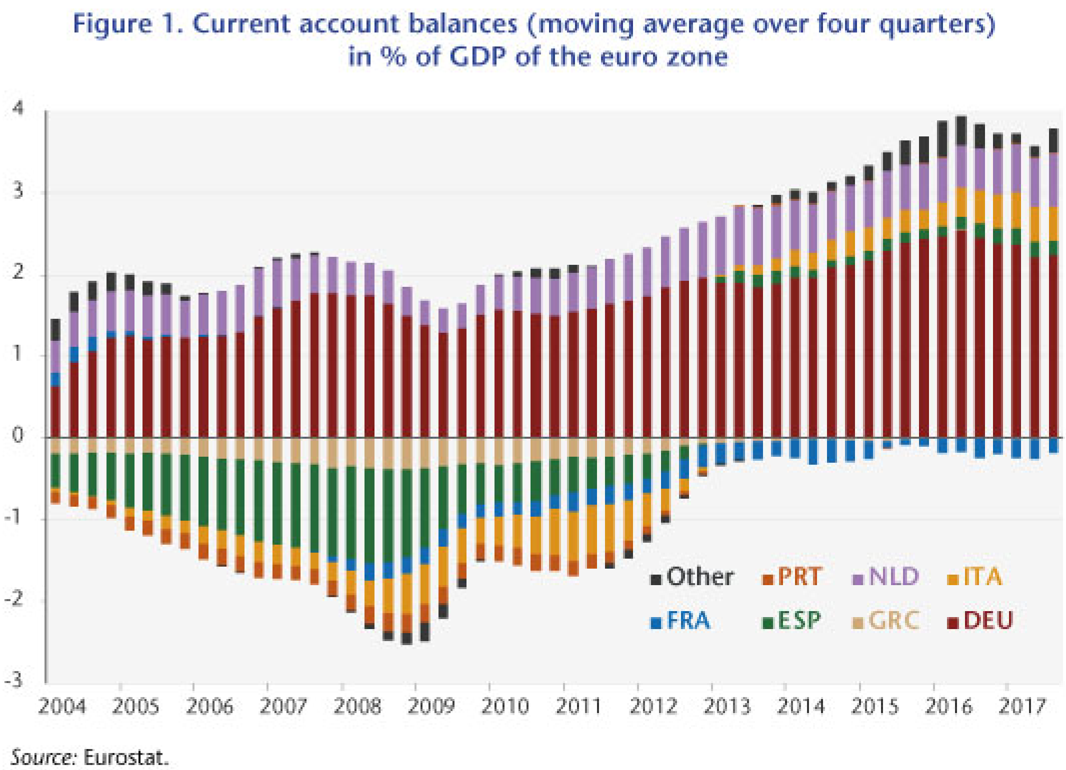
Major adjustments are awaiting the euro zone

By Bruno Ducoudré, Xavier Timbeau and Sébastien Villemot

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

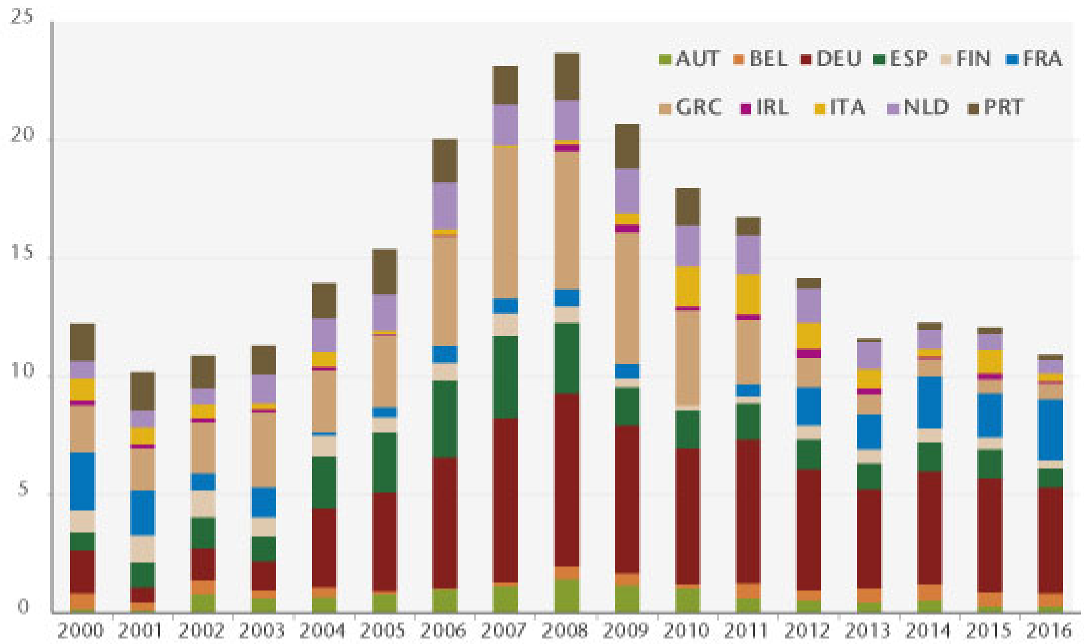


The trend towards diverging current account balances slowed sharply after 2009, and external deficits disappeared in almost all the euro zone countries. Despite this, there is still a significant gap between the northern and southern countries, so there cannot yet be any talk about reconvergence. Moreover, the fact that the deficits have fallen (Italian and Spanish) but not the surpluses (German and Dutch) has radically changed the ratio of the euro zone to the rest of the world: while the zone's current account was close to balanced between 2001 and 2008, a significant surplus has formed since 2010, reaching 3.3% of GDP in 2016. In other words, the imbalance that was internal to the euro zone has shifted into an external imbalance between the euro zone and the rest of the world, in particular the United States and the United Kingdom. This imbalance is feeding Donald Trump's protectionism and putting pressure on exchange rates. While the nominal exchange rate internal to the euro zone is not an adjustment variable, the exchange rate between the euro and the dollar can adjust.

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

In a recent study [1], we seek to quantify the adjustments that remain to be made in order to resolve these various current account imbalances, both within the euro zone and vis-à-vis the rest of the world. To do this, we estimate equilibrium real exchange rates at two levels. First, from the point of view of the euro zone as a whole, with the idea that the adjustment of the real exchange rate will pass through an adjustment of the nominal exchange rate, notably the euro vis-à-vis the dollar: we estimate the long-term target of euro / dollar parity at USD 1.35 per euro. Next, we calculate equilibrium real exchange rates within the euro zone, because while the nominal exchange rate between the member countries does not change because of the monetary union, relative price levels allow adjustments in the real exchange rate. Our estimates indicate that substantial misalignments remain (see Figure 2), with the average (in absolute terms) misalignment relative to the level of the euro being 11% in 2016. The relative nominal differential between Germany and France comes to 25%.

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



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

In the current situation, claims by some euro zone countries are not accumulating on others in the zone, but there is accumulation by some euro zone countries on other countries around the world. This time the exchange rate (actual, weighted by accumulated gross assets) can serve as an adjustment variable. The appreciation of the euro would therefore reduce the euro zone's current account surplus and depreciate the value of assets, which are probably accumulated in foreign currency. France however now appears as the last country in the euro zone running a significant deficit. Relative to the zone's other countries, it is France that is contributing most (negatively) to the imbalances with Germany (positively). If the euro appreciates, it is likely that France's situation would further deteriorate and that we would see a situation where the net internal position accumulates, but this time between France (on the debtor side) and Germany (creditor). This would not be comparable to the situation prior to 2012, since France is a bigger country than Greece or Portugal, and therefore the question of sustainability would be posed in very different terms. On the other hand, reabsorbing this imbalance by an adjustment of prices would require an order of magnitude such that, given the relative price differentials that would likely be needed between France and Germany, it would take several decades to achieve. It is also striking that, all things considered, since 2012, when France undertook a costly reduction in wages through the CICE tax credit and the Responsibility Pact, and Germany introduced a minimum wage and has been experiencing more wage growth in a labour market that is close to full employment, the relative imbalance between France and Germany, expressed in the adjustment of relative prices, has not budged.

Three consequences can be drawn from this analysis:

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

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

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

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

Universal basic income: An

ambition to be financed

By Pierre Madec and Xavier Timbeau

This evaluation of Universal Basic Income (UBI), the flagship proposal of French presidential candidate Benoît Hamon, highlights a potentially important impact of the measure on the living standards of the least well-off households and on inequalities in living standards. If implemented, a universal basic income would have the effect of making France one of the most egalitarian countries in the European Union. In return, the "net" cost of the programme could be high, around 45 to 50 billion euros. Given the measure's cost, financing it through an income tax reform could make the French socio-fiscal system even more redistributive, but would lead to a considerable increase in the marginal tax rates borne by the wealthiest households.

By making it one of the flagship proposals of his election programme for the presidency, Benoît Hamon has revived the debate around a universal basic income (UBI). It is a radical project, the subject of numerous controversies (see, for example, Allègre and Sterdyniak, 2017), so the quantification of the programme is needed. Starting from Benoît Hamon's proposal, which has been significantly modified in recent weeks, we attempt here, using a number of important assumptions (total or partial individualization, dependence on other social benefits) to make an initial evaluation. The idea here is neither to enter into the debate as to whether the modalities of application chosen are relevant, such as the exclusion of pensioners, nor to judge how close the proposal in its present form comes to an ideal of universality. Rather the aim is to avoid this type of debate and to qualify and quantify the effects of the implementation of the UBI as proposed by the presidential candidate.

The latest version of the first step in the Universal Basic

Income can be summarized as follows: “A basic income corresponds to a rise in net income that starts at 600 euros for people without resources and then disappears at 1.9 times the minimum wage (SMIC).”

Put like this, the proposal is for a differential allocation making it possible not to give rise to an artificial tax increase among those whose income situation is not changed by the universal income.

For married couples, the programme is not automatically individualized since it would still be possible to choose to maintain joint taxation. Couples with a family quotient that is less than the potential amount of the UBI should choose individualization. This is the case for couples with low incomes and not much income differential. Conversely, couples for whom the family quotient provides a bigger advantage than the basic income should choose to stick with joint taxation[1]. This would be the case for couples in which one of the individuals has a very high income and the other has no income[2].

For the most modest households the UBI replaces the RSA (income supplement for the working poor) and the Prime d’activité (working tax credit), and the calculation of social benefits (housing and family allowances, disabled adult allowance, scholarships, etc.) is not modified, as their amounts are included in the resources used to calculate the universal income.

In the general framework, for all tax households whose gross resources are less than 1.9 times the SMIC, i.e. 2,800 euros gross per month, the UBI is equal to the difference between the base amount of 600 euros per month (7,200 euros per year) and 27.4% of the tax household’s gross resources. For non-taxable households, the UBI is considered a tax on negative income. For taxable households with gross resources of between 1.5 and 1.9 times the SMIC (3.8 SMIC in the case of a married couple), the UBI reduces the income tax due, thereby increasing the household's disposable income, with this additional income cancelling out at 1.9 SMIC. The measure's cost to the public finances for these households therefore corresponds to the difference between the amount of the UBI and the income tax currently paid. For tax households with gross resources of more than 1.9 times the gross SMIC (3.8 SMIC for married couples), the current system applies and there is no gain (Figure 1).

Formally, the monthly amount of UBI received by a tax household composed of a single adult and with resources of less than 1.9 times the gross SMIC is based on the following formula:

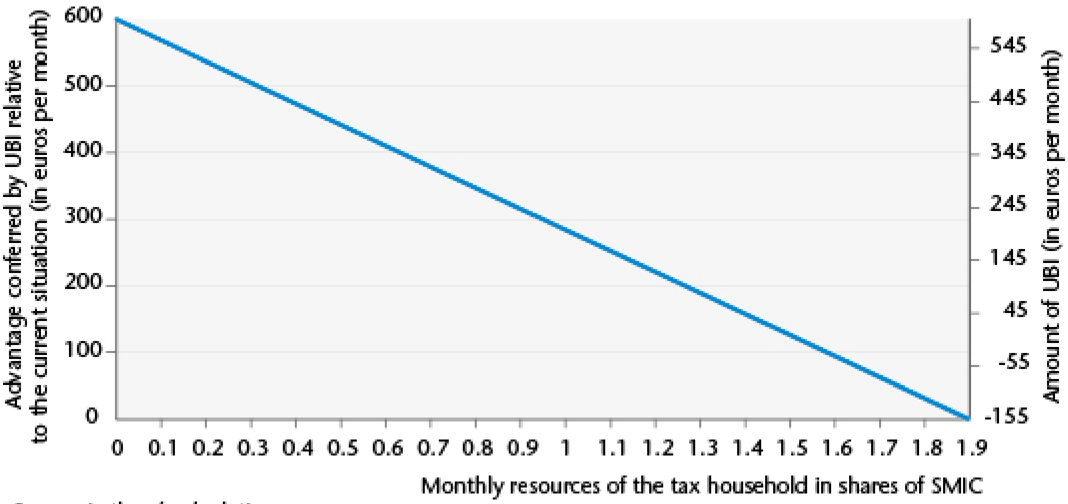
$UBI = 600 – 0.274 \times GR$

GR, gross resources, corresponds to the gross taxable income, as defined in the tax code, of the tax household, increased by a factor of 1.33 used to approximate the conversion between taxable income and gross resources including charges and contributions, the tax base for the calculation of the UBI. In the case of a married couple, the UBI is calculated as follows, since the UBI as proposed is not then individualized:

$UBI = [600 – 0.274 \times GR/2] \times 2$

In order to measure the measure's redistributive impact, we have drawn on the micro-simulation model of the DREES and INSEE known as *INES* ([3] see the box). As the last operational version of the model dates from 2015, the results presented must be interpreted In line with the legislation of 2015. In fact, measures such as the Prime d'activité credit, introduced in 2016, are not taken into account, in contrast to the Prime pour l'emploi in-work tax credit (PPE).

Figure 1. Amounts of UBI and advantages conferred in shares of SMIC for a tax household composed of one adult



Source: Authors' calculations.

As of January 2018, people over age 18 who are still reported in their parents' tax household and who are UBI eligible must leave their parents' tax household in order to benefit from the UBI. It should be noted that this case is not dealt with in our evaluation, given the complexity of taking into account transfers between parents and children when they are not in the same tax household. We will therefore focus on households in which the reference person was aged between 18 and 64, i.e. 20 million households out of the 28.3 million total households in France, as the rest, pensioners, are not eligible for the measure.

The UBI has been modelled as an additional line in the calculation of income tax, with the amount of UBI being subtracted, subject to conditions of age, resources and marital status explained above, from the latter.

Subject to these assumptions, the UBI should benefit 11.6 million households in which the reference person is aged 18 to 64, at a gross cost of around 51 billion euros, i.e. an average of 4,400 euros per year and per beneficiary household.

The gross cost is not the cost to the public purse. Indeed, the implementation of the UBI would de facto lead to the elimination of the base RSA income supplement and the Prime d'activité tax credit from the tax-benefit system. In 2016, these two programmes had a fiscal cost of close to 15 billion euros (10 billion euros for the RSA and 5 billion for the Prime d'activité). Moreover, the interactions between universal income and these other social benefits are not yet completely set out in Benoît Hamon's proposal[4]. If the amount received from UBI were to be taken into account for the calculation of the other social benefits, the amounts paid for these would fall significantly. The gross cost of universal income would remain unchanged, but savings could be realized on social benefits.

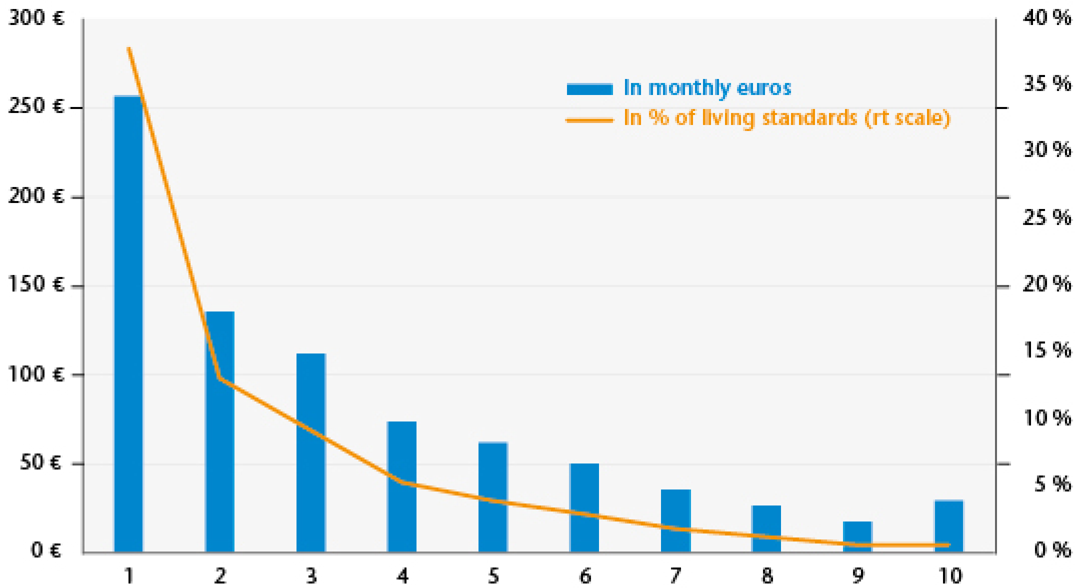
We assume here that the amount received in social benefits by the household is taken into account for the final calculation. In other words, we subtract from the amount of UBI received by the household 27.4% of the total amount of social benefits received in cash (housing and family allowance, scholarships, disabled adult allowance, etc., i.e. 32 billion euros per year for potential UBI beneficiaries). While including the benefits in the calculation of the amount of UBI is complicated by the structure of the microsimulation model, it is possible to estimate the reduction in the overall amount of UBI paid by taking into account total social benefits, about 6 billion euros.

If this option is chosen – which we assume in the absence of further clarification – UBI's "net" cost, excluding the 18-25 year-olds fiscally reporting under their parents, would be on the order of 30 billion euros, which is close to the amount declared by the candidate, to which, once again, it will be necessary to add the amount owed to individuals between the ages of 18 and 24 who are currently reported fiscally by their parents. In 2015, of the 5.2 million individuals aged 18 to 24, 1.7 million were fiscally independent of their parents. The additional gross cost if no 18-24 year-olds were included on their parents' tax statements would therefore be on the order of 25 billion euros, from which should be subtracted 27.4% of the scholarships (0.115 billion euros per year) and housing benefits paid (1.4 billion euros per year), as well as the tax benefits currently enjoyed by the parents of the said individuals (benefit of up to 1,500 euros per year and per child, to a maximum of 5.2 billion if all households are at the ceiling).

The measure, which is targeted at low-income households and not funded by an increase in household taxation or a decrease in social benefits, would have a positive impact on the bottom of the distribution of living standards (Figure 2) [5].

On average, households in the first decile of living standards should see their standard of living rise by 257 euros per month per consumption unit, i.e. a 38% increase in their average standard of living. The gain for households in the second decile should be roughly half as much, i.e. 137 euros per month per consumption unit, which represents a 13% increase in their average standard of living.

Figure 2. Average monthly gains by consumption unit and living standards decile



Source: INSEE Tax and revenue [Revenus fiscaux et sociaux] survey 2013 (updated 2015); Drees, Ines 2015 model, Authors' calculations.

Given that, unlike many benefits, the UBI is allocated not to households but to *tax* households, some members (not taxed jointly but cohabiting as unmarried couples not in PACS civil partnerships) of some households in the upper deciles of the distribution of living standards should receive the UBI (and the highest decile more than the ninth decile due to a composition effect). In other words, there are tax households with low gross incomes among households with high living standards[6].

Based on these assumptions, the median standard of living would be raised by 3.6%, and the poverty rate, i.e. the share of French households with resources under 60% of the median level, i.e. about 1,000 euros / month / consumption unit, would come to 8.5%, versus 13.4% at present. The median standard of living of the poorest households – those with a standard of living below the poverty line – would rise by 11%. The intensity of poverty, measured as the relative gap between the median standard of living of the poor and the poverty line, would also fall by a third, from 17% today to 11%.

Finally, the Gini coefficient of living standards, an indicator of inequality, would be reduced by 0.04 to a level of 0.26, thus moving France from a median situation in terms of the Gini at the European level to being among the least unequal countries – the European median of the Gini in 2015 was 0.30 (and the lowest 0.25).

Excluding the young people (aged 18-24) reported on their parents' taxes, the net cost of the UBI would be on the order of 30 billion euros. By adding them, subject to a more detailed assessment, the net cost would be on the order of 49 billion. This is a long way from the 400 billion once bandied about, but it is still not negligible[7]. If the UBI were to be financed by a reform of personal taxation, this would lead to a considerable increase in the marginal rates of the highest deciles of the income distribution. Note that personal income tax brings in 74 billion euros annually. Another tax base, such as wealth, could also be used, but this would lead to a significant hike in wealth taxes. Property taxes and the ISF wealth tax currently bring in a little less than 30 billion euros. Moreover, the redistributive effects of the UBI – which are significant, in our assessment – would be amplified by an increase in taxation that is already progressive.

Box: The *Ines* micro-simulation model (Sources: INSEE, DREES)

Ines is the acronym for "Insee-Drees", the two organizations that are jointly developing the model. The model is based on the INSEE's Tax and Social Revenue surveys (ERFS), which include several hundred details on each individual and accurate and reliable data on income taken from tax returns. It can be used to simulate all recent legislative years using more recent ERFS years.

The model is used to carry out studies at annual intervals, but it is also used for in-depth studies in order to inform the economic and social debate in the areas of monetary redistribution, taxation and social protection. Finally, it is sometimes used to aid reflection in response to specific requests from various high government councils, supervisory ministries or control bodies (IGF financial inspectorate, Court of Auditors [*Cour des comptes*], Igas social inspectorate).

The *Ines* model simulates:

– **Social charges and direct taxes:** social contributions, CSG wealth tax, CRDS debt contribution and income tax (including the Prime pour l'emploi credit);

– **Social benefits** other than those corresponding to replacement income: personal aid for housing; the main social minima: the Revenu de solidarité active (RSA) income supplement; the Disabled adult allowance (AAH) and its complements; pension supplements and the Supplementary disability allowance (ASI); family benefits: the Family allowance (AF), the Family complement, the Back-to-school allowance (ARS) and high school scholarships, the Young child benefit (Paje) and its complements (Free choice of activity complement – CLCA – and Free choice of childcare complement – CMG), public subsidies for childcare in collective and family kindergartens, the Family support allowance (ASF) and the Disabled child education allowance (AEEH); and the Prime d'activité credit.

The main omissions relate to local taxes and subsidies (property tax, for example) and the Solidarity tax on wealth (IS). Retirement pensions, unemployment benefits and housing tax are not simulated but are presented in the data. Indirect levies are strictly speaking also outside the scope of the *Ines* model. The model simulates, using ranges, the different benefits to which each household is entitled and the taxes and levies that it has to pay. *Ines* draws on the INSEE's Tax and Social Revenue surveys (ERFS), which bring together socio-demographic information from the Employment Survey, administrative information from the CNAF, the CNAV and the CCMSA, and details of the income reported to the tax authorities for the calculation of income tax.

Ines is a so-called "static" model: it does not take into account any changes in household behaviour, for example in terms of birth rates or labour market participation, which could be induced by changes in tax-benefit law. Since 1996, the model has been updated annually during the summer in order to simulate the most recent legislation and cover the preceding year. For example, in the summer of 2016, *Ines* was updated to simulate the legislation for 2015. Based on these updates, the INSEE and DREES teams contribute annually to the INSEE's *Social Portrait,* in which they analyse the redistributive balance sheet for the tax and benefit measures enacted during the preceding year. The latest publication is entitled “Tax and benefit reforms in 2015 are leading to a slight redistribution from the richest 30% to the rest of the population” (André, Biotteau, Cazenave, Fontaine, Sicsic, Sireyjol).

---

[1] Recall that the family quotient gives entitlement to a maximum tax reduction of 30,000 euros per year. The abolition of the family quotient would yield 5.5 billion euros (HCF, 2011) but would cost all the UBI paid to partners with a lower income who have chosen individualization.

[2] We have chosen not to take into account these tax optimization mechanisms within households, but it is understood that this means the evaluation proposed for the cost of the measure is underestimated.

[3] The source code and documentation for the *INES* micro-simulation model was opened to the public in June 2016 (https://adullact.net/projects/ines-libre). We have been using the 2015 open access version since 1 October 2016.

[4] In particular, the use of a micro-simulation model such as *INES* makes it possible to explore the consequences of different choices that can be made about the situation of the persons covered, the net redistribution effected and what has to be financed. A change in the rules for allocating or calculating a social benefit can have significant impacts on the net cost and the redistributive effects.

[5] The proposed measure significantly alters the distribution of living standards. Due to this, some households see their membership in a decile of living standards change positively or negatively. The deciles are maintained here at their pre-reform level.

[6] By way of illustration, the average age of the reference persons in households in the upper decile of the standard of living benefiting from the UBI is over 55. It can thus be assumed that these households are home to young adults who are fiscally independent but have few resources.

[7] The evaluation presented here is called "static". It therefore does not take into consideration any possible changes in individual behaviour with respect to employment due to the impact of this measure.

Europe is dead – Long live Europe!

By Maxime Parodi and Xavier Timbeau

The British people's vote for Brexit merely reinforces the political logic that has become an imperative. On the one hand, people want to be consulted, while on the other, Europe is summoned to change. François Hollande believes that, "the vote of the United Kingdom is putting Europe to the test"; Alain Juppé holds that, "we must write a new page, a new chapter, in the history of Europe"; the leaders of France's National Front, but not they alone, are calling for a referendum on France's membership in the EU and in the euro. Throughout Europe, debate along these same lines is underway.

A few days ago, we wrote on the Terranova Foundation site: "The referendum on the UK's membership in the European Union will lead to a shock that is more political than economic. It will be difficult to contain demands for similar consultations. Meeting these demands by ‘more Europe’ will only heighten the distance between the peoples and European construction. To think that referendums could on the other hand legitimize the status quo would also be a mistake. We propose responding to the democratic need not by a ‘all or nothing’ approach but by a process of democratic ownership that helps to legitimize European integration and to imagine future possibilities.”

This method of democratic ownership of Europe and the euro has to be taught. Referendums “for or against” won’t cut it. The federal leap now acts as a foil for probably a large majority of Europeans. But a public domain does nevertheless exist in Europe. Articulating what today are the sites of democracy, the EU Member States, with the need, for some subjects, of a supranational legitimacy is the alternative to the invention of the European citizen. But it is the method that counts. And all the levers of participatory democracy, of broad national and transnational debates, including through citizen juries, must be mobilized to take stock of the current state of Europe and propose reforms that will render it more democratic. **This could lead to concrete advances such as a parliament of the euro zone or an extension of the European Parliament’s powers.** It is also the way to reverse the trend towards the breakdown of Europe.

Give Recovery a Chance

By iAGS team, under the direction of [Xavier Timbeau]

The ongoing recovery of the Euro Area (EA) economy is too slow to achieve a prompt return to full employment. Despite apparent improvement in the labour market, the crisis is still developing under the covers, with the risk of leaving long-lasting “scars”, or a “scarification” of the social fabric in the EA. Moreover, the EA is lagging behind other developed economies and regardless of a relatively better performance in terms of public debt and current account, the current low rate of private investment is preparing a future of reduced potential growth and damaged competitiveness. So far, the Juncker Plan has not achieved the promised boost to investment. The internal rebalancing of the EA may fuel deflationary pressure if it is not dealt with through faster wage growth in surplus countries. Failure to use fiscal space where it is available will continue to weigh down on internal demand. Monetary policy may not succeed in the future in avoiding a sharp appreciation of the Euro against our trade partners’ currencies. Such an appreciation of the real effective exchange rate of the Euro would lock the EA in a prolonged period of stagnation and low inflation, if not deflation.

A window of opportunity has been opened by monetary policy since 2012. Active demand management aimed at reducing the EA current account combined with internal rebalancing of the EA is needed to avoid a worrying “new normal”. Financial fragmentation has to be limited and compensated by a reduction of sovereign spreads inside the euro area. Active policies against growing inequalities should complement this approach. Public investment and the use of all policy levers to foster a transition toward a zero carbon economy are ways to stimulate demand and respect the golden rules of public finance stability.

For further information, see [iAGS 2016 report]

An ever so fragile recovery

By the Department of Analysis and Forecasting, under the direction of [Eric Heyer]() and [Xavier Timbeau]()

This text summarizes the OFCE's [economic forecast for 2015-2017]() for the euro zone and the rest of the world.

The figures for euro zone growth in the first half of 2015 have confirmed the upswing glimpsed at the end of 2014. While the zone's return to growth might once have been taken to indicate the end of the global economic and financial crisis that struck in 2008, the turbulence hitting the emerging countries, particularly over the summer in China, is a reminder that the crisis ultimately seems to be continuing. China's economic weight and its role in world trade are now so substantial that, even in the case of a soft landing, the impact on growth in the developed countries would be significant. We nevertheless anticipate that the scenario for a recovery need not be called into question, and that euro zone growth will be broadly supported by favourable factors (lower oil prices and ECB monetary support) and by some weakening of unfavourable factors (easing of fiscal policies). But the fact remains that the situation in the developing world will add new uncertainty to an already fragile recovery.

Between 2012 and 2014, the euro zone economies stagnated at the very time that the United States turned in average GDP growth of 2%. The recovery that got underway after the sharp contraction in 2008-2009 was quickly cut short in the euro zone by the sovereign debt crisis, which led almost immediately to the uncontrolled tightening of financial conditions and the reinforcement of the fiscal consolidation being implemented in the Member States, as they searched for market credibility.

The euro zone then plunged into a new recession. In 2015, these economic policy shocks are no longer weighing on demand. The ECB helped to reduce sovereign debt risk premiums by announcing the Outright Monetary Transaction programme (OMT) in September 2012 and then by implementing quantitative easing so as to improve financial conditions and promote a fall in the euro. In terms of fiscal policy, while in some countries the consolidation phase is far from over, the measures being taken are smaller in scale and frequency. Furthermore, growth will also be helped by the fall in oil prices, which should last, and the resulting gains in household purchasing power should in turn fuel private consumption. These factors thus reflect an environment that is much more favourable and propitious for growth.

However, it is clear that this scenario depends on some volatile elements, such as the fall in oil prices and the weaker euro. The Chinese slowdown adds another element of risk to the scenario, which is based on the assumption that China will make a smooth transition from an export-oriented growth model to one driven by domestic demand. We expect the euro zone to grow at a rate of 1.5% in 2015 and 1.8% in 2016 and 2017. The main short-term risks to this scenario are negative. If oil prices go up and the euro doesn’t stay down, and if the slowdown in the emerging countries turns into an economic and financial crisis, then growth worldwide and in the euro zone will be significantly lower. This risk is particularly critical given the very high level of unemployment still plaguing the zone (11% in August 2015). Nevertheless, given the pace of anticipated growth, we expect the unemployment rate to fall in 2016-2017 by around 0.6 percentage point per year. At this pace, it will take almost seven years to bring the rate back to its pre-crisis level. So while the prospects for recovery from the 2008 crisis are uncertain, the social crisis undoubtedly has a long time to run.

Investing in the zero carbon economy in order to escape secular stagnation

By Xavier Timbeau

What the downward revisions of various forecasts (IMF, OECD, OFCE) presented in early autumn 2015 tell us about the euro zone is not very comforting. A recovery is underway, but it is both sluggish and fragile (see: "A very fragile recovery"). The unemployment rate in the euro zone is still very high (almost 11% of the labour force in the second quarter), and a sluggish recovery means such a slow fall (0.6 point per year) that it will take more than seven years to return to the 2007 level. Meanwhile, the European Central Bank's unconventional monetary policy is having difficulty re-anchoring inflation expectations. The announcement of quantitative easing in early 2015 pushed up the 5-year/5-year forward inflation rate [1], but since July 2015 the soufflé has collapsed once again and medium-term expectations are 0.8% per year, below the ECB target (2% per year). Underlying inflation has settled in at a low level (0.9% per year), and there is a high risk that the euro zone will be frozen in a state of low inflation or deflation, strangely resembling what Japan has experienced from the mid-1990s to today. Low inflation is not good news because it is triggered by high unemployment and slowly rising nominal wages. The result is real wages growing more slowly than productivity. Little or no inflation means both real interest rates that remain high, which increases the burden of debt and paralyzes investment, but also an unconventional monetary policy that undermines the ability to measure risks and which gradually loses its credibility for maintaining price stability, i.e. to keep inflation within declared targets. At the Jackson Hole Symposium in August 2014, Mario Draghi announced that, in the face of persistent unemployment, monetary policy cannot do everything. Structural reforms are necessary (what else could a central banker say?). But a demand policy is also needed. Not having one means running the risk of secular stagnation, as was formulated by Hansen in the late 1930s and recently brought up to date by Larry Summers.

Europe does not, however, lack investment opportunities. The COP21 commitments, though timid, assume a reduction in CO2 emissions (equivalent) per capita from 9 tons to 6 tons within 15 years, and investment will need to pick up pace in a big way if the change in global temperature is not to exceed 2°C. This means aiming to put an end to the use of petroleum and coal (or the large-scale development of carbon capture and storage) within 35 years. Achieving this will require investment on a massive scale, which is estimated in the European Commission’s Energy Road Map at over 260 billion euros (nearly 2% of GDP) per year by 2050. The social profitability of such investments is substantial (since it helps to avoid climate catastrophe and makes it possible to meet the EU’s commitments to the world’s other countries), but – and this is the problem posed by our sluggish recovery – their private profitability is low, and uncertainty about future demand together with poor coordination could give pause to the “animal spirits” of our entrepreneurs. Secular stagnation results from the very low profitability of investments, particularly after taking into account the real rates anticipated and the risk of a more serious depression. To avoid this trap, the social returns on investment in a zero carbon economy need to become evident to all, and in particular they need to coincide with private returns. There are numerous tools that can do this. We can use carbon pricing and markets for trading in emission rights; we can use a carbon tax; we can develop certificates for new investments (assuming we know how to ensure that they reduce CO_2 emissions compared to an opposing counterfactual) or impose standards (if these are followed!). The difficulties of the transition and the acceptance of a relatively painful change in prices can be eased by compensatory measures (which have a budgetary cost, see Chapter 4 of the IAGS 2015 report, but are part of the stimulation package). It might also be desirable to draw on monetary policy to amplify the stimulus (see this proposal by Michel Aglietta and Etienne Spain). The implementation of artillery like this to reduce emissions and boost the European economy is not straightforward and would require wrenching the institutional framework. But that's the price to pay in order to avoid sinking into a long period of stagnation which, with the inequalities and impoverishment that it would generate, would certainly break up the European project.

This text was published on *Alterecoplus* on 22 October 2015.

Greece: an agreement, again and again

By Céline Antonin, Raul Sampognaro, Xavier Timbeau, Sébastien Villemot

… La même nuit que la nuit d'avant [...The same night as the night before

Les mêmes endroits deux fois trop grands The same places, twice too big

T’avances comme dans des couloirs You walk through the corridors
Tu t’arranges pour éviter les miroirs You try to avoid the mirrors
Mais ça continue encore et encore … But it just goes on and on…]

Francis Cabrel, Encore et encore, 1985.

Just hours before an exceptional EU summit on Greece, an agreement could be signed that would lead to a deal on the second bail-out package for Greece, releasing the final tranche of 7.2 billion euros. Greece could then meet its deadlines in late June with the IMF (1.6 billion euros) as well as those in July and August with the ECB (6.6 billion euros) and again with the IMF (0.45 billion euros). At the end of August, Greece’s debt to the IMF could rise by almost 1.5 billion euros, as the IMF is contributing 3.5 billion euros to the 7.2 billion euro tranche.

Greece has to repay a total of 8.6 billion euros by September, and nearly 12 billion by the end of the year, which means funding needs that exceed the 7.2 billion euros covered by the negotiations with the Brussels Group (i.e. the ex-Troika). To deal with this, the Hellenic Financial Stability Fund (HFSF) could be used, to the tune of about 10 billion euros, but it will no longer be available for recapitalizing the banks.

If an agreement is reached, it will almost certainly be difficult to stick to it. First, Greece will have to face the current bank run (despite the apparent calm in front of the bank branches, more than 6 billion euros were withdrawn last week according to the *Financial Times*). Moreover, even if an agreement can put off for a time the scenario of a Greek exit from the euro zone, the prospect of exceptional taxes or a tax reform could deter the return of funds to the country’s banks. Furthermore, the agreement is likely to include a primary surplus of 1% of GDP by the end of 2015. But the information on the execution of the state budget up to May 2015 (published 18 June 2015) showed that revenue continues to be below the initial forecast (- 1 billion euros), reflecting the country's very poor economic situation since the start of 2015. It is true that the lower tax revenues were more than offset by lower spending (down almost 2 billion). But this is cash basis accounting. The monthly bulletin for April 2015, published on 8 June 2015, shows that the central government payment arrears have increased by 1.1 billion euros since the beginning of 2015. It seems impossible that, even with an excellent tourist season, the Greek government could make up this lag in six months and generate a primary surplus of 1.8 billion euros calculated on an accrual basis.

A new round of fiscal tightening would penalize activity that is already at half-mast, and it could be even more inefficient in that this would create strong incentives to underreport taxes in a context where access to liquidity will be particularly difficult. The Greek government could try to play with tax collection, but introducing a new austerity plan would be suicidal politically and economically. Discussion needs to get started on a third aid package, including in particular negotiations on the reduction of Greece's debt and with the counterparties to this relief.

Any agreement reached in the coming days risks being very fragile. Reviving some growth in Greece would require that financing for the economy is functioning once again, and that some confidence was restored. It would also require addressing Greece's problems in depth and finding an agreement that was sustainable over several years, with short-term steps that need to be adapted to the country's current situation. In our study, "Greece on the tightrope [in French, or the English-language post describing the study at http://www.ofce.sciences-po.fr/blog/greece-tightrope/]," we analysed the macroeconomic conditions for the sustainability of the Greek debt. More than ever before, Greece is on the tightrope. And the euro zone with it.

Save Greece by Democracy!

By Maxime Parodi @MaximeParodi, Thomas Piketty (Director of research at the EHESS and professor at Paris School of Economics), and Xavier Timbeau @XTimbeau

The newspapers have been full of the Greek drama since Syriza’s election to power on 25 January 2015. Caught in the noose of its loans, Greece’s government is defending its position by threatening to leave the euro zone. The situation today is at an impasse, and the country’s economy is collapsing. As bank deposits flee and uncertainty mounts about the times ahead and the measures to come, no-one is really able to think about the future.

Europeans, for their part, are wondering what has led to this state of affairs. There has been a diagnosis of Institutional incompleteness, with proposals to reinforce the construction of the euro zone. But what is emerging is not up to the challenges facing Europe.

So let’s take the problem by the other end of the stick and give European democracy a chance to evolve. Let’s entrust the resolution of the Greek debt crisis to a body of representatives of the euro zone’s national parliaments, that is to say, an embryo of a true parliamentary assembly for the euro zone.

Such an Assembly would arbitrate the conflict between the creditors and the Greek government, shifting the debate and decision-making to the big questions: what responsibility should the younger generation bear for the debt of their elders? What about the creditors' rights? How have other large public debts been resolved historically, and what lessons can we draw for the future?

As any agreement reached would be legitimated by a formal assembly that would also act as its guardian, it would no longer be in danger of being denounced – once again – on the morrow. Since what's at stake is to resolve a debt and to not reach an agreement through force, the first step would be to suspend Greece's debt for the time needed. This step is a matter of common sense and the ordinary practice during the resolution of private debt in nearly all the world's countries.

A lasting agreement

This would require leaving the IMF out of the discussion by letting Greece reimburse this institution. It would be necessary at the same time to eliminate the possibility of Athens leaving the euro zone. By accepting the principle of negotiations, Greece and the other European countries would take this option off the agenda and pledge to accept the agreement reached. This embryonic Assembly would periodically review the situation and monitor the contingencies of the Greek economy. This is in effect what is already being done today, but now this would be explained and legitimated.

The technical institutions (the Commission, the European Central Bank) would continue to assess and support the reforms envisaged. They would inform the Assembly and answer to it. The Assembly would be a body set up to arbitrate, whenever necessary, any conflicts. Nor would there be any reason not to involve the European Council and the European Parliament. But clarifying the issue of legitimacy would open the door to a solution that was both more constructive for Greece and the other heavily indebted countries and fairer to the taxpayers of the euro zone.

We would be experimenting with a scheme for the resolution of sovereign defaults within the euro zone by building a political union – while remembering one thing: that Europe was reconstructed starting back in the 1950s by investing in the future and forgetting the debts of the past, in particular Germany's.

Finally, this Assembly would be competent to establish a common fund for euro zone debt, to undertake its global restructuring and to establish democratic rules governing the choice of a common level of public deficits and investments – which would help to overcome today's Do-It-Yourself approach to our euro zone.

The spirit of the letter of the law … to avoid a "Graccident"

Raul Sampognaro and Xavier Timbeau

The noose, in the words of Alexis Tsipras, is getting tighter and tighter around the Greek government. The last tranche of the aid program (7.2 billion euros) has still not been released as the Brussels Group (the ex-Troika) has not accepted the conditions on the aid plan. The Greek state is therefore on the brink of default. It might be thought that this is simply one more episode in the drama that Greece has been acting out with its creditors and that, once again, at the last moment the money needed will be found. But if Greece has managed to meet its deadlines up to now, it has been at the price of expedients that it is not at all certain can be used again.

While tax revenues since the start of the year have been almost one billion euros behind the anticipated targets, the expenses for wages and pensions still have to be paid each month. This time the wall is getting closer, and an agreement is needed if the game is to continue. In June, Greece must pay 1.6 billion euros to the IMF in four tranches (5, 12, 16 and 19 June). On 28 May an IMF spokesperson confirmed the existence of a rule that would make it possible to group these payments on the last day of the month (a rule last used by Zambia in the 1980s). Since it would then take six weeks for the IMF to consider Greece in default, the country could still gain a few days after 30 June before the deadline with the ECB (with 2 tranches for a total 3.5 billion euros by 20 July 2015).

Historically very few countries have failed to honour their payments to the IMF (currently only Somalia, Sudan and Zimbabwe are in arrears to the IMF, for a few hundred million dollars). As the IMF is the last resort in case of a crisis in liquidity or the balance of payments, it has, as such, the status of preferred creditor, so defaulting on its debt may trigger cross defaults on other securities, in particular, in the Greek case, those held by the European Financial Stability Facility (EFSF). This could make them due immediately. A Greek default with the IMF could well jeopardize Greece's entire public debt and force the ECB to reject Greek bonds as collateral in the Emergency Liquidity Assistance (ELA) operations, the only firewall remaining against the collapse of the Greek banking system.

The legal consequences of such a default are difficult to grasp (which says a lot about the modern financial system). An article published by the Bank for International Settlements, dated July 2013, whose author, Antonio Sainz de Vicuña, was then Director General of ECB Legal Services, is very informative about this issue in the context of the Monetary Union.

In presenting the legal framework, Sainz de Vicuña focuses on Article 123 of the Treaty on the Functioning of the European Union (TFEU), a pillar of the Monetary Union, which prohibits the ECB or the national central banks from financing government[1]. In a footnote, the author concedes that there are two exceptions to this rule:

– “Credit institutions controlled by the public sector, which may obtain central bank liquidity on terms identical to private credit institutions.” This exception appears explicitly in paragraph 2 of Article 123 of the TFEU[2].

– “The financing of state obligations vis-à-vis the IMF.”

This second aspect has attracted our attention because it is little known to the general public, it does not appear explicitly in the Treaty and it could be a solution, at least in the short term, to avoid Greece being put in default by the IMF .

In searching the corpus of European law, this exception is defined more precisely in Council Regulation no. 3603/93, which clarifies the terms of Article 123 of the TFEU, which it is authorized to do under paragraph 2 of Article 125 of the TFEU[3]. More specifically, in Article 7:

The financing by the European Central Bank or the national central banks of obligations falling upon the public sector vis-à-vis the International Monetary Fund or resulting from the implementation of the medium-term financial assistance facility set up by Regulation (EEC) No 1969/88 (4) shall not be regarded as a credit facility within the meaning of Article

104 of the Treaty[4].

The justification for this article is that: during quota increases in the IMF, the financing by the central bank was accepted because It had as a counterpart an asset comparable to international reserves. In the spirit of the law, financing Greek borrowing from the IMF by a credit from the central bank (the ECB or the Bank of Greece) should not be permitted. The obligations falling upon the Greek state probably only concern, according to the spirit of the text, the contribution to the IMF quotas. Nevertheless, the spirit of the law is not the law, and the proper interpretation of the phrase "obligations falling upon the public sector *vis-à-vis* the International Monetary Fund" could open another door for Greece. Given the consequences of a default with the IMF – in particular the continuity of the ELA – invoking this could be justified as preserving the functioning of the Greek payment system, a role falling within the mission of the ECB.

Beyond the legal possibility of a central bank financing Greece's debt to the IMF, which would certainly be challenged by some governments, this action would open up a political conflict. A MemberState could be accused of violating (the spirit of) the Treaties, even though that is not a reason to exclude it (according to the ECB's Legal Services). But is this really an obstacle in view of the importance a default on Greece's debt would have for the sustainability of the single currency?

Greece's cash flow problems are not new. Since January, the government has been financing its expenditure through accounting transactions that allowed it to offset tax losses. In particular, on 12 May, the Greek government was able to repay an IMF loan tranche by drawing on an emergency fund that was essentially international reserves. The Eurosystem was able to use this exception to give Greece extra time in order to continue the negotiations and avoid the accident.

[1] Paragraph 1 of the article stipulates that, “Overdraft facilities or any other type of credit facility with the European Central Bank or with the central banks of the Member States (hereinafter referred to as “national central banks”) in favour of Union institutions, bodies, offices or agencies, central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of Member States shall be prohibited, as shall the purchase directly from them by the European Central Bank or national central banks of debt instruments.”

[2] Which stipulates that, “Paragraph 1 shall not apply to publicly owned credit institutions which, in the context of the supply of reserves by central banks, shall be given the same treatment by national central banks and the European Central Bank as private credit institutions.”

[3] Which stipulates that, “The Council, on a proposal from the Commission and after consulting the European Parliament, may, as required, specify definitions for the application of the prohibitions referred to in Articles 123 and 124 and in this Article.”

[4] Article 104 became Article 123 in the TFEU.

Greece on a tightrope

By Céline Antonin, Raul Sampognaro, Xavier Timbeau and Sébastien Villemot

This text summarizes the special study, “Greece on a *tightrope”*

Since early 2015, Greece’s new government has been facing intense pressure. At the very time that it is negotiating to restructure its debt, it is also facing a series of repayment deadlines. On 12 May 2015, 750 million euros was paid to the IMF by drawing on the country’s international reserves, a sign that liquidity constraints are becoming more and more pressing, as is evidenced by the letter sent by Alex Tsipras to Christine Lagarde a few days before the deadline. The respite will be short: in June, the country has to make another payment to the IMF for 1.5 billion euros. These first two deadlines are only a prelude to the “wall of debt” that the government must deal with in the summer when it faces repayments of 6.5 billion euros to the ECB.

Up to now, Greece has made its payments despite its difficulties and the suspension of the bailout program negotiated with the “ex-Troika”. Thus, 7.2 billion euros in remaining disbursements have been blocked since February 2015; Greece has to come to an agreement with the former Troika before June 30 if it is to benefit from this financial windfall, otherwise it will fail to meet its payment deadlines to the ECB and IMF and thus default.

Besides Greece’s external repayments, the country must also meet its current expenses (civil servant salaries, retirement pensions). But the news on the fiscal front is not very encouraging (see State Budget Execution Monthly Bulletin, March 2015): for the first three months of the year, current revenue was nearly 600 million euros below projections. Only the use of its European holding funds, combined with an accounting reduction in expenditures (1.5 billion euros less than forecast) allowed the Greek government to generate a surplus of 1.7 billion euros and to meet its deadlines. So by using bookkeeping operations, the Greek government was able to transfer its debt either to public bodies or to its providers, thus confirming the tight liquidity constraints facing the

State. Preliminary data at the end of April (to be taken with caution because they are neither definitive nor consolidated for all government departments) seem nevertheless to qualify this observation. At end April, tax revenues had returned to their expected level; however, the government's ability to generate cash to avoid a payment default is due to its holding down public spending through the accounting operations described above. These accounting manipulations are simply emergency measures, and it is high time, six years after the onset of the Greek crisis, to put an end to this psychodrama and finally find a lasting solution to Greece's fiscal difficulties.

Our study, "Greece on a tightrope", considers what would be the best way to resolve the Greek debt crisis over the long term and the potential consequences of a Greek exit from the euro zone. We conclude that the most reasonable scenario would be to restructure the country's debt, with a significant reduction in its present value (cutting it to 100% of Greek GDP). This is the only way to significantly reduce the likelihood of a Grexit, and is in the interest not only of Greece but also of the euro zone as a whole. Furthermore, this scenario would reduce the scale of the internal devaluation needed to stabilize Greece's external position.

If the Eurogroup were to refuse to restructure Greece's debt, a new assistance program would then be needed in order to deal with the current crisis of confidence and to ensure funding for the cash needs of the Greek State over the coming years. According to our calculations, this solution would require a third bailout plan of around 95 billion euros, and its success would depend on Greece being able to generate major primary budget surpluses (of around 4% to 5% of Greek GDP) over the coming decades. Historical experience shows that, due to political constraints, there is no guarantee of being able to run a surplus of this magnitude for such a long time, so this commitment is not very credible. A new assistance program would not therefore eliminate the risk that the Greek State would face yet another financial crisis in the coming years.

In other words, the full repayment of the Greek debt is based on the fiction of running a budget surplus for several decades. Accepting a Greek exit from the euro zone would imply a significant loss of claims that the world (mainly Europe) holds both on the Greek public sector (250 billion euros) and on the private sector (also on the order of 250 billion). To this easily quantifiable loss would be added the financial, economic, political and geopolitical impact of Greece's departure from the euro zone and possibly the European Union. This might look like an easy choice, since writing off 200 billion euros in loans to the Greek State would make it possible to end this psychodrama for once and for all. But the political situation is deadlocked, and it is difficult to give up 200 billion euros without very strong counterparties and without dealing with the issue of moral hazard, in particular the possibility that this could induce other euro zone countries to demand large-scale restructurings of their own public debt.