The euro-isation of Europe

By Guillaume Sacriste, Paris 1-Sorbonne and Antoine Vauchez, CNRS and Paris 1-Sorbonne

In the latest article in La Revue de l'OFCE (no. 165, 2019), <u>accessible here in French</u>, the authors analyze the emergence of a new European government, that of the euro, built to a great extent on the margins of the EU's existing framework. In noting this, the article takes stock of a process of the transformation of Europe (the European Union and Member States), which we call here the "Euro-isation of Europe", in three dimensions: 1) the creation at its core of a powerful pole of Treasuries, central banks and national and European financial bureaucracies; 2) the consolidation of a European system of surveillance of the economic policies of the Member States; 3) the gradual re-hierarchisation of the political priorities and public policies of the European Union and the Member States around the priority given to financial stability, balanced budgets and structural reforms. The article thus makes it possible to redefine the nature of the "constraints" that the management of the single currency is imposing on the economies of the Member States, constraints that are less legal than socio-political, less external and overarching than pervasive and diffuse, and ultimately closely linked to the key position now occupied by the transnational network of financial bureaucracies in defining European issues and policies.

Climate justice and the social-ecological transition

By <u>Éloi Laurent</u>

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 <u>detailed report</u> published by the Data for Progress think tank deploys an extremely effective argumentative sequence: the new ecological deal is necessary to preserve humanity's wellbeing; 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.

German women work less than French women

By <u>Hélène Périvier</u> and <u>Gregory Verdugo</u>

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 lifework-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

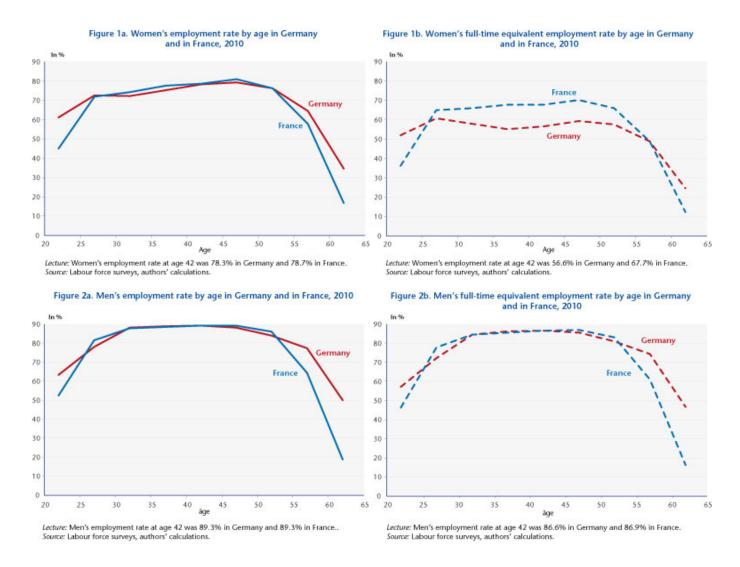
Comparing employment rates with employment rates in full-time equivalents over the life cycle highlights the significant differences between the two countries in terms of the reduction in women's working hours at the ages when the family constraint is the strongest, between 30 and 40 years old. Figures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



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.

What Donald Trump's economic programme reveals

By Xavier Ragot

The US elections are proving to be very revealing. Three different perspectives on the current elections are yielding insights into three areas: first, on the state of the US economy, second, on the state of the thinking of economists, and finally, on the nature of the relationship between economists and politicians.

The US primaries were marked by both the "resistible rise" of Donald Trump and the emergence of Bernie Sanders, who has hit Hilary Clinton from the left but failed to win.

The success of Donald Trump, who circumvented the Republican Party, was based on policy mainsprings that draw on some paranoia about the loss of identity of the United States in the face of concessions made economically to China, politically to Iran, and militarily in Iraq. The country's loss of status is a very real topic in the United States. The success this theme has enjoyed also stems from the reality of the economic situation of the middle and working classes in the US. The social scars caused by inequality in the country, so elegantly studied by Thomas Piketty, are visible on the streets, reflecting the reality of unequal access to health care (so incomprehensible to a European). While this theme of inequality is the central focus of the Bernie Sanders campaign, popular anger is also being expressed in the Republican camp.

Donald Trump's economic programme has the poetic but disturbing charm of a ramshackle inventory. By European standards it is difficult to identify it as right, extreme right or left. Trump does have a formal fiscal programme, but

it has been significantly "enriched" by media interventions. He is in favour of investment in infrastructure and military spending, the reduction of taxes, an increase in the minimum wage, an end to Obamacare and the total privatization of health care, the taxation of the rich, a reduction of immigration, especially from Mexico (building a wall between the US and Mexico), an aggressive trade policy toward China, which he accuses of dumping and, more recently, a partial default on US public debt. This last point has caused serious waves among Republicans. The United States is one of the world's few countries to have never defaulted on its public debt, so the Republican candidate publicly raising this possibility comes as a shock.

On this last point, I personally think that defaulting on public debt is a bad idea. This amounts to an uncontrolled tax, without assumption of responsibility, and it can also add to banking instability. Much better would be to impose a tax after a democratic debate. Furthermore, to ease the public debt burden, it is always possible to lower real interest rates on the public debt for a number of years using an accommodative monetary policy, without financial repression (see the article by Blanchard, Dell'Ariccia and Mauro).

Few economists defend Donald Trump's programme, even the part that sticks strictly to economics. A fairly positive interpretation of Trump's programme recently gained attention, as it came from a recognized and respected economist, Narayana Kocherlakota (here). Before getting into the reasons for Kocherlakota's (very relative) support for Trump, it is worth reviewing this economist's career to see how a crisis can change the way economists think. Narayana Kocherlakota trained as an economist at the University of Chicago, and he has made fundamental, highly technical contributions to financial theory, monetary theory and the dynamic theory of public finances, which are based on the application of tools from intertemporal contract theory. This is a very serious

Kocherlakota wrote a text on the state of academic! macroeconomic thought post-crisis that is very interesting because it is based on the broad vision of a researcher who doesn't recognize his discipline when he looks at economics textbooks (not to mention popular texts). Kocherlakota became chair of the Federal Reserve of Minneapolis in 2009 (stepping down on 1 January 2016). The Minneapolis Fed is known as a hard-core, intellectually active outpost of "anti-Keynesian" thought, to put it in a nutshell. Kocherlakota went through a profound intellectual transformation while at the Fed and took a fairly radical Keynesian turn (here is one original theoretical contribution), which led to conflicts with his colleagues. What was missing in Kocherlakota's academic output? What economic facts destabilized him to such an extent?

It is obviously difficult to answer these questions. However, it could be argued that Kocherlakota's own work did not make it possible to foresee the effectiveness of unconventional monetary policy or the impact of Obama's fiscal stimulus plans. Indeed, the US government conducted a very Keynesian monetary and fiscal policy (tax cuts and massive monetary creation), which had positive effects that could not be encompassed by the models of the Minneapolis Fed. The major missing ingredients were the nominal rigidities that give aggregate demand a potentially important role. This issue of nominal rigidities is not a detail in macroeconomics. I have written a text about the return of Keynesian thinking on this issue.

Kocherlakota's indulgence of the Trump programnme is not therefore that of a hard-core free marketer, but rather that of a converted Keynesian, whose faith seems a bit extreme. Kocherlakota is selling Trump's Keynesian stimulus based on public spending and lowering taxes. His only concern is that he would like to be sure that Trump would accept higher inflation of around 4% rather than 2%.

Thus, the Trump programme is further blurring the lines between the economic policy of the left and the right. The theme of inequality and impoverishment is dominating debate in the middle and working classes. The global problem of lack of demand and underemployment is worrying economists under the rubric of secular stagnation. The emergence of Bernie Sanders, the hodge-podge of Trump's economic programme (the violence of his remarks on immigration is not the subject of this text), and on another scale, Kocherlakota's transformation, all reveal the difficulty facing the emergence of a coherent economic paradigm that has a broad social base. Policy (Republican and Democratic) is groping for a different articulation between the State and the market, a coherent and effective return of economic policy (fiscal and monetary) that is able to stabilize market economies and reduce inequality. This debate will be identical, but, due to the European issue, will take a different form in France's presidential elections.

2015-2017 forecasts for the French economy

By <u>Mathieu Plane</u>, <u>Bruno Ducoudré</u>, <u>Pierre Madec</u>, Hervé Péléraux and Raul Sampognaro

This text summarizes the <u>OFCE's economic forecast for the</u>
<u>French economy for 2015-2017</u>

After a hesitant upturn in the first half of 2015 (with growth rates of 0.7% and 0% respectively in the first and second quarter), the French economy grew slowly in the second half year, with GDP rising by an average of 1.1% for the year as a

whole. With a GDP growth rate of 0.3% in the third quarter of 2015 and 0.4% in the fourth quarter, which was equal to the pace of potential growth, the unemployment rate stabilized at 10% at year end. Household consumption (+1.7% in 2015) was boosted by the recovery in purchasing power due in particular to lower oil prices, which will prop up growth in 2015, but the situation of investment by households (-3.6%) and the public administration (-2.6%) will continue to hold back activity. In a context of sluggish growth and moderate fiscal consolidation, the government deficit will continue to fall slowly, to 3.7% of GDP in 2015.

With GDP growth in 2016 of 1.8%, the year will be marked by a recovery, in particular by rising corporate investment rates. Indeed, all the factors for a renewal of investment are coming together: first, a spectacular turnaround in margin rates since mid-2014 due to a fall in the cost of energy supplies and the impact of the CICE tax credit and France's Responsibility Pact; next, the historically low cost of capital, which has been helped by the ECB's unconventional monetary policy; and finally, an improvement in the economic outlook. These factors will lead to an acceleration of business investment in 2016, which will increase by 4% on average over the year. Household consumption should remain strong in 2016 (+1.6%), driven by job creation in the market sector and by a slight fall in the savings rate. Fuelled by the rise in housing starts and building permits, housing investment will pick up (+3%), after shrinking for four years in a row. Foreign trade will be boosted by the impact of the euro's depreciation and the government's competitiveness policies, and will make a positive contribution to growth (+0.2 GDP point in 2016, the same as in 2015). Once the impact of the downturn in oil prices has fed through, inflation should be positive in 2016, but still low (1% on an annual average, after two years of virtual stagnation), a rate that is close to underlying inflation. The pace of quarterly GDP growth in 2016 will be between 0.5% and 0.6%: this will

trigger a gradual closing of the output gap and a slow fall in the unemployment rate, which will end the year at 9.8%. The public deficit will be cut by 0.5 GDP point, due to savings in public spending, notably through the contraction of public investment (-2.6%), low growth in government spending (+0.9%), and the impact of the rise in tax revenues as the economy recovers.

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

The COP 21 conference: the necessity of compromise

By <u>Aurélien Saussay</u>

On Tuesday, 6 October 2015, the United Nations Framework Convention on Climate Change (UNFCCC) released a preliminary version of the draft agreement that will form the basis for negotiations at the Paris Conference in December. Six years after the Copenhagen agreement, widely described as a failure, the French Secretariat is making every effort to ensure the success of COP 21 — at the cost of a certain number of compromises. Although the text's ambitiousness has been cut down, the strategy of taking "small steps" is what can make an

agreement possible.

The project has renounced a binding approach, where each country's contributions were negotiated simultaneously, and replaced that with a call for voluntary contributions, where each country makes its commitments separately. This step was essential: the Kyoto Protocol, though ambitious, was never ratified by the United States, the world's principal emitter of carbon at the time — and it was the attempt to build a successor on that same model which resulted in the lack of agreement at Copenhagen.

The countries' commitments, called Intended Nationally Determined Contributions (INDC), fall into three broad categories: a reduction in emissions from the level of a given base year — generally used by the developed countries; a reduction in the intensity of emissions relative to GDP (the amount of GHGs emitted per unit of GDP produced); and finally, the relative reduction in emissions compared to a baseline scenario, called "business-as-usual", which represents the projected trajectory of emissions in the absence of specific measures.

Most emerging countries have chosen to express their targets in terms of intensity (China and India in particular) or relative to a baseline trajectory (Brazil, Mexico and Indonesia). This type of definition has the advantage of not penalizing their economic development — at the price, of course, of uncertainty about the level of the target: if economic growth exceeds the projections used, the target could be met even while the reduction in emissions achieved would be lower than expected. Moreover, part of the target is often indexed on the availability of financing and of technology transfers from developed countries — once again, a perfectly legitimate condition. Due to the contribution that having a plurality of targets makes to a fair distribution of efforts between developed, long-standing emitters and countries that have been developing recently, this represents an essential

source of compromise.

With regards to the level of emissions targets set for 2030, while some are trivial — note the case of Australia, which is proposing to increase its emissions over 1990 levels — many involve accelerating existing efforts. To meet its commitments, Europe must reduce its emissions twice as rapidly from 2020 to 2030 as it does in the previous decade, and the United States one-and-a-half times; China will need to reduce its carbon intensity three times faster than it has in the last five years, and India two-and-a-half times faster.

As a guide, if the INDCs made public to date were fully realized, then according to the research consortium Climate Action Tracker [1], global temperatures would rise 2.7 °C above pre-industrial levels by the end of the century. This simple calculation must, however, be qualified, since the plan is for commitments to be revised every five years, and they can only be tightened. This system of iterative negotiations should make it possible to move steadily closer to the goal of 2°C that is still being upheld officially.

To be effective, it is necessary to check on whether these commitments are actually met, which requires independent monitoring. In this respect, while guidelines have been highlighted in the current version of the draft agreement, the final negotiations will need to clarify the mechanisms actually used. In the absence of an effective verification procedure, successive revaluations of commitments could turn into a global game of liar's poker, and ultimately undermine the fight against climate change.

Moreover, the existence of relatively ambitious commitments should certainly not delay the implementation of the necessary adaptation measures, which are at present the subject of a single article in the provisional draft, with no reference to the funding that will be devoted to this. This is one of the project's main weaknesses, as the question of funding is

barely mentioned — the Green Climate Fund, which was to be endowed with 100 billion dollars by 2010, has received only 10.2 billion to date.

In turning the page on Copenhagen, the draft agreement for Paris could constitute a real step forward for climate protection. It is the result of a change in method and a series of compromises which, though scaling down ambitions, are absolutely necessary to the very existence of an agreement. Demanding greater requirements for the proposal's targets could lead to the failure of the negotiations, which would be far more damaging. In its current version, the draft agreement provides a robust foundation for the future coordination of efforts against climate change.

[1] The Consortium of the following research organizations: Climate Analytics, Ecofys, NewClimate Institute, and Potsdam Institute for Climate Impact Research.

Slowing growth: due to the supply side?

By <u>Jérôme Creel</u> and <u>Xavier Ragot</u>

The weakness of the recovery in 2014 and 2015 raises the need for a structural re-examination of the state of France's productive fabric. Indeed, an analysis of investment dynamics, the trade balance, productivity gains and business margins, and to a lesser extent companies' access to credit, indicates

the existence of some disturbing trends since the early noughties. In addition, the persistence of the crisis inevitably poses the question of the unravelling of France's productive fabric since 2007 due to a combination of low growth, weak investment and numerous bankruptcies.

The contributions gathered in <u>Revue de l'OFCE</u> no.142 have a double ambition: first, to put France's businesses and economic sectors at the heart of reflection about the ins and outs of the current slowdown in growth, and second, to question the basis for theoretical analyses of future growth in light of the situation of France and Europe. Based on the various contributions, nine conclusions emerge:

- 1) Growth potential, a concept that aims to measure an economy's medium-term productive capacity, has fallen in France since the crisis. While the level of potential growth is high over the long term, on the order of 1.8%, it has fallen since the crisis by about 0.4 point, according to the new measurement provided by Eric Heyer and Xavier Timbeau.
- 2) The main point is to figure out whether this slowdown is temporary or permanent. This is important for growth forecasts but also with respect to France's European commitments, which depend on its growth potential. One important conclusion is that a very large portion of the current slowdown is transitory and linked to France's economic policy. As Bruno Ducoudré and Mathieu Plane demonstrate, the low level of employment can be explained investment and macroeconomic environment and in particular by the current sluggish economy. Business behaviour does not seem to have changed during the crisis. The analysis by Ducoudré and Plane also shows that the determinants of investment differ in the short term and the long term. A 1% increase in economic activity increases investment by 1.4% after one quarter, whereas a 1% increase in the margin rate has very little impact in that same period. However, over the long term (10 years), a 1% increase in activity boosts investment by

- about 1%, while a 1% increase in the margin rate boosts investment by 2%. So promoting investment means supporting economic activity in the short term, while boosting margins will have an impact over the longer term.
- 3) France's productive fabric will take time to recover from the effects of the crisis because of three major obstacles: the weakness of investment, of course, but also the decline in the quality of investment and finally the disruption of production following on from the poor allocation of capital during the crisis, including its territorial dimension. Sarah Guillou and Lionel Nesta show that the low level of investment makes it impossible to go upmarket, which has meant less technical progress since the crisis. Jean-Luc Gaffard and Lionel Nesta then show that regional convergence has slowed since the crisis, and that economic activity has tended to decline in the most productive areas.
- 4) The concept of growth potential as a tool for macroeconomic management has emerged from the crisis in a profoundly weakened state. Whatever the methods used, ongoing revisions of growth potential make the idea of a system of rules-based European guidance dangerous, according to Henri Sterdyniak. There is a need to rediscover European economic policy that is discretionary in character. In addition, fiscal policy that is more contingent on macroeconomic and financial conditions needs to be better coordinated with the climate issue, as Jérôme Creel and Eloi Laurent argue.
- 5) The notion of secular stagnation, that is to say, a lasting weakening of growth, has led to intense debate. Two visions of secular stagnation are discussed. The first vision, associated with Robert Gordon, insists that technological progress has been exhausted. The second flows from the analysis of Larry Summers and stresses the possibility of a permanent demand deficit. Jérôme Creel and Eloi Laurent show the limitations of the analysis of Robert Gordon for France; in particular, French demographics are more an advantage for French growth

than a hindrance. Gilles Le Garrec and Vincent Touzé show the possibility of a long-term demand deficit that would hinder capital accumulation, due to the central bank's inability to make further interest rate reductions. In this kind of environment, support for demand is necessary to get out of an unfavourable equilibrium between low inflation and high unemployment, which leads to a negative perception of growth potential. Changing expectations may require large-scale policies to stimulate economic activity, along with an acceptance of high inflation over the long term.

- 6) The analyses presented here therefore recognize the profound difficulties with France's productive fabric and recommend better coordination of public policy. Support for demand is needed rapidly in order to restore investment, followed by an ongoing progressive policy to boost the margins of companies exposed to international competition so, according to Jean-Luc Gaffard and Francesco Saraceno, not a competitive shock, but rather support for business that takes into account the time profile of productive investment.
- 7) In the longer term, part of what can be characterized as the French supply-side problem is the result of poor European adjustments, including the discrepancy in wages between Europe's major economies. The divergence between France and Germany since the mid-1990s has been impressive. Mathilde Le Moigne and Xavier Ragot show that German wage restraint is a singularity among European countries. They offer a quantification of the impact of this wage moderation on France's foreign trade and economic activity, and conclude that German wage restraint has contributed to an increase of more than 2 points in France's unemployment rate. A supply policy could also go by the name of a policy for European reconvergence.
- 8) The deep-going modernization of the productive fabric will depend on spaces for cooperation, collective learning and collaboration so as to nourish the creativity made possible by

new technologies. These spaces need to recognize the importance of difficult-to-value intangible assets. In economies with an ageing workforce, advances in robotics and artificial intelligence should lead to enhancing potential productivity, according to Sandrine Levasseur. Cooperation also needs to be strengthened in two areas: the company and the territory. Within companies, partnership governance should help limit short-termist financial tendencies. With respect to territory, the definition of regional innovation systems should be the focus of a modern industrial policy, according to Michel Aglietta and Xavier Ragot.

9) Guillaume Allègre concludes that it is not so much the level of production that is disturbing as the inequitable distribution of the fruits of growth, however small these may be. The emerging consensus on the negative impact of inequality on economic growth should not obscure the real debate, which does not concern just the income gap, but also what that income makes it possible to consume, i.e. equal access to goods and services of equal quality. The key question is thus the content of production, more than simply growth.

Areva, Flamanville and Fessenheim: key players in France's nuclear turn

By <u>Sarah Guillou</u>

The recent law on "the energy transition to green growth",

promulgated on 17 August 2015, plans for a fall in nuclear energy's share of electricity production from 75% to 50% by 2025. It also caps the power of the country's nuclear plants at 63.2 GW. This limit corresponds to current capacity and implies that any new reactor start-up (Flamanville, for example) must result in the closure of a reactor with equivalent power. The decision to postpone the expected closure of the Fessenheim plant comes under this and is now part of this energy equilibrium. The conditioning of the closure of Fessenheim is provoking discontent among all those who believed in the unconditional pledge of Francois Hollande during his presidential campaign.

This decision is coming in a new context for French nuclear power policy and in an international and technological situation that is leading the French state to abandon the country's "all nuclear" approach. Areva, Flamanville and Fessenheim are key players in this shift.

Act I began with the revelation of Areva's losses. In early 2015, the announcement of a loss of almost 5 billion euros for fiscal year 2014 relegated the company from first class status to a company in difficulty, alongside Alstom, whose energy branch is being sold to General Electric, with completion this autumn. The Areva group had a turnover of slightly more than 8 billion euros in 2014. The group's problems are due to the simultaneous emergence of difficulties in its environment, including market and regulatory trends, technological constraints and changes in the competition (see "Areva, vaincue à la croisée des risques" [Areva: defeated at the crossroads of risk], Note de l'OFCE, no. 52, September 2015). With private and public governance having proved incapable of taking timely decisions to deal with these developments, the moment for restructuring has come. Areva now needs 7 billion in financing for the 2015-2017 period (to cover losses and debt maturities, without including any provisions for the TVO site). The proposed agreement with EDF

presented in late July concerns Areva NP.

Areva NP is already a joint venture of Areva and EDF that handles the construction of reactors and the assembly of fuel and services for the installed base; it accounts for half of Areva's sales. In late July 2015, it was duly accepted that EDF would increase its share of Areva NP's capital by injecting two billion euros, giving it between 52% and 75% of the capital, depending on the inputs of other investors, along with 400 million for the acquisition of other assets. It was also agreed that the additional costs related to the Finnish Olkiluoto OL3 reactor built by Areva would not be borne by EDF but by the State and Areva. There is still uncertainty about how to handle the risks related to the Flamanville reactor, and EDF is conditioning its commitments on lifting these risks.

Foreign capital could participate in replenishing the capital through the purchase of assets. The most likely candidates are Chinese firms, which are already partners of EDF (CNNC and CGNPC), and Mitsubishi, which has partnered with Areva (see above), alongside France's Engie (GDF Suez). The French government is prepared to bail out the company for at most 2 billion euros.

The integrated model of Areva is therefore on the rocks. Less than 15 years after its birth, Areva's industrial coherence is under question. The company has been forced to allow the entry of industry partners into its capital and into its vast range of expertise. Its activity is now concentrated on the fuel cycle (the extraction, enrichment and reprocessing of uranium), with nearly one-third of its workload ensured by its client EDF and by maintenance and decommissioning.

The refocusing strategy, market trends and the preferences incorporated in France's energy policies are mutually consistent. The nuclear market will be centred on the need to maintain plants in operating condition and on decommissioning.

Just under 500 reactors are listed worldwide, so there is a vast market for maintenance and decommissioning. This is in fact the area where Areva has won contracts in recent years.

In Act II, Flamanville and Fessenheim found themselves bound by the new energy transition law, illustrating both the technological difficulties involved as well as the budgetary constraints. The completion of the construction of the Flamanville plant is meeting significant technical hurdles from the Nuclear Safety Authority. Its opening is, for the moment, subject to strong conditions. At the same time, the postponement of its opening means that the expected output of electricity production will have to do without it. The closure of the Fessenheim plant, promised for 2016, must therefore be delayed so as to avoid a transition in terms of electrical power output that will have to be filled in one way or another.

Without the capacity in the short run to replace the missing nuclear KWh by KWh from renewable energy, the replacement will have to be done using coal plants — going against the current targets for reductions in CO2 emissions — or by importing electricity — which would hurt the trade balance and could push up electricity prices. Given the necessity of postponing the closure of Fessenheim, the government will not fail to seize the political opportunity of the shortfall between the announcement of the plant's closure and its actual implementation.

Add to these factors the potential compensation — estimated at 5 billion euros — that EDF will request for the early closure of Fessenheim, and it is quite logical that the government is procrastinating as much as possible before deciding on the closing date.

Even today we still do not know the extent to which the State will recapitalize Areva. The government has clearly indicated that it would minimize the amount as much as possible, but for

the most part it seems ready to allow foreign players in. So, concomitantly, the law on the energy transition is requiring a decrease in the share of nuclear power and the State is announcing that it can no longer finance the sector in the way it used to. More generally, the globalization of the industry, the rising cost of technology and safety requirements as well as the shift in the preferences of the average voter towards less nuclear power are all combining to redefine the State's commitment to nuclear energy.

The State is thus being politically and economically compelled to withdraw from its "all-nuclear" approach and to accept the end of everything "made in France". The final decisions that will be taken on Areva's future and on the fate of the plants in Fessenheim (which will undoubtedly close in the short term) and Flamanville (whose opening is compromised but financially necessary) will therefore mark a change in the era of nuclear policy, even if the recent energy transition law is subsequently amended by a new party in power.

Climate justice — the "Open Sesame" of the COP 21 climate conference

By **Eloi Laurent**

Climate negotiations cannot be limited to technical discussions between experts about the reliability of scientific data: they need to take the form of an open political dialogue that is nourished by ethical reflection

involving the citizens. What should be the focus of this dialogue? With COP 21 opening in two months in Paris, it is becoming increasingly clear that the key to a possible agreement is not economic efficiency, but social justice. The "green growth" that was a goal in the past century has little mobilizing power in a world plagued by injustice. It is much more important to highlight the potential that resolute action against climate change holds for equality at the national and global level.

Three issues indicate how social justice is at the heart of the climate negotiations. The first concerns the choice of the criteria for allocating the carbon budget between countries in order to mitigate climate change (the approximately 1200 billion tons of carbon that remains to be emitted over the next three to four decade so as to limit the rise of ground temperatures to around 2 degrees by the end of the 21st century). Various indicators can be used both to estimate the carbon budget and to distribute it equitably among countries; while these indicators need to be discussed, we cannot under any circumstances ignore this issue in Paris. demonstrable that the application of hybrid but relatively simple criteria on climate justice would lead to cutting global emissions almost in half over the next three decades, which would ensure meeting the goal of 2 degrees, and even targeting the increased rise in temperatures to 1.5 degrees, thereby enhancing the fairness of this common rule with respect to the most vulnerable countries and social groups.

The second issue concerns adaptation to climate change, that is to say, the exposure and sensitivity to extreme weather events and rising global temperatures that is differentiated between countries and social groups. Here too it is important to select relevant indicators of climate vulnerability to fairly allocate the available funding (which should increase to \$100 billion per year by 2020). But it will be very difficult to mobilize the necessary sums without shifting the

<u>climate negotiations from the current quantitative logic to a price logic</u>.

Finally, combatting inequality seems to be the most effective way to involve citizens in the climate dialogue. The fight against climate change must be understood not as a social threat or an opportunity for profit-making but as a lever for achieving equality: a chance to reduce disparities in human development between countries and within countries.

The case of China shows how constraints on cutting CO2 emissions can turn into a tool for reducing inequality: the limitation on coal consumption simultaneously reduces the country's greenhouse gas emissions and the damage caused to the Chinese population's health by fine particles, which are distributed very unevenly around the territory and therefore within the population. The same applies to the much desired regulation of automobile traffic in France's urban areas, which represents both a gain for health and a reduction in emissions related to mobility. This dual climate-health dividend (reducing emissions to contain global warming has an indirect effect, i.e. improving health) must therefore be at the heart of the Paris negotiations. The fight against climate change offers a chance to reduce the inequalities that will be so devastating: by cross-checking the "social" map and the "climate" map, we can anticipate that the impact of heat waves will be felt strongest in regions where both climatic exposure and the share of elderly people living alone are at high levels. The climate risk is a socio-ecological risk. Inequality associated with this risk is environmental inequality [article in French]. The goal of COP 21 should not be to "save the planet" or even less to "save growth" but rather to "save our health" by protecting the most vulnerable from the worst of the climate crisis.

The redistributive effects of the ECB's QE programme

By Christophe Blot, Jérôme Creel, Paul Hubert, Fabien Labondance and Xavier Ragot

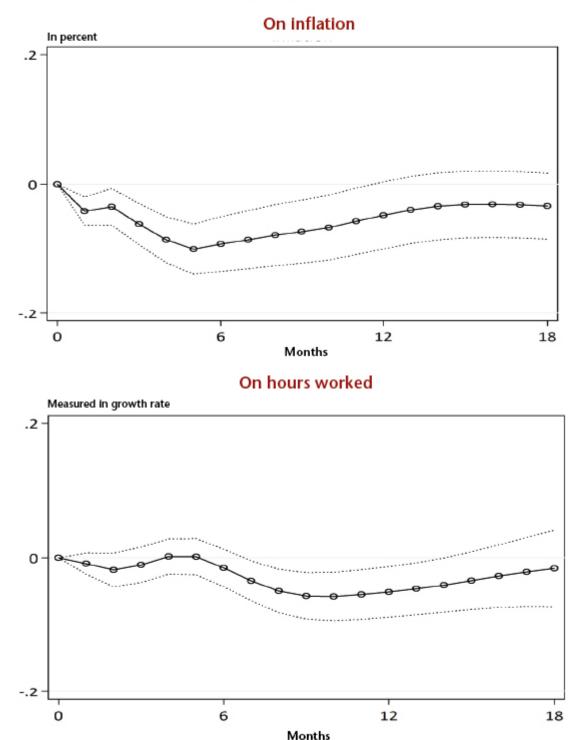
Rising inequality in income and wealth has become a key issue in discussions of economic policy, and the topic has inserted itself into evaluations of the impact of monetary policy in the US and Japan, the precursors of today's massive quantitative easing programmes (QE). The question is thus posed as to whether the ECB's QE policy has had or will have redistributive effects.

In a paper prepared for the European Parliament, <u>Blot et al.</u> (2015) point out that the empirical literature gives rise to two contradictory conclusions. In the US, the Fed's base rate cuts tend to reduce inequality. Conversely, in Japan an expansionary QE type policy tends to increase inequality. So what's the situation in Europe?

Based on macroeconomic data aggregated for the euro zone as a whole, Blot et al. (2015) show that while European monetary policy, conventional and unconventional, have indeed had an impact on the unemployment rate, the number of hours worked and the rate of inflation (see graphs), this was limited. This result suggests that the ECB's expansionary monetary policy has tended to reduce inequality, but not by much. So when the ECB finally decides to wind up its expansionary policy, we can expect a slight increase in inequalities to follow. Because of this effect, though small, Blot et al. (2015) suggest that the ECB should be held accountable not just for price stability or economic growth, but also for the impact of its policies in

terms of inequality and the mechanisms needed to take this into account.

Figures. The impact of a restrictive monetary policy shock (0.2 percentage point hike in the implicit interest rate) in the euro zone...



On the unemployment rate

