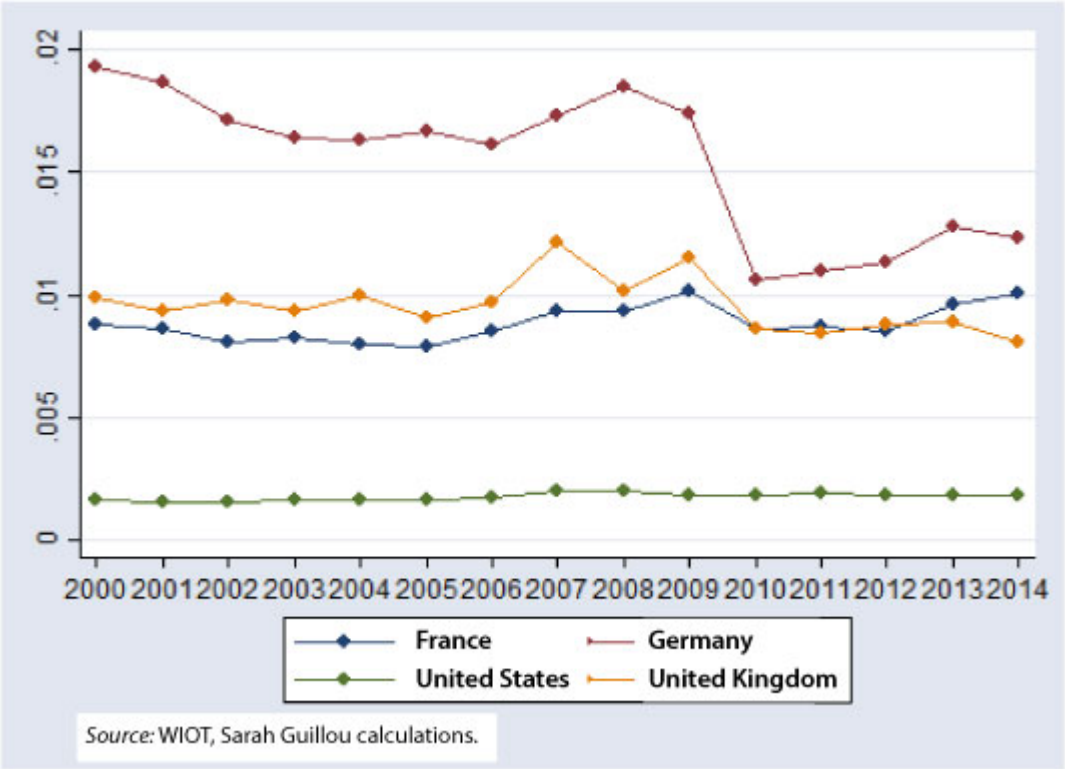
While the overlap between "software and databases" on the one hand and "digital publishing services" on the other is not perfect, there should not be a contradiction between the trends or the hierarchies between countries – unless software expenditure consists mainly of software produced in-house, in 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

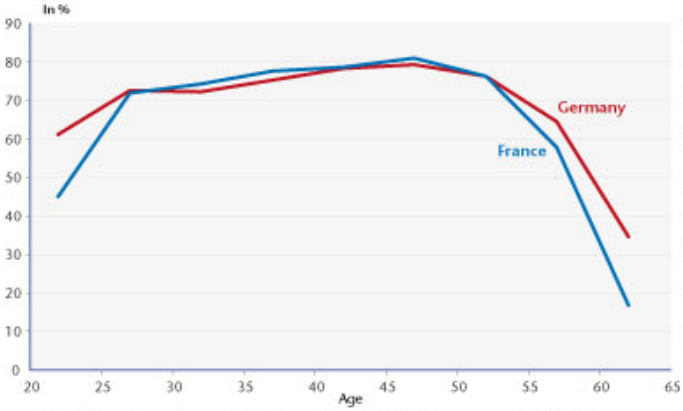
Comparing employment rates with employment rates in full-time equivalents over the life cycle highlights the significant differences between the two countries in terms of the reduction in women's working hours at the ages when the family constraint is the strongest, between 30 and 40 years old. Figures 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].

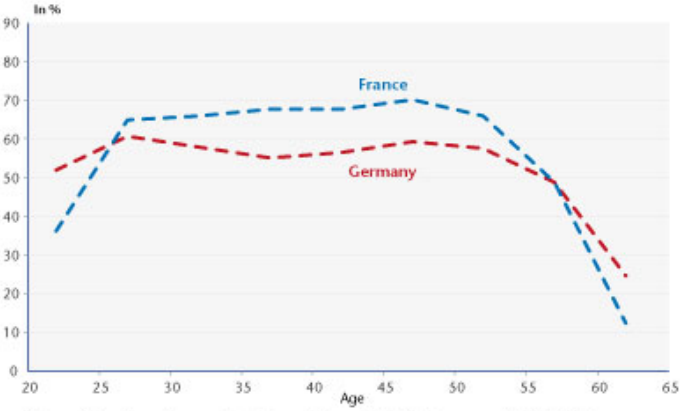
At all ages, the full-time equivalent employment rate for women is lower in Germany than in France (whereas for men it is close to the employment rate, for both countries). From the age of 30, the female full-time equivalent employment rate falls below 60% in Germany, while in France it is above 65%. 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



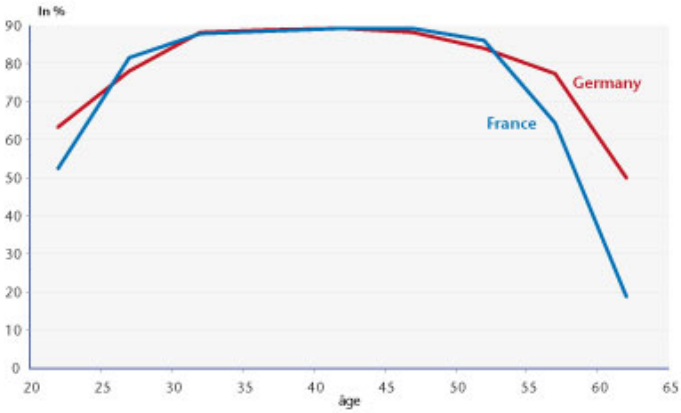
Lecture: Women's employment rate at age 42 was 78.3% in Germany and 78.7% in France.
Source: Labour force surveys, authors' calculations.

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



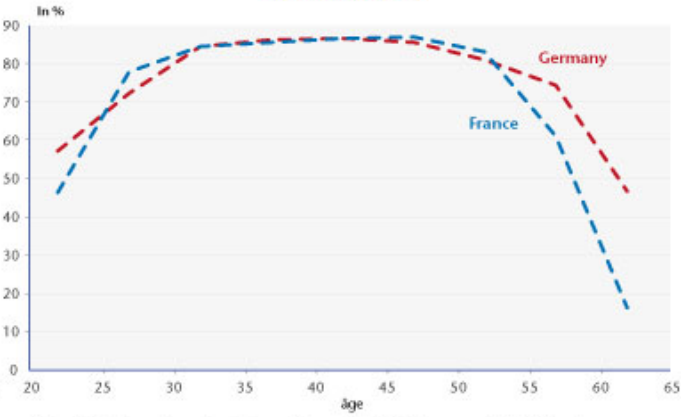
Lecture: Women's employment rate at age 42 was 56.6% in Germany and 67.7% in France.
Source: Labour force surveys, authors' calculations.

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.

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

by Aizhan Shorman and Thomas Pastore

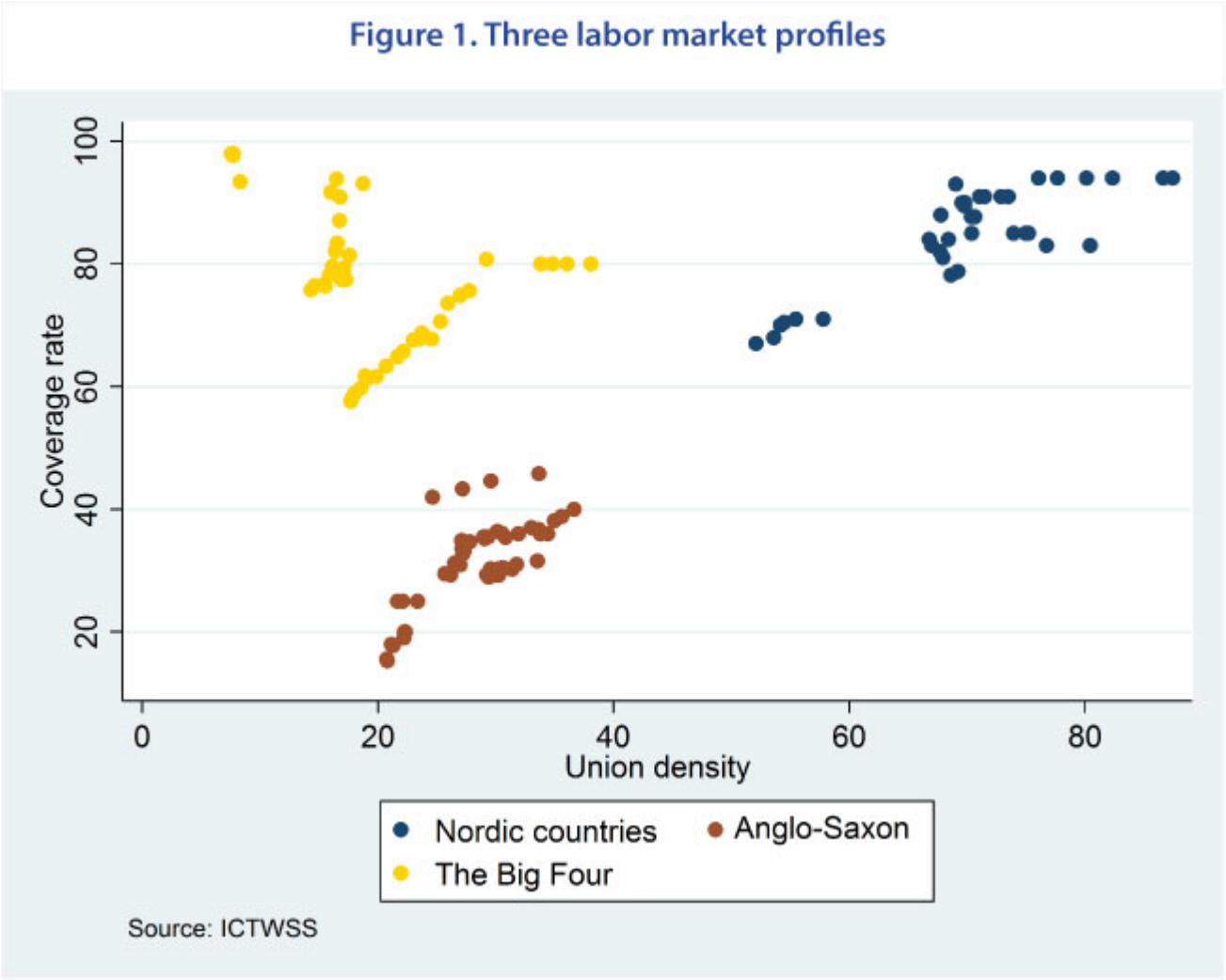
The European labor market is characterized by a great economical and institutional divergence. On the one hand, there is the German miracle constituted in part by a decrease in unemployment rate during the Great Recession. On the other, there is high unemployment in southern European countries.For example, 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).



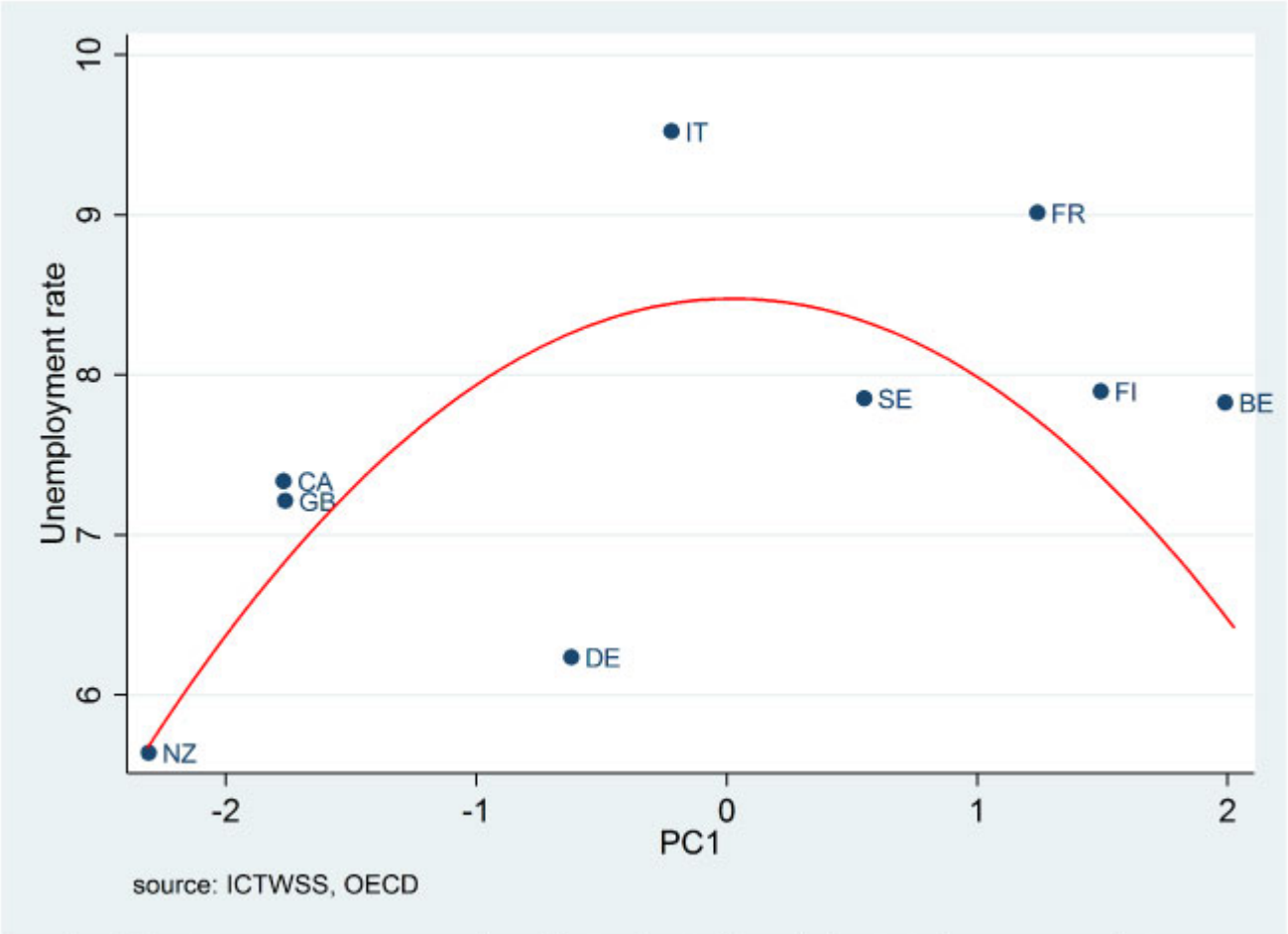
Calmfors-Driffill and the Great Recession

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)



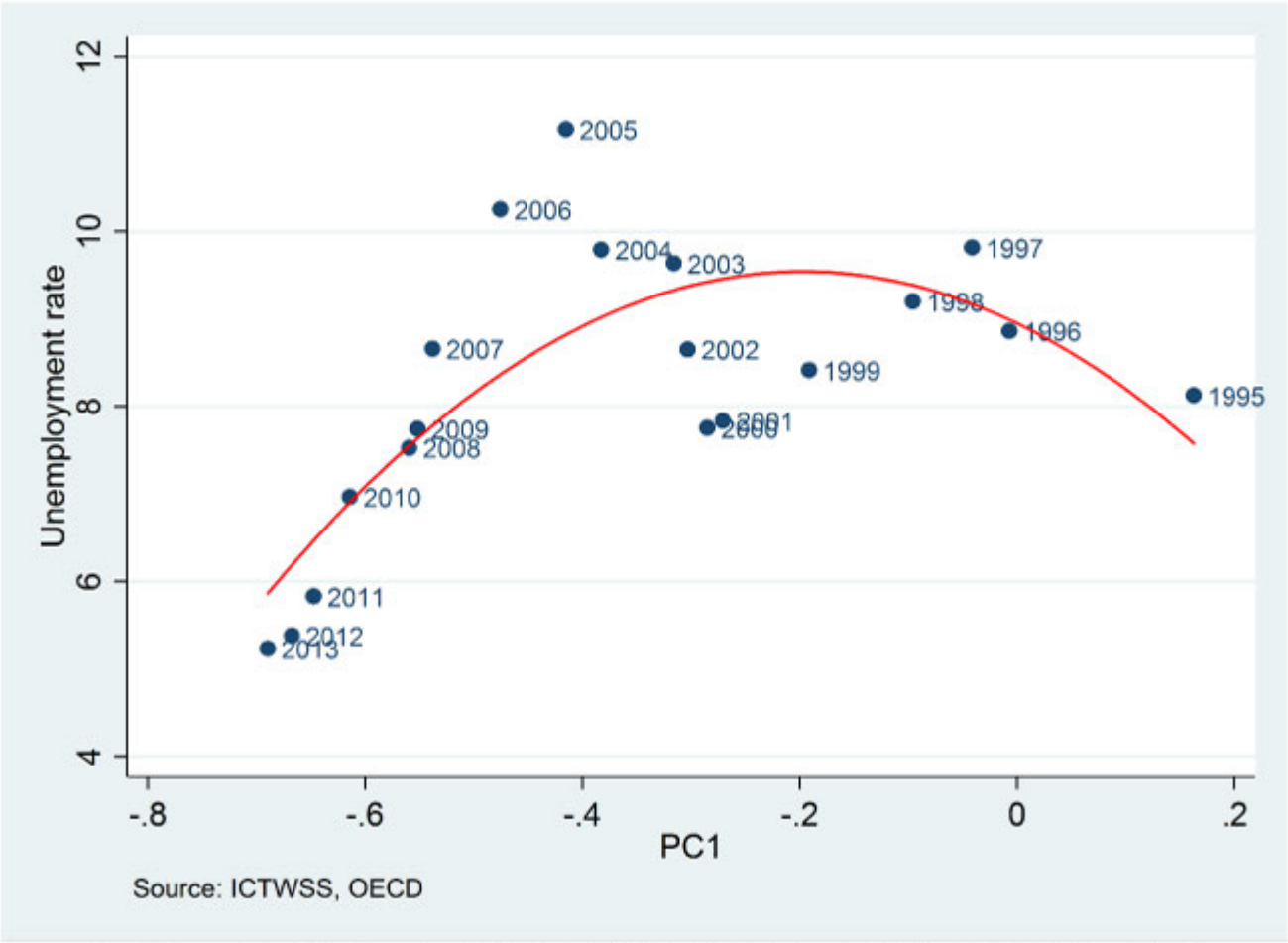
Note: PC1 axis is an aggregate measure of centralization obtained through the principal componentsanalysis; it includes measures of coverage rate, extension rate of collective bargaining agreements, and union density.

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\

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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[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.

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

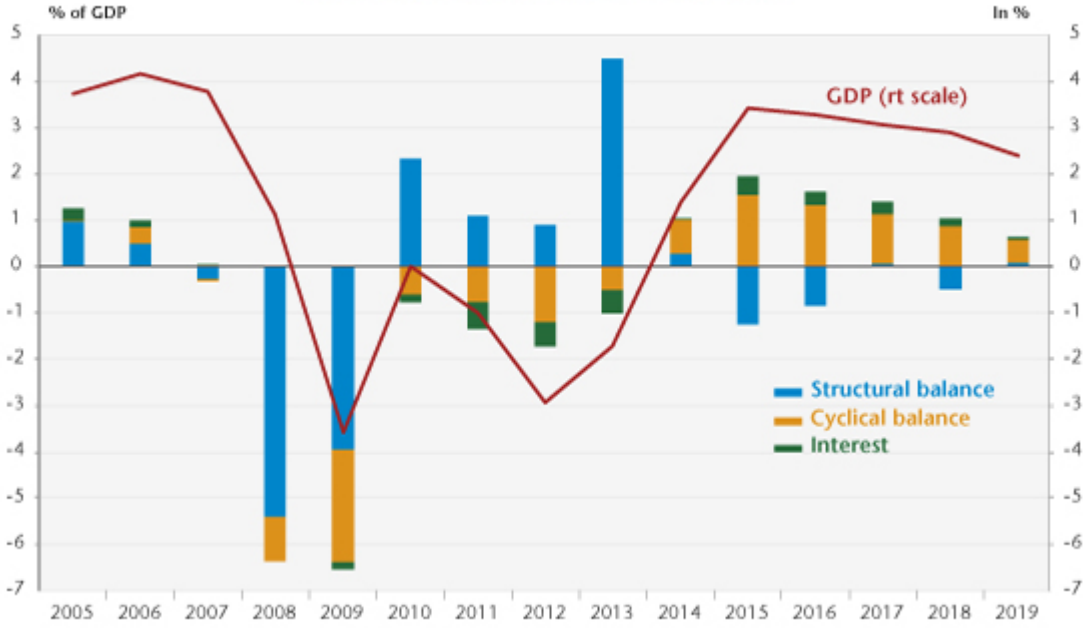
% of GDP	2017			2018			2019*		
	Gvt	EC	OFCE	Gvt	EC	OFCE	Gvt	EC	OFCE
GDP	3.1	3.1	3.1	2.7	2.9	2.6	2.4	2.4	1.9
Potential GDP	1.0	1.0	0.9	1.0	1.2	1.1	1.3	1.4	1.1
Output gap	-1.6	-0.2	-2.9	0.1	1.4	-1.4	1.2	2.3	-0.6
Budget balance	-3.1	-3.1	-3.1	-2.2	-2.6	-2.3	-1.3	-1.9	-1.5
Revenue	37.9	37.9		38.3	38.1		38.5	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[4], 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

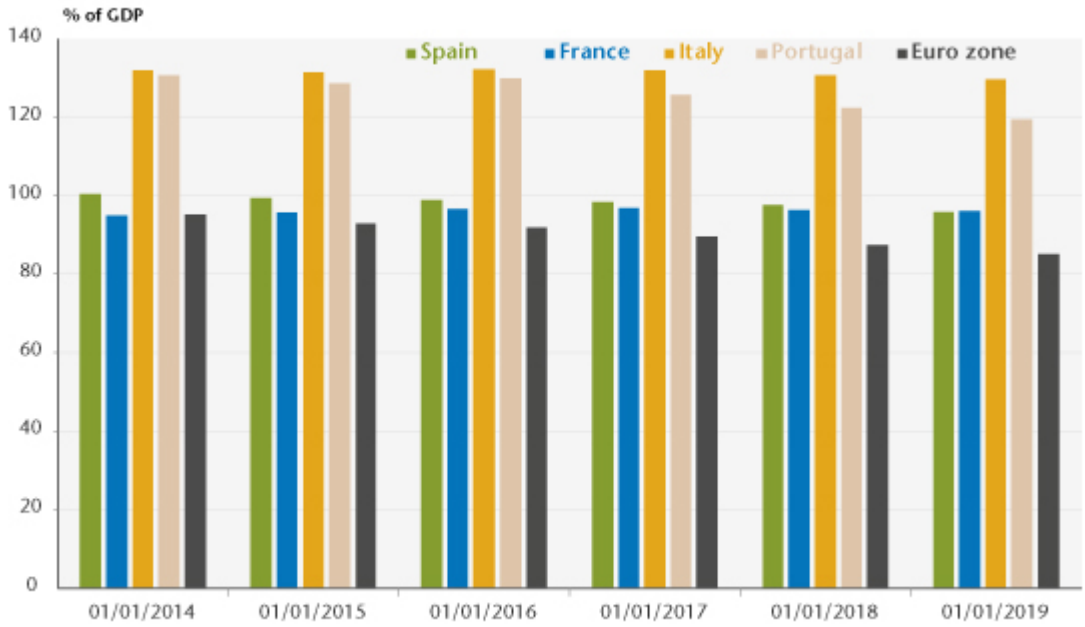


Source: European Commission.

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



Source: European Commission.

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

[2] 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/11-155OFCE.pdf , pp 137-141.

[4] Nor by the AIReF.