

Financing higher education: Should students have to pay?

By [Guillaume Allègre](#) and [Xavier Timbeau](#)

Is it necessary to ensure that a greater portion of the cost of higher education is borne by students in the form of higher tuition fees, which might or might not be coupled with loans? It is often argued that financing higher education through taxes is anti-redistributive. We show in a [working document](#) that from a life cycle perspective proportional taxation is not anti-redistributive.

While raising higher education fees is not on the political agenda in France, it is a subject of intense fighting, not only in Quebec, but also in Spain and Great Britain, where student protests erupted at the end of 2010. Reports in France regularly propose raising tuition fees: recently (2011), in a note by the [Institut de l'Entreprise](#) [in French] on the role of business in financing higher education, Pierre-André Chiappori proposes “lifting the taboo on tuition fees”. In a [contribution to Terra Nova](#) [in French] published in 2011, Yves Lichtenberger and Alexandre Aïdara propose raising annual university tuition fees by about 1000 euros. Paradoxically, the authors also propose creating a study allowance that could be used anytime in a person’s life. The authors are attempting to deal with two contradictory economic dynamics. On the one hand, a study allowance would help raise the general level of education, a factor in innovation and growth, while simultaneously fighting against social self-selection in higher education:

In countries that have adopted it [the study allowance], disadvantaged social strata may have an opportunity to undertake lengthier studies even though their social origins have predestined them to short-term courses that provide quick entry into salaried employment. This is an important means of

raising the general level of education and the qualifications of young people, which is a central concern of this report. (Lichtenberger and Aïdara, [p.82](#))

But on the other hand, education benefits better-off strata, and being free makes it anti-redistributive:

The fact that public higher education is virtually free leads, first, to a transfer of resources (the public cost of education) to young people who are in education the longest. This overwhelmingly means young people from better-off strata. This transfer is reflected ultimately in private returns to the beneficiaries: higher wages and then pensions, which benefit the most highly educated throughout their lives.... As things stand, higher education's free character has no redistributive value and even aggravates inequalities. (Lichtenberger and Aïdara, [p.84](#))

Indeed, even if the anti-redistributive character of free higher education is not the only argument made by advocates of higher tuition, it is one of their main arguments. This argument relies on a static and familialist vision of redistribution. We adopt a life cycle perspective instead.

As highlighted in the second excerpt above, on average the beneficiaries of education spending enjoy a significant private benefit: they will have higher wages and pensions throughout their lives. Even assuming that tax (on income) is proportional to income (which is not the case: in reality, it is progressive), they will pay much more tax, in absolute terms, than individuals who have completed shorter studies. Above all, tax allows for the financing of education by individuals who actually receive significant private benefits, and in proportion to this benefit. People who suffer discrimination in the labour market or who were oriented towards less profitable sectors and benefit from low returns to education reimburse society a lesser amount through their taxes than those who benefit more. Financing through income tax leads people with higher incomes to contribute even when they have not had a lengthy education. The injustice would therefore lie in the transfer between persons with high

incomes who are not highly educated and those who are highly educated. But if education is characterized to a great extent by significant social returns, thanks to its impact on growth ([see Aghion and Cohen](#)), then people with high incomes are actually beneficiaries of spending on education, whether or not they are highly educated themselves (for instance, self-taught entrepreneurs benefit from the availability of skilled labour).

Adopting a life cycle perspective, we show in a [working document](#) that financing spending on non-compulsory education (beyond 16 years) by a proportional tax represents a net transfer from those with higher incomes during their careers to those with lower incomes during their careers. From a life cycle perspective, free non-compulsory education financed by taxes does not benefit individuals with more affluent parents (the transfer from individuals from better-off households to those from poorer households is not significantly different from zero). If individuals from the poorest households react to the increase in tuition fees by reducing their investment in education, even when this is financed by loans, then there can be little doubt that they will be the first victims of this type of reform. Advocates of tuition increases generally argue for small increases in tuition fees and exemptions based on means-testing the parents. But recent developments in Australia, the United Kingdom and Canada show that, once the fees have been introduced, it is difficult to prevent governments that are seeking new funds from increasing the fees and reducing the exemption thresholds.

In higher education, the leading injustice is the lack of access to people from modest backgrounds. The surest way to ensure equity in education is still to fund it through income tax and to reform education so that it is targeted at academic success for all rather than at selection.

The euro zone in crisis: challenges for monetary and fiscal policies

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

The 9th EUROFRAME conference [\[1\]](#) was held on 8 June 2012 in Kiel on issues concerning the economic policy of the European Union. The topic was: “The euro zone in crisis: challenges for monetary and fiscal policies”. The conference was, of course, dominated by the issue of the sovereign debt crisis in the euro zone. How did it come to this? Should the blame be put on mistakes in national economic policies? Must the way the euro zone is organized be changed?

A number of fault lines appeared (*cf.* also the related [Note](#) in French):

- Some believe that it is irresponsible domestic policies that are the cause of the imbalances: the southern countries were allowed to develop real estate and wage bubbles, while the northern countries carried out virtuous policies of wage moderation and structural reform. The southern countries must adopt the strategy of the northern countries and accept a prolonged dose of austerity. For others, the single currency has allowed the development of mirror opposite imbalances: too much austerity in the North, and too many wage increases in the South; what is needed is a convergence where stimulus in the North facilitates the absorption of the external imbalances in the South.
- For some, every country must implement policies that

combine fiscal consolidation and structural reform. For others, what is needed is an EU-wide growth strategy (in particular by financing an ecological transition) and a guarantee of public debt so as to promote a convergence of national interest rates at lower levels.

- Some believe that any new solidarity measures involve developing a Union budget, which means the inclusion of binding rules in the Fiscal Compact; for others, what is needed is the open coordination of economic policies, without pre-established standards.

We provide a report that includes brief comments [\[2\]](#) in a lengthy [Note](#).

[\[1\]](#) [EUROFRAME](#) is a network of European economic institutes that includes: DIW and IFW (Germany), WIFO (Austria), ETLA (Finland), OFCE (France), ESRI (Ireland), PROMETEIA (Italy), CPB (Netherlands), CASE (Poland), NIESR (United Kingdom).

[\[2\]](#) Most of the articles are available at: <http://www.euroframe.org/index.php?id=7>. Selected articles will be published in an issue of the *Revue de l'OFCE*, in the “Débats et Politiques” collection, at the end of 2012. The report reflects the views of the authors alone.

European Council: wait and sink?

By [Jérôme Creel](#), Paul Hubert and [Francesco Saraceno](#)

The European Council meeting being held at the end of the week should have been spent, according to the wishes of the French authorities, on renegotiating the European Fiscal Compact adopted on 2 March 2012. However, renegotiation has not been on the agenda. Alas, the Fiscal Compact does need to be re-opened for debate: it should be denounced for being poorly drafted, and its overly restrictive character needs to be reviewed; ultimately, the text should be amended. The focus of the debate on the structural deficit rule, which is unfairly described as the “golden rule”, is wide of the mark in so far as it is the rule on the reduction of public debt that is the more restrictive of the two rules included in the Fiscal Compact. This is the rule that demands to be discussed, and urgently, in order to avoid sinking deeper into a contagion of austerity plans that are doomed in advance...

The conflict over European growth between the French and Italians on the one side and the Germans on the other was probably defused by the agreement late last week with Spain in favour of a coordinated European recovery plan. The plan represents 1% of Europe's GDP, *i.e.* 130 billion euros, though its contours and funding remain to be clarified. The slogan of the European Council has thus been, by a process of elimination, “banking union”, in an effort to prevent a new wave of banking and financial crises in the European Union. Is the creation of a banking union important? Certainly. Is it urgent? Less so than a return to growth, which, while it certainly cannot be decreed, can be prepared. Given the state of the current Fiscal Compact, we can conclude that what is being prepared is not economic growth, but recession [\[1\]](#).

The Fiscal Compact, which is contained in Title III of the [Treaty on Stability, Coordination and Governance in the Economic and Monetary Union](#), explicitly includes two fiscal rules. The first clarifies what constitutes a budgetary position that is “balanced or in surplus”, a term enshrined long ago in the Stability and Growth Pact. According to the

Fiscal Compact of March 2012, a budgetary position that is “balanced or in surplus” means a structural deficit of at most 0.5% of GDP. The structural deficit is the cyclically adjusted public deficit, *i.e.* adjusted for the well-known automatic stabilizers; this includes interest charges, among other items. When the structural deficit is exceeded, apart from exceptional circumstances, *e.g.* a “significant” downturn in activity, an automatic adjustment mechanism, whose nature is not specified, must bring it back below this limit. The structural deficit rule is relaxed for Member States whose public debt is below 60% of GDP: the structural deficit ceiling is increased to 1% of GDP.

The second fiscal rule is also a requirement for euro zone Member States with a public debt in Maastricht terms that is greater than 60% of GDP. In 2012, this rule applies to 12 out of the 17 Member States of the euro zone. This second rule aims to reduce the public debt by one-twentieth every year. Unfortunately, the text adopted is poorly written and opens the door to different interpretations, as we show below. It is therefore inapplicable. Even worse, given the current state of the economy, this rule is the more restrictive of the two rules in the Fiscal Compact. It is therefore urgent to pay attention to it and modify it to make it enforceable.

According to Article 4 of the Treaty, “When the ratio of a Contracting Party’s general government debt to gross domestic product exceeds the 60% reference value..., that Contracting Party shall reduce *it* at an average rate of one-twentieth per year as a benchmark...” The problem is that “*it*”, which we have put in italics, refers to the public debt ratio rather than to the difference between the public debt and the 60% reference value. So, in 2012 should Germany, with a public debt in 2011 of a little more than 80% of GDP, reduce its debt by 4 GDP points (one-twentieth of 80% of GDP) or by 1 GDP point (one-twentieth of the difference with the reference value of 60% of GDP)? Legally, it is essential that a clear answer can be

given to this kind of question.

Moreover, the Fiscal Compact is silent on the nature of the surplus to be used to reduce the debt: if, to leave room for maneuver in case of a cyclical deficit, this rule were to address the structural deficit – which would therefore need to be explained in the Compact – the debt rule would be even more restrictive than the golden rule: a structural *surplus* would be systematically required to reduce the public debt to 60% of GDP in the 12 Member States whose debt exceeds the reference value. Again, the formulation needs to be clear.

Suppose now that the “it” in Article 4 concerns the difference between the debt and the reference value, and that the rule on debt reduction applies to the entire public deficit. The question can then be asked, which of the two rules – the “golden rule” or the debt reduction rule – places greater restrictions on the Member States, and thus needs to be applied. We have set out, in an appendix [\[2\]](#), the small set of fiscal rules compatible with the Fiscal Compact. The total deficit is the sum of the cyclical deficit and the structural deficit. The cyclical deficit depends on the difference between actual and potential GDP, *i.e.* the output gap, which has an elasticity of 0.5 (average elasticity customary in the literature on the European countries, cf. [OECD](#)). The “golden rule” relates only to the structural deficit, while the debt reduction rule concerns the total public deficit, and thus depends on both the output gap and the structural deficit.

For what values of the public debt and the output gap is the “golden rule” more restrictive than the debt reduction rule? Answer: when the output gap is greater than 1 plus one-tenth of the difference between the original debt and the reference value. This means that, for a country like Germany, the debt reduction rule would predominate over the “golden rule” except in cases of very high growth: the real GDP would have to be at least two points higher than the potential GDP. According to the OECD economic forecast published in May 2012, Germany’s

output gap in 2012 will be -0.8. The debt reduction rule is thus much more restrictive than the “golden rule”. This is also true for France (debt of 86% of GDP in 2011), which would have to have an output gap of at least 3.6 points for the “golden rule” to be binding; yet the OECD forecasts an output gap of -3.3 in 2012. The same holds true for all the countries in the euro zone with a debt greater than 60% of GDP, without exception.

Except in cases of very strong growth, the debt reduction component dominates the structural deficit component. Yet it is the latter that is the focus of all the attention.

When a treaty is open to such differences in interpretations, isn't it normal to want to revise it? When a treaty requires intensifying austerity measures in an area like the euro zone, whose GDP is almost 4 percentage points below its potential, according to the estimates of an organization, the OECD, that is generally not suspected of overestimating the said potential, is it not desirable and urgent to renegotiate it?

[\[1\]](#) A recent post emphasized the risks of social instability and the potential losses that might result from austerity-induced contagion in the euro zone (cf. [Creel, Timbeau and Weil, 2012](#)).

[\[2\]](#) Annex:

We start by defining with *def* the total public deficit, which includes a structural component *s* and a cyclical component *dc*:

$$def = s + dc$$

All the variables are expressed as a proportion of GDP. The cyclical component is composed of the variation in the deficit that occurs, thanks principally to the action of the automatic stabilizers, when the economy deviates significantly from its

potential. A reasonable estimate is that the deficit increases by 0.5 point per point of lost output. The cyclical component can thus be expressed as:

$$dc = - 0.5 y$$

where we define y as the output gap, *i.e.* the difference between GDP and its potential level.

The rules introduced by the fiscal compact can be expressed as follows:

$$s_1 < 0.5,$$

that is, the structural deficit can never exceed 0.5% of GDP (s_1 refers to the first aspect of the rule), and

$$def = - (b_0 - 60)/20,$$

that is, the total deficit must be such that the public debt (expressed as a proportion of GDP) is reduced every year by one-twentieth of the difference between the initial public debt (b_0) and the 60% reference level. The debt rule can thus be re-written in terms of the structural deficit as:

$$s_2 = def - dc = 0.5 y - (b_0 - 60)/20.$$

We thus have 2 possible cases for when the structural deficit component is less restrictive than the debt reduction component:

Case 1

$$s_1 < s_2 \text{ if } y > 1 + (b_0 - 60)/10.$$

Assume the case of a debt level like Germany's ($b_0 = 81.2$ % of GDP). Case 1 implies that the structural deficit component will be less restrictive than the debt reduction component if and only if $y > 3.12\%$, that is, if Germany has a GDP that is at least three points higher than its potential. If a country

has a higher level of debt (e.g. Italy, at 120% of GDP), then $y > 7\%$!

Case 2

If the debt reduction rule concerns the structural deficit (rather than the total public deficit), then we have:

$$s_1 < 0.5$$

and

$$s_2 = - (b_0 - 60)/20$$

In this case, $s_1 < s_2$ if $1 < - (b_0 - 60)/10$, which will never happen so long as the public debt is greater than the reference level.

A boost for the minimum wage or for income support?

By [Guillaume Allègre](#)

The government has made a commitment to an exceptional, “reasonable” boost to the French minimum wage, the “SMIC”, and to indexation based on growth, and no longer just on workers’ purchasing power. In [Les Echos](#), Martin Hirsch has argued for strengthening the RSA [the French income support scheme] rather than the SMIC. The point is not to oppose the working poor, the target of the RSA, and low wages: redistribution policies need to attack, not just poverty, but inequality throughout the income chain.

In terms of reducing inequalities, there are several strategies: one strategy aims to reduce inequality in individual earnings; a second aims to reduce inequalities in living standards between households, the level at which people are presumed to live in solidarity. There are legitimate grounds for both these strategies. The RSA *activité* [the income supplement for the working poor] and the SMIC are thus not substitutable (see also [“le SMIC ou le RSA?”](#) in French). Unlike the RSA, the fight against poverty is not the objective of the SMIC. The SMIC aims “to ensure that employees with the lowest salaries share in the country’s economic development”. A high minimum wage has the effect of reducing inequalities across the bottom of the wage scale, with increases in the minimum wage [impacting up to two times the SMIC](#). Given the increase in unemployment, in precarious jobs and in part-time work, full-time employees on the minimum wage are certainly not the poorest in society, but they are far from well-off. The SMIC reduces the income gap between the working class and the middle class, which is an objective in itself (though some in the middle class may take a dim view of this: by its very nature, reducing inequality isn’t going to satisfy everyone). In particular, it is not the same thing to receive a high salary or to receive a low salary supplemented by targeted social benefits. These benefits do not confer any rights to a pension or to unemployment benefits. In terms of dignity, the minimum wage level is the value that a society places on work. Social benefits targeted at the poorest people put them in a position of being assisted, which has consequences in terms of social representations (individual and collective). As work is performed by individuals, it is not illegitimate to try to reduce inequalities between employees and not only between the employees’ households.

The proposed boost to the RSA is ambiguous, as the term “RSA” designates both the minimum social benefits for the unemployed and the inactive population (the “base” RSA, formerly the RMI and API benefits) and the income supplement for the working

poor (*RSA activité*). If the proposal for a boost applies only to the *RSA activité*, it would then be inconsistent with the objective of targeting the most disadvantaged households. If, on the contrary, it concerns the RSA as a whole, which would be legitimate, then it is necessary to be more explicit and to assume that it will benefit mainly the unemployed and the inactive [1]. In March 2012, there were 1.59 million people receiving just the base RSA, and 689,000 the *RSA activité* (all France), i.e. only one-third of RSA recipients received the *activité* component.

The implementation of the *RSA activité* has up to now failed in two ways ("[The failings of the RSA income support scheme](#)") according to the [final report of the National Evaluation Committee](#), it has had no discernible impact on employment, and poverty reduction has been severely limited because of a major lack of take-up of the *RSA activité* component. We can move quickly over the first point, as there is little emphasis these days on the incentive aspect of the RSA. The main problem of a boost to the *RSA activité* is indeed the lack of take-up: in the report, take-up for the *RSA activité* component alone is estimated at 68% in December 2010 [2]. And this is not a matter of the programme coming on line: between December 2010 and March 2012, the number of *RSA activité* beneficiaries increased only marginally in mainland France, from 446 000 to 447 000. Linking eligibility for the *RSA activité* to both earned income and family expenses and mixing into a single instrument beneficiaries of a social minimum and the working poor, who are sometimes very well integrated into the labour market, poses problems both in terms of improper assessment of eligibility for the provision and stigmatization. This highlights two causes of the lack-of take-up of the *RSA activité*: insufficient awareness of the scheme, on the one hand, and voluntary lack of take-up, on the other: 42% of non-applications who do not exclude themselves from eligibility declare that they did not file a claim because they "get by financially otherwise", and 30% did not file a claim because

they did “not want to depend on welfare, to owe something to the state” ([p.61](#)). Better information would not be sufficient to solve the problem of lack of take-up. Increasing the minimum wage, on the contrary, has the great advantage of automatically benefitting those affected without fear of stigmatization, since it involves labour income.

Unlike the RSA, increasing the gross SMIC increases labour costs. However, there are several strategies to raise the minimum wage that would not have a net effect on labour costs: the increase could be offset by a reduction in employers' social contributions. One could also ease employee social security contributions on low wages. But this proposal would probably be censured by the Constitutional Council, which in 2000 knocked down the exemption of the CSG tax on low wages on the grounds that the progressivity of the CSG would then no longer depend on the household's ability to pay [\[3\]](#). Finally, a more extensive reform aimed at merging the CSG tax and the income tax would make it possible to reduce taxes on low wages and thus increase the net minimum wage. The integration of the PPE in-work negative income tax would also make it possible to show the amounts involved directly on the payslip.

The fight against inequality clearly should not stop with inequalities in wages between full-time workers. It is also necessary to attack involuntary part-time work, by enabling the workers concerned to move into full-time work and/or by making part-time work more costly by lowering the rate of general tax relief on employer social contributions.

Basically, there is no reason to want to vary the level of the base RSA relative to the minimum wage. However, since the base RSA is indexed to prices, its level has fallen sharply relative to the minimum wage since the early 1990s (see [Périvier](#), 2007). It would therefore be legitimate to significantly raise the base RSA (even if this means reducing the rate of accumulation of the RSA *activité* component) and to index it to the minimum wage level. This would definitively

solve the question of whether to boost the minimum wage or the RSA.

[\[1\]](#) Here it can be seen that the “simplification”, which consists of combining two instruments into one, is not facilitating public debate.

[\[2\]](#) This lack of take-up is partially due to the fact that, for some of those who are eligible (about a third), the potential gains are very low or even non-existent due to the deduction of the sums paid under the RSA *activité* from the PPE in-work negative income tax. But the lack of take-up is nevertheless high even when looking at the potential gainers (and not simply all those eligible).

[\[3\] Decision No. 2000-437 DC dated 19 December 2000](#): “Whereas, while the legislature has the right to change the base of the general social contribution to alleviate the burden on the poorest taxpayers, this is subject to the condition that it does not undermine the existence of conditions of equality between taxpayers; that the provision in question does not take account of the taxpayer’s income other than from an activity or of income of other household members or of dependents within it; that the choice made by the legislature to not take into consideration all the contributory capacities does not create, between the taxpayers concerned, a manifest inequality that violates Article 13 of the Declaration of 1789.”

Social networks today. A decidedly small world

by Michel Forsé

Everyone has undoubtedly had personal experience at least once in their lives of what is suggested by the notion of a “small world”. You meet a complete stranger and you realize that you share a mutual acquaintance. Back in the 1960s, Stanley Milgram provided empirical validation of this intuitive notion by trying to determine how many intermediaries it took on average to link two individuals who did not know each other in a large country like the United States. He conducted a clever experiment that yielded a striking result: 5.2 intermediaries sufficed (or 6 “degrees of separation”, as the saying goes). Other studies since then have produced figures of about the same order. Without going into the technical details, however, these studies had certain problems, including that many of the subjects surveyed dropped out during the studies, and the number of participants were relatively small.

The recent advent of social networks on the Internet has provided an opportunity to consider this issue again, this time on a much larger scale since the Net covers the entire planet. The networks formed by instant messaging, Twitter and Facebook have been studied from this angle. The question posed was always the same: how many intermediaries does it take to link two individuals selected at random from one of the networks. And while the figures may vary slightly, every time the response confirmed or amplified what could be expected based on Milgram’s work.

The case of Facebook is particularly instructive, since it is the largest network analyzed to date. An investigation conducted in 2011 covered 721 million people and some 69 billion links that exist among them. On this basis, it took

an average of 4.7 intermediaries to connect two Facebook subscribers worldwide. This figure drops even further, to 4.3, if we restrict ourselves to the United States. There is no doubt therefore that this largely confirmed the theory of a “small world”.

But this still needs to be explained. While many models exist, two seem paramount: one based on a world of clusters connected by weak links, and another that invokes hubs at various levels (international, national, regional, local) demonstrating relative scale invariance. Up to now, these models have been seen as rivals, but there may be potential for combining them, as is suggested in an article published on this subject in the [Revue de l'OFCE](#).

Would returning to the drachma be an overwhelming tragedy?

by [Céline Antonin](#)

Following the vote in the Greek parliamentary elections on 17 June 2012, the spectre of the country leaving the euro zone has been brushed aside, at least for a while. However, the idea is not completely buried, and it is still being evoked in Greece and by various political forces around the euro zone. This continues to pose the question of the cost of a total default by Greece for its creditors, foremost among them France. The analysis published in the latest [OFCE Note \(No. 20, 19 June 2012\)](#) shows that, despite the magnitude of the potential losses, several factors could mitigate the consequences for the euro zone countries of a default by the

Greek state.

The withdrawal of Greece from the euro zone, which is not covered in the Treaties, would cause a major legal headache, as it would involve managing the country's removal from the Eurosystem [\[1\]](#). In case of a return to a new drachma, which would depreciate sharply against the euro [\[2\]](#), the burden of the public debt still outstanding would be greatly increased, as would private debt, which would still be denominated in euros. Many financial and nonfinancial firms would go to the wall. Legally, Greece could not unilaterally convert its debt into new drachmas. Since the country's public debt is not very sustainable and it is denominated almost exclusively in euros, Greece would certainly default (at least partially) on its public debt, including its foreign debt [\[3\]](#). Given that the main holders of Greek debt are euro zone countries, what would be the magnitude of the shock in the case of a Greek default?

While more detail about this can be found in the [OFCE Note \(No. 20, 19 June 2012\)](#), the focus here is on providing a breakdown of the exposure of the euro zone countries (in particular France) to Greek public and private debt. Exposure to Greek public debt involves three main channels:

- 1) The two aid packages of May 2010 and March 2012;
- 2) Participation in the Eurosystem;
- 3) The exposure of the commercial banks.

An analysis of these channels shows that the main source of exposure of the euro zone countries to losses is the two support plans. The maximum exposure of the euro zone countries through this channel is 160 billion euros (46 billion euros for Germany and 35 billion euros for France). Euro zone countries are also exposed to Greek government debt through their participation in the Eurosystem: indeed, the Eurosystem's balance sheet swelled dramatically to support the vulnerable countries in the euro zone, notably Greece.

However, given the Eurosystem's capacity to absorb losses (over 3,000 billion euros), we believe that the potential losses for the countries of the euro zone are not likely to be realized if Greece were to default unilaterally on its public debt. Finally, the euro zone's banking system is exposed to 4.5 billion euros in Greek sovereign risk and up to 45 billion euros from the Greek private sector [\[4\]](#).

The cumulative exposure of the euro zone to Greek debt, excluding the Eurosystem, amounts to a maximum of 199 billion euros (2.3% of the euro zone's GDP, cf. Table), including 52 billion euros for Germany (2% of GDP) and 65 billion euros for France (3.3% of GDP). If we include exposure to the Eurosystem, the cumulative exposure of the euro zone to Greek debt comes to 342 billion euros (4% of euro zone GDP), including 92 billion for Germany (3.6% of GDP) and 95 billion (4.8%) for France. France is the most heavily exposed euro zone country, due to the exposure of its banks to Greek private debt through subsidiaries in Greece. If we consider only Greek government debt, however, it is Germany that appears to be the country most exposed to a Greek default.

Summary of the exposure of different countries to Greek debt

In billion euros

	1) Support plans		2) Eurosystem		3) Commercial banks		Total	Total excl. Eurosystem
	1st plan	2e plan	SMP	TARGET2	Public debt	Private debt		
Germany	14.7	31.4	12.5	27.3	1.3	5.1	92.3	52.5
Austria	1.5	3.2	1.3	2.8	NC*	NC*	8.8	4.7
Belgium	1.9	4.0	1.6	3.5	0.1	0.0	11.1	6.0
Cyprus	0.1	0.2	0.1	0.2	NC	NC	0.6	0.3
Spain	6.5	13.8	5.5	12.0	0.1	0.5	38.4	20.9
Estonia	0.0	0.3	0.1	0.3	NC	NC	0.7	0.3
Finland	1.0	2.1	0.8	1.8	NC	NC	5.7	3.1
France	11.1	23.6	9.4	20.5	1.3	29.1	95.0	65.1
Ireland	0.9	0.0	0.7	1.6	NC	NC	3.2	0.9
Italy	9.7	20.7	8.3	18.0	0.2	1.1	58.0	31.7
Luxembourg	0.1	0.3	0.1	0.3	NC	NC	0.8	0.4
Malta	0.1	0.1	0.0	0.1	NC	NC	0.3	0.2
Netherlands	3.1	6.6	2.6	5.7	NC	NC	18.0	9.7
Portugal	1.4	0.0	1.2	2.5	NC	NC	5.1	1.4
Slovakia	0.5	1.1	0.5	1.0	NC	NC	3.1	1.6
Slovenia	0.3	0.6	0.2	0.5	NC	NC	1.6	0.9
Total EZ	52.9	107.7	45.0	98.0	2.9	35.8	342.3	199.3

[NC => NA]

NA: Not available, as the BIS gives only the exposures of Germany, Belgium, France, Italy and Spain. The totals are thus calculated without taking into account the second tier banks, except for Germany, Belgium, France, Italy and Spain and the Euro Zone Total.

Sources: "The Economic Adjustment Programme for Greece – First review summer 2010", ECB, EFSF, BIS Quarterly Review (June 2012), Bank of Greece, author's calculations.

These amounts constitute an upper bound: they represent the maximum potential losses in the worst case scenario, namely the complete default of Greece on its public and private debt. Furthermore, it is impossible to predict with certainty all the chain reactions associated with a Greek exit from the euro zone: everything depends on whether the exit is coordinated or not, whether a debt rescheduling plan is implemented, the magnitude of the depreciation of the drachma against the euro, and so on.

The "reassuring" element in this analysis is the magnitude of the potential losses (Table): the shock of a Greek exit would be absorbable, even if it would generate a shock on each member country and widen its deficit, undermining the members'

efforts to restore balanced budgets. However, this analysis also points out how intertwined the economies of the euro zone are, even if only through the monetary union, not to mention the mechanisms of the solidarity budget. A Greek exit from the euro zone could therefore open a Pandora's Box – and if other countries were tempted to imitate the Greek example, it is the euro zone as a whole that could go under.

[1] The Eurosystem is the European institution that groups the European Central Bank and the central banks of the countries in the euro zone.

[2] On this point, see [A. Delatte, What risks face the Greeks if they return to the drachma?, OFCE blog, 11 June 2012.](#)

[3] The foreign debt designates all the [debt](#) that is owed by all a country's public and private debtors to foreign lenders.

[4] This refers to a textbook case, where the drachma's depreciation would be so great that the currency would no longer be worth anything.

Will Germany be caught up in the recession of its European partners?

[Christophe Blot](#) and Sabine Le Bayon

Can Germany avoid the recession that is hitting a growing number of countries in the euro zone? While Germany's economic situation is undoubtedly much more favourable than that of

most of its partners, the fact remains that the weight of exports in its GDP (50%, vs 27% for France) is causing a great deal of uncertainty about the country's future growth.

Thus, in the last quarter of 2011, the downturn in the German economy (-0.2%) due to the state of consumption and exports has upset hopes that the country would be spared the crisis and that it could in turn spur growth in the euro zone based on the strength of its domestic demand and wage increases. Exports of goods fell 1.2% in value in late 2011 over the previous quarter, with a contribution of -1.5 points for the euro zone and -0.4 points for the rest of the European Union. Admittedly, the beginning of 2012 saw renewed growth, with GDP rising by 0.5% ([versus 0% in the euro zone](#)). Once again this was driven by exports, in particular to countries outside the euro zone. The prospects of a recession across the Rhine in 2012 thus appear to be receding, but there is still great uncertainty about how foreign trade will be affected in the coming months and about the extent of the slowdown "imported" into Germany. The question is whether the improvement in the first quarter of 2012 is temporary. The decline in manufacturing orders from euro zone firms to Germany (-7.5% in the first quarter of 2012, after -4.8% in the last quarter of 2011) could spell the end of German's persistent growth, especially if the recession in the euro zone continues or worsens.

With GDP per capita above the pre-crisis level, Germany has been an exception in a euro zone that is still profoundly marked by the crisis. The country's public deficit is under control, and it already meets the 3% threshold set by the Stability and Growth Pact. Germany is still running a foreign trade [1] surplus, which came to 156 billion euros (6.1% of GDP) in 2011, whereas at this same time France ran a deficit of 70 billion euros (3.5% of GDP). Despite Germany's favourable foreign trade performance, the crisis has left scars, which today are being aggravated by the energy bill.

For instance, before the crisis the trade surplus was 197 billion euros, with over 58% from trade with partners in the euro zone. With the crisis, activity slowed sharply in the euro zone – the zone's GDP in the first quarter of 2012 was still 1.4% lower than the level in the first quarter of 2008 – which is automatically reflected in demand addressed to Germany. Thus, exports of goods to the euro zone are still below their level of early 2008 (down 2.9% for Germany and 6.3% for France, see Table 1). Germany's trade surpluses vis-à-vis Italy and Spain – two countries that were hit hard by the crisis – have fallen significantly, mainly due to lower demand from the two countries. German exports to these two countries have decreased by 27% and 4% respectively since 2007.

Nevertheless, although Germany is more exposed to foreign trade shocks than France, it is less exposed to the euro zone. The share of euro zone countries in German exports fell from 44.8% in 2003 to 39.7% in 2011 (Table 2a). In France, despite a fall on the same order of magnitude, 47.5% of exports are still directed towards the euro zone. When the European Union as a whole is considered, however, the gap disappears, as the EU represents 59.2% of German exports compared with 59.8% of French exports. The lower level of dependence on the euro zone has been offset by increasing exports to the new member states of the European Union (the NEM), with which German trade reached 11.4% in 2011. Moreover, Germany has maintained its lead over France on the emerging markets: in 2011 Asia represented 15.8% of German exports and China 6.1%, against 11.5% and 3.2% in the French case. By managing to diversify the geographical composition of its exports to areas experiencing vigorous growth, Germany has been able to dampen the shock of the slowdown in the euro zone. This can be seen in recent trade trends: while Germany's exports (like France's) have surpassed their pre-crisis level, this was due to exports to countries outside the euro zone, where Germany has benefited more than France (Table 1). Germany has in fact

succeeded in significantly reducing its deficit with Asia, which has helped to offset the poor results with the euro zone and with Central and Eastern Europe. Finally, Germany has advantages in terms of [non-price competitiveness](#) [2], which reflects the dynamism of trade in automobiles and electrical, electronic and computer equipment. The surpluses in these two sectors regained their pre-crisis level in 2011 (respectively, 103 and 110 billion euros in 2011), whereas the balances in these two sectors have continued to deteriorate in France.

Even if orders from countries outside the euro zone remain buoyant (up 3.6% in early 2012), the weight of the euro zone is still too strong for exports to emerging markets to offset the decline in orders placed by the euro zone to Germany. This will inevitably affect the country's growth. GDP should therefore rise less rapidly in 2012 than in 2011 (0.9% according to the OFCE [3], following 3.1%). Germany might thus avoid a recession, unless the euro zone as a whole experiences even sharper fiscal contraction. Indeed, the slowdown in growth means that the euro zone member states will not be able to [meet their budget commitments in 2012 and 2013](#), which could lead them to decide on further restrictive measures, which would in turn reduce growth throughout the zone, and therefore demand addressed to the zone's partners. In this case Germany would not avoid a recession.

Finally, the role of foreign trade is not limited to growth and employment. It could also have an impact on negotiations between France and Germany about the governance of the euro zone. The relative growth of the two countries will in practice affect the balance of power between them. The expected slowdown in growth in Germany clearly reflects its conflicting interests between, on the one hand, maintaining its market opportunities and, on the other, its fears vis-à-vis the functioning of the euro zone and the cost to public finances of broader support for the countries in greatest difficulty. While up to now the latter consideration has

dominated the German position, this could change once its commercial interests come under threat, especially at a time when the German Chancellor is negotiating with the Parliamentary opposition about the ratification of the fiscal pact – an opposition that could demand measures to support growth in Europe, as has the new French president.

Table 1. German and French exports since the crisis, in value

2008 Q1 = 100

		2009 - Q2	2012 - Q1
Totale	Germany	76,5	108,4
	France	77,6	101,6
Euro zone	Germany	76,4	97,1
	France	75,4	93,7
Other EU countries	Germany	71,2	103,3
	France	71,4	89,4
Rest of the world	Germany	79,8	123,0
	France	83,1	117,5

Sources : Customs, Destatis.

Table 2a. The main partners of Germany and France

%

	2003		2011	
	Germany	France	Germany	France
European Union	65,0	67,0	59,2	59,8
Euro zone	44,8	52,2	39,7	47,5
- France/Germany	10,4	15,8	9,6	16,3
- Italy	7,3	9,2	5,9	8,0
- Spain	4,9	10,0	3,3	7,2
- Netherlands	6,4	3,8	6,5	4,2
- Belgium/Luxembourg	5,8	8,2	5,0	7,5
- Austria	5,4	1,0	5,4	0,9
United Kingdom	8,4	9,5	6,2	6,5
NEM*	9,2	3,7	11,4	4,8
United States	9,3	6,7	6,9	5,5
Asia	11,4	7,3	15,8	11,5
- China	2,7	1,4	6,1	3,2
- Japan	1,8	1,6	1,4	1,5

Note : The NEM include Bulgaria, the Czech Republic, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia, Slovakia and Estonia.

Sources : Customs, Destatis.

Table 2b. The main suppliers of Germany and France

%

	2003		2011	
	Germany	France	Germany	France
European Union	61,4	65,2	55,7	58,9
Euro zone	42,4	53,6	37,7	48,2
- <i>France/Germany</i>	9,3	18,9	7,6	17,3
- <i>Italy</i>	6,5	9,4	5,3	7,4
- <i>Spain</i>	3,0	7,6	2,8	6,1
- <i>Netherlands</i>	7,9	4,7	8,4	4,4
- <i>Belgium/Luxembourg</i>	5,1	7,4	4,5	8,2
- <i>Austria</i>	4,1	1,0	4,1	0,9
United Kingdom	6,4	6,7	4,8	4,4
NEM*	9,3	3,2	10,7	4,0
United States	7,8	6,5	5,6	5,7
Asia	15,5	12,5	20,4	15,7
- <i>China</i>	4,1	4,1	9,7	8,2
- <i>Japan</i>	3,8	3,2	2,8	1,9

Note : The NEM include Bulgaria, the Czech Republic, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia, Slovakia and Estonia.

Sources : Customs, Destatis.

[1] Measured by the gap between the export and import of goods.

[2] See also J.-C. Bricongne, L. Fontagné and G. Gaulier (2011): "Une analyse détaillée de la concurrence commerciale entre la France et l'Allemagne" [A detailed analysis of commercial competition between France and Germany], Presentation at the Fourgeaud seminar [in French].

[3] This figure corresponds to the update of our forecast of April 2012, which takes into account the publication of the growth figures for Q1 2012.

Taxes on wealth: what kind of reform?

By [Guillaume Allègre](#), [Mathieu Plane](#) and [Xavier Timbeau](#)

Why and how should wealth be taxed? Are France's wealth taxes fair and efficient? In an article entitled, "[Reforming the taxation of wealth?](#)", published in the [special Tax Reform issue](#) of the *Revue de l'OFCE* [in French], we examine these issues and propose some possible ways to reform the taxation of wealth.

We show that in recent years real economic income from capital has been very substantial. The visible income from capital (interest, dividend, rents received, etc.) exists alongside less visible income (capital gains net of the consumption of fixed capital and inflationary tax). As only a portion of potential capital gains are realized, this less visible income forms a significant part of average personal income. Between 1998 and 2010, despite two financial crises, capital gains increased real per capita income by an annual average of 12% (33% on average from 2004 to 2007). This growth was due in large part to the sharp rise in property prices.

We also show that the actual tax rate on income from wealth is low, even though the nominal interest rates on capital income are high, and the tax rate *on income that is actually taxed* is even higher due to not taking into account inflationary tax in the calculation of taxes [\[1\]](#). After taking into account all taxation based on household wealth, including wealth which is held ("ISF" wealth tax, property tax) or which is passed on (property transaction taxes *i.e.* "stamp duty") and income from wealth (income tax, "CSG" wealth tax, etc.), the actual rate

of taxation on economic income from capital [\[2\]](#) comes to an average of 11.1%. This low rate for the actual taxation of capital income is due to the fact that a large portion of this income fully or partially escapes taxation: real property gains on principal residences are totally exempt, and secondary residences are partly exempt; the housing enjoyed by owner-occupiers ("imputed rent") is not taxable, even though, net of interest, it constitutes income; gifts serve to "purge" any capital gains, even when these are not taxed (there is a tax allowance of 159,000 euros per child for gifts to direct heirs, which is renewable every ten years); and some financial income avoids income tax (life insurance, tax-exempt bank accounts, etc.).

Next we discuss possibilities for reform that would lead to taxing all income from wealth. We believe that income from wealth (net increased income from wealth) should be taxed in the same way as labour income. This principle is fair (in the sense that households are then taxed on their contributory capacity, regardless of the source of their income), and it would also help to combat tax avoidance. In an increasingly financialized economy, the interface between labour income and capital income has become porous. Taxing capital income differently opens the door to tax schemes. Any reform of wealth taxation should make it a priority to tax all real capital gains, in particular real property gains, which currently are subject to specific rules. In addition, since property is a fixed asset, the existing rules cannot be justified as due to tax competition in Europe. They are occasionally defended based on the need to take account of inflation or due to the unique character of the principal residence. But taking inflation into account cannot justify the total exemption of real property gains on secondary residences after they have been held for a certain time (currently 30 years, previously 22 years): not only does the exemption on capital gains seem unfair, but it can also prompt some households to keep their property, in particular during

speculative bubbles. Furthermore, the specific character of property cannot be invoked once there has been a definitive withdrawal from the market. The taxation of realized capital gains, net of inflation, of the consumption of fixed capital and of renovation costs, would thus be preferable to a system of allowances based on the period of ownership. This could take place when the sale is not followed by another purchase – so as not to penalize mobility – and during inheritance (taxation of unrealized gains, before calculating inheritance tax). The taxation of real property gains upon a definitive withdrawal from the market could gradually replace the system of property transaction taxes or “stamp duty”, which would promote mobility and greater horizontal fairness.

In light of these arguments, what do we make of the proposals by the new French President François Hollande with regard to the taxation of wealth? He proposes (1) to tax capital income at the same rate as labour income is taxed; (2) to roll back the tax breaks on the ISF wealth tax and to raise the rate of taxation on the top income brackets; and (3) to reduce the inheritance tax allowance from 159,000 euros per child to 100,000 euros (it was raised from 50,000 euros to 150,000 euros in 2007).

(1) The first point would also involve eliminating the flat-rate withholding tax and the various tax loopholes that permit tax avoidance. It is similar to our proposals, so long as the income subject to tax takes into account inflationary tax and the consumption of fixed capital. This kind of proposal would involve taxing imputed rent, which constitutes an imputed income from capital. Nevertheless, given the difficulty of estimating the tax base, imputed rent has not been taxed since 1965 (see the article by [Briant and Jacquot](#)). One solution to this difficulty is to permit renters and first-time buyers to deduct their rent or loan interest payments from their taxable income, while increasing the average income tax rate to offset this.

(2) The second point departs from our proposals, but the ISF tax offers one solution for taxing large estates bit by bit, *even when they do not procure any taxable income* (when there are unrealized capital gains but an absence of dividends or earned rent, for example). In a situation like this, the ISF tax makes sense *only if it is not capped based on the taxable income (or a similar notion)*. The ISF tax on wealth makes even more sense when the actual yields, including the unrealized gains on the assets, are not very heterogeneous (but it is then equivalent to a tax on the income from the assets) or when the supervision of the asset owners can improve their yields (taxation based on holding the wealth, and not on income, then serves as an additional incentive “to owners to ‘activate’ their estate,” in the words of Maurice Allais). In contrast, if the asset yields are heterogeneous and strong incentives to optimize the wealth already exist, then a tax on the income from the wealth is preferable from the viewpoint of fairness and not undermining economic efficiency.

(3) Higher inheritance taxes seem legitimate from the perspective of equal opportunity. We feel, however, that this should go further, at least by eliminating the purge of capital gains, in particular when the goods have been exempted from inheritance tax.

** This text is taken from the article [Reforming the taxation of wealth?](#) published in the special Tax Reform issue of the *Revue de l'OFCE*, available on the [OFCE website](#).*

[1] As [Henri Sterdyniak](#) points out: “It is thus erroneous to claim that capital income is taxed at a lower rate. When it is *actually* taxed, this is at higher rates.”

[2] Defined as the ratio between the sum of taxes based on wealth and the net increased income from the wealth after having subtracted the consumption of fixed capital and

inflationary tax.

What risks face the Greeks if they return to the drachma?

By Anne-Laure Delatte (associate researcher of the Forecasting Department)

The debate about whether the Greeks will stay in the euro zone is intensifying. Christine Lagarde, head of the IMF, has lambasted the Greek government. The German Finance Minister, Wolfgang Schäuble, believes that the euro zone can now deal with a Greek exit, and that the Greeks no longer have a choice. What would be the risks for the Greeks of a return to the drachma? Would this inevitably plunge the country into chaos? Argentina's experience with returning to the peso in 2002 provides some insight.

In Argentina, the peso/dollar parity was set at one peso per dollar by law in 1991. The dollar could be used freely in domestic exchange. The result was that dollars began to be used for everyday transactions, including the denomination of financial assets. In practice, in the 1990s, on average more than 70% of bank deposits and two-thirds of private sector lending were denominated in dollars. These figures peaked in the last quarter of 2001, just before the system was abandoned, when 75% of private deposits and 80% of all loans were denominated in dollars.

The average Argentinean's strong commitment to the dollar was propped up during the 1990s by the promises of all the

presidential candidates to continue the system. Moreover, the abandon of the dollar in January 2002 took place in an especially dramatic context, after five presidents in a row had resigned and amidst a period of popular revolt that was felt beyond the country's borders. The peso was devalued by more than 70% against the dollar, and a massive amount of domestic savings fled the country into foreign banks. While the barter economy remained marginal, the provinces and the central State began to issue their own currency to pay civil servants and government suppliers. According to the country's central bank, in 2002 these parallel currencies accounted for an average of 30% of all bills in circulation.

The context in which Argentina returned to its national currency in 2002 therefore bears some resemblance to the current situation in Greece: widespread political confusion, a serious recession, and above all a national currency with no credibility.

Against all expectations, despite the serious crisis, the social and political disorder and monetary disintegration, which led to predictions that it would take 10 years for Argentina's GDP to return to its pre-crisis level, an economic recovery began to take hold by the second half of 2002. With nominal annual growth of 9% and controlled inflation, Argentina ultimately restored its pre-crisis level by 2004. How did the country manage to leave the dollar with such results?

The default on 90 billion dollars in public debt, followed by a fiscal pact between the provinces and the central State, along with budget controls, led to a recovery in public finances. But the unique feature of Argentina's experience was the monetary reform carried out in January 2002.

The devaluation of the peso rocked the country's financial equilibrium. With 80% of lending contracted in dollars, most consumers and businesses saw the value of their debt virtually

quadrupled! After the devaluation, in 2002 the amount of private debt came to 120 billion dollars, whereas the country's GDP was only 106 billion dollars. To avoid bankrupting the entire private sector, the national authorities came up with a rule for the reimbursement of debt.

The logic was that, to avoid bankruptcy, business revenue should be denominated in the same currency as the debt. Hence on 4 February 2002, the government issued decree 214/02, which imposed the "peso-fication" of the entire economy: all prices and all contracts in the real and financial sectors, all salaries and debts, were converted into pesos at a rate of one peso per dollar, whereas the market rate was almost four pesos per dollar. Contracts in the financial sector were also converted: deposits that did not exceed thirty-thousand dollars were converted at a rate of 1.4 pesos for 1 dollar [1]. How could such a rule be imposed in light of the disastrous wealth effects on creditors?

The conversion at a rate of one for one (or 1.4 for 1) imposed by the authorities resulted in a settlement of conflicts over debt in favour of debtors, and to the detriment of national and foreign creditors. However, the main debtor in the economy is the productive sector, that is, businesses. By offering them a protected way out of the crisis, the new monetary rules neutralized balance sheet effects and permitted the devaluation to have the expansionary impact one would conventionally expect. In effect, trade began to run a surplus and the country's economy was able to benefit from the booming global economy in the early 2000s. Exports rose from 10% to 25% of GDP, and by 2004 GDP was 2% higher than the average for the 1990s. In short, the government's monetary rule led to a return to growth and employment, which explains why it won the support of the majority of the population.

In actuality, the Argentines, like the Greeks today, were caught in a trap: with contracts denominated in dollars, the return to the peso, following the devaluation, was leading

towards a generalized bankruptcy of the private sector. If the Greeks were to leave the euro right now, the entire country would go bankrupt. If the drachma were devalued by 50%, as certain forecasts currently predict, private debt would double. With revenue denominated in drachmas and debt in euros, businesses and consumers would be incapable of repaying their lenders. This was the same kind of trap that paralyzed Argentina's leaders before 2002.

Argentina's experience thus provides several lessons. First, the main risk for Greece of leaving the euro is that the entire private sector would go bankrupt. Given that the public sector has already restructured 50% of its debt, all else being equal, a return to the drachma would lead to financial conflicts between private creditors and debtors that would paralyze the entire system of payments. Secondly, the State has to play a key role as arbitrator in order to resolve the crisis. In conditions like these, the nature of the rules adopted is not neutral. A number of solutions exist, and these reflect different policy orientations and have different economic consequences. In Argentina, the decision to favour national debtors ran counter to the interests of the holders of capital and foreign investors. Furthermore, contrary to the assertions of Wolfgang Schäuble, the Greek government does have choices. This is the third lesson. The resolution of the Greek crisis is not simply an economic matter, and the options being offered to the Greek people involve political choices. The choice made will have a more favourable result for some economic groups (such as European creditors, Greek employees, holders of capital, etc.).

Depending on the nature of the political order, the State could seek to maintain the existing balance of forces, or, on the contrary, disrupt them. A reform could lead to a rupture, and provide an opportunity to establish a new balance of forces. The option pursued up to now has consisted of spreading the cost of resolving the Greek crisis over

creditors, on the one hand, by restructuring the public debt, and over debtors, on the other hand, by means of structural efforts (cuts in wages \and social transfers), along with an increase in the tax burden. In contrast, a withdrawal from the euro zone accompanied by an Argentina-style restructuring of private and public debt would place the burden of the crisis resolution more on the shoulders of creditors, mainly the rest of Europe. This explains the renewed pressure seen in the discourse of some European creditor countries with respect to Greece, as well as the confusion that typifies the debate in Europe today: in the absence of an optimal solution with a neutral impact, each party is defending its own interests – at the risk of destroying the euro.

[1] Deposits of greater amounts could be either converted under the same conditions or transformed into dollar-denominated Treasury bonds.

Japan's reconstruction: constrained by the deterioration in public finances

By Bruno Ducoudré

Following the earthquake that hit Japan in March 2011, the government estimated the cost of the loss at 16.9 trillion yen

(3.6 points of GDP). The response in terms of the structural deficit needed to deal with this exogenous shock conflicts with the government's desire to implement an austerity policy to reduce the deficit. The additional financing requirements are thus coming at the worst possible time, amidst the economic crisis that began in 2008, which has been accompanied by a sharp deterioration in public finances due to the need to prop up the economy.

On the growth front, 2011 was a difficult year for Japan, coming on the heels of a 4.4% rebound in GDP in 2010 following a 5.5% drop in 2009. While the economy saw renewed growth in Q3 of 2011 (1.9% GDP growth quarter-on-quarter), after two quarters of falling GDP, at year end floods in Thailand again disrupted the supply chains of Japanese firms, and the economy faltered (zero growth in Q4 and -0.7% growth for 2011). The period of reconstruction begins in 2012.

In fiscal year 2011, four additional budget bills were passed for a total of 3.9 percentage points of GDP, mainly to cope with emergency expenses (1.3 GDP points) and to prepare for reconstruction (2.3 GDP points). The services of the State have estimated the total bill for reconstruction at 23 trillion yen (4.8 GDP points). The reconstruction will be spread over the next ten years, with the main effort concentrated on the period 2012-2016. The government decided to allocate 0.8 GDP points for reconstruction in fiscal 2012, three-quarters of which is to be funded by debt (Table).

Contrary to expectations, the series of plans passed in 2011 have not resulted in a rapid surge in public spending: public consumption grew by 2.1% in 2011, unchanged from 2010 and less than in 2009, and public investment fell by 3.1% in 2011. Reconstruction costs were partly substituted for other expenses. Also, part of the budget adopted was set aside and so is just beginning to be spent. Public orders for construction work rose by 20% in Q4 of 2011 yoy, and public works in progress rose sharply at year end. Thus, the

additional expenses related to the reconstruction costs already approved will be spread in part over the coming quarters, and even beyond fiscal year 2012.

Japan's fiscal situation is actually precarious. The expenditures needed to rebuild the devastated areas were decided in a context of high levels of deficit and debt related to the crisis. The budget deficit has indeed deteriorated sharply since the beginning of the crisis, rising from 2.2% of GDP in 2008 to 8.1% in 2010, while the debt has risen by 31.2 GDP points since 2007, to reach 199% of GDP in 2010. In 2011, the deficit widened to 9.3% of GDP mainly due to the increased debt burden, higher social security spending and the fall in GDP in 2011. The government announced that some plans would be financed by a combination of restrictions in other areas of expenditure, surplus tax revenues related to the improvement in activity in 2010, and the accumulated reserves from past budgets (for a quarter of the budget dedicated to reconstruction in 2011-2012).

In the short term, the government has nevertheless chosen to favor growth over fiscal consolidation. We expect, for instance, a fiscal stimulus of 0.4 GDP point in 2012 and 0.5 GDP point in 2013, and the Japanese economy should see average annual growth of 1.9% in 2012 and 1.5% in 2013 (see ["Japan: reconstruction time", in our forecast dossier](#), in French). In these circumstances, the budget deficit will be stable at 9.2% of GDP in 2012, and will worsen to 9.8% of GDP in 2013.

Provisional budgets for 2011-2012 for reconstruction
Central government

In % GDP

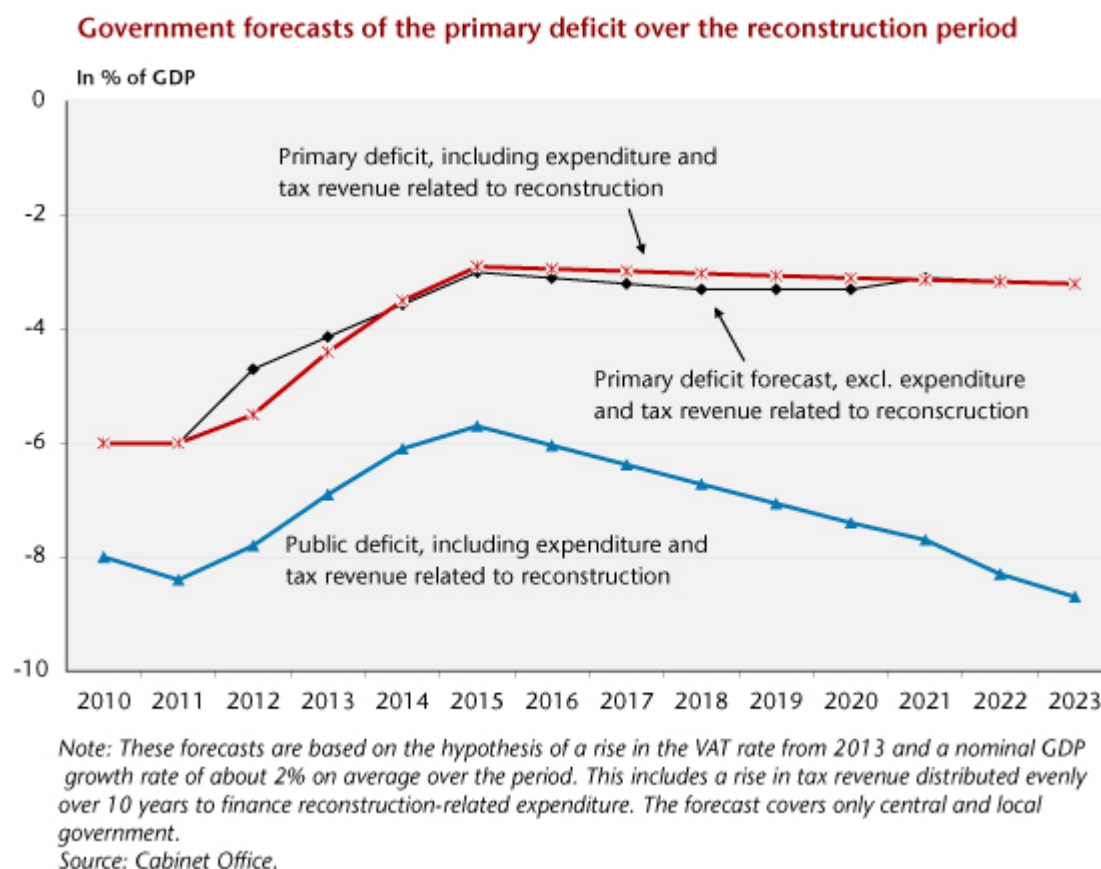
	2011	2012
Revenue and financing	3.9	0.8
Tax revenue	0.3	0.1
Non-tax revenue	0.0	0.1
Bond issues	2.1	0.6
Surplus from previous years	1.1	0.0
Reduction in expenditure	0.4	0.0
Expenditure	3.9	0.8
General expenditure, including:	3.3	0.7
<i>Public works</i>	1.4	0.2
<i>Other expenditure</i>	1.9	0.6
Transfers to local government	0.6	0.1

Sources: Cabinet Office, Ministry of Finance, OFCE calculations.

However, beyond 2013, there is still uncertainty about the direction of government economic policy. In the Japanese government's [medium-term fiscal strategy](#), decided in 2010, it aimed to halve the primary deficit of central and local government by 2015 compared to the level in 2010 (6.4% of GDP), and to break even by 2020. According to our calculations, balancing the primary structural deficit would require the implementation of a major fiscal consolidation effort. This would involve a negative fiscal impulse on the order of 1.1 GDP points a year in 2014, which is nevertheless a slower pace than the consolidation policies planned in the euro zone in 2012-2013 (see "[He who sows austerity reaps recession](#)" in our forecasting dossier). To this end, an increase of 5 points in the consumption tax is to be considered during the current session of the Diet, Japan's parliament, which will wind up in June. This increase would occur in two stages and yield 2.5 GDP points in tax revenue. According to [the latest medium-term forecast of the Japanese government](#), this will not be sufficient to meet its targets (Figure 1). Moreover, the means to achieve a balance by 2020 have not been clarified, and the government has not indicated how the debt built up to finance reconstruction would be

repaid. Finally, given the continuing growth of the public debt, the interest burden, which currently is low (1.8 GDP points in 2011), will place an increasing burden on state finances in the future. This will exacerbate the government's difficulties in implementing any budgetary changes aimed at stabilizing the debt-to-GDP ratio by 2020, and then to bring it down even further.

Despite all this, Japan does not seem to need a brutal fiscal consolidation, as it is currently borrowing at low interest rates (0.86% for the last issue of 10-year government bonds). Furthermore, the share of the debt held by non-residents is still low (6.7% in Q4 of 2011), and the abundant savings of the Japanese population, together with the Japanese Central Bank's programme of share purchases, considerably reduces the risk of a sovereign debt crisis like the one seen in the euro zone.



This text refers to the economic analysis and forecast for 2011-2012, which is available on the [OFCE website](#).

