No. 120
October 2013

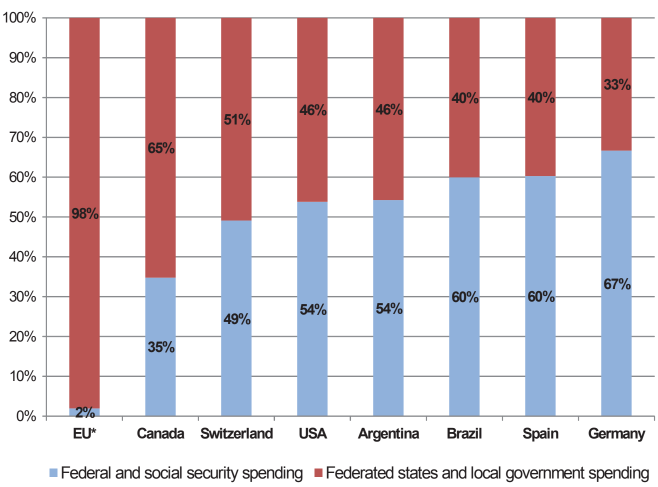
TRÉSOR-ECONOMICS

A budget for the euro area

This study was prepared under the authority of the Directorate General of the Treasury (DG Trésor) and does not necessarily reflect the position of the Ministry of Economy and Finance and Ministry of Foreign Trade

- The sovereign debt crisis that started in 2010 was a reminder of the euro area's design flaws: the area comprises a central monetary pillar (the ECB), but no unified "fiscal pillar", as in a federal state. Although its aggregate fundamentals are fairly sound by comparison with other currency areas, the euro area has experienced an episode of severe macroeconomic and financial instability unseen anywhere else.
- Although the situation in the euro area has stabilised since mid-2012 thanks to the efforts of the Member States and the ECB (through the reform of economic governance, governmental commitments with respect to their public finances, a strengthening of the action of the ECB, financial solidarity mechanisms, a deepening of Banking Union, and a shift in the policy mix in favour of growth), this crisis brought home the need for a currency area to have a permanent stabilisation mechanism capable, in particular, of dealing with asymmetric shocks. This mechanism could take the form of a common budget for the euro area, with significant resources.
- This budget, consisting of cyclical revenues (e.g. corporate income tax) and used to finance countercyclical spending (e.g. unemployment benefits), would contribute to macroeconomic stabilisation in the euro area via automatic stabilisers at the central level, together with a capacity for discretionary intervention. A development along these lines might also make the ECB more comfortable with taking action – if necessary – on the central debt backed by this budget, and so contribute to the financial stability of the euro area.
- The creation of a budget for the euro area would necessarily be a medium-term project, calling at the same time for a further step in the direction of political integration to ensure the democratic legitimacy of the new prerogatives transferred to the European level. The resulting greater solidarity could also justify a further strengthening of the euro area's economic governance. Moreover, a change of this kind would structurally affect many different areas, in the social and tax fields particularly. Overall, the introduction of a central budget would significantly improve the economic and institutional workings of the euro area, thereby boosting its growth potential.

Breakdown of public spending by level of government (2010)



Source: OECD, Argentina Ministry of Economy, Brazil Central Bank (data for Argentina and Brazil date from 2009), DG Trésor calculations.

* For the EU, social security spending is included under the heading "Federated states and local government spending" since the spending is covered at national level.

Note: Data supplied by the OECD are not consolidated by level of government, i.e. data include transfers between the different levels. To avoid double counting, data presented here assume an ad hoc rule that most transfers are from central to local level.

MINISTÈRE DE L'ÉCONOMIE ET DES FINANCES

MINISTÈRE DU COMMERCE EXTÉRIEUR

1. Despite recent progress, the architecture of the euro area cannot provide optimum macroeconomic and financial stabilisation

1.1 The coexistence of a single monetary policy and the preservation of essentially national responsibility in fiscal matters has been a feature of the euro area from the outset

When setting up the Euro, Member States decided that fiscal policy should remain a national responsibility. This resulted in the creation of a very small European budget alongside national budgets[1]. This decision, which reflected a desire to reap the economic benefits of a single currency while preserving national sovereignty, sets the euro area apart from most other currency areas which are rooted in a federal structure.

It was assumed that coordinated fiscal policy, market discipline and the gradual synchronisation of Member States' economic cycles would guarantee the effectiveness of this configuration. The Stability and Growth Pact (SGP) introduced rules to enforce fiscal discipline in order to avoid free-rider behaviour[2]. The ban on "monetary financing" of States by the ECB and the "no bail-out" clause for national public debt were supposed to guarantee "market discipline"[3], thus expressing the preference for purely national responsibility in fiscal matters. The stabilisation of activity was also supposed to be facilitated by the deepening of the single market and the intensification of trade links, which would in turn help to synchronise economic cycles, thereby limiting asymmetric shocks within the euro area. At the same time, flexible mechanisms introduced into the SGP from its inception in 1997 were strengthened by the Pact's reform in 2005 to give national governments a degree of fiscal policy leeway in the event of a severe recession[4].

1.2 Fiscal policy plays an essential role in macroeconomic stabilisation in a currency area, especially in the euro area

Fiscal policy has an especially important role to play in macroeconomic stabilisation in a currency union. It serves to stabilise economic activity through automatic stabilisers[5] or discretionary measures. In a currency union, when a Member State experiences an asymmetric supply or demand shock, it lacks the other usual adjustment mechanisms, namely exchange rate and monetary policy. Because by construction monetary policy reflects the average situation for the euro area as a whole, fiscal policy plays an even more crucial role in Member States' policy mix. This is particularly true for the smaller economies, because, by construction, monetary policy reacts more powerfully to the state of the largest economies, and may consequently prove to be over-restrictive or over-expansionary for a given country or group of countries[6].

Moreover, internal adjustment mechanisms – which are insufficient to keep a currency union functioning properly in any case – are ineffectual in the euro area. Mundell's (1961)[7] criteria for an optimum currency area (labour mobility, price and wage flexibility) are not completely satisfied in the euro area and in any case insufficient to ensure the viability of a currency union. The economic literature has indeed highlighted the central role played by fiscal integration in the working of currency areas (see Box 1).

Imperfectly synchronised economic cycles in the euro area further underline the key role played by fiscal policy in stabilising the economy. Even though an economic cycle common to the entire euro area does exist[8] there are frequent and sometimes wide cyclical divergences between Member States (see Chart 1). Moreover, even in the event of a symmetrical variation in activity, differences in the specialisation and productive structure of euro area economies can result in them being affected very differently. Consequently, the stabilising function of fiscal policy is particularly important in the euro area so as to avoid a locally procyclical policy mix.

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(1) European Union budget expenditures in 2010 represented 1.0% of EU GDP, whereas national budget expenditures averaged 49.7% of GDP. By way of comparison, US Federal expenditures in the same year represented around 27% of GDP.

(2) Where governments adopt lax fiscal strategies while continuing to enjoy low interest rates as expressed by the average of the euro area.

(3) The prohibition on monetary financing and the no bail-out clause were supposed to incite investors to pay attention to the sustainability of the public finances of each of the Member States and act as an incentive to fiscal discipline, to keep interest rates from rising too far.

(4) The 2005 reform relaxed the notion of "exceptional circumstances" (temporarily suspending the European budgetary rules in the event of a severe contraction), and at the same time introduced the possibility of postponing the time frame for correcting excessive public deficits provided the Member State concerned takes sufficient measures.

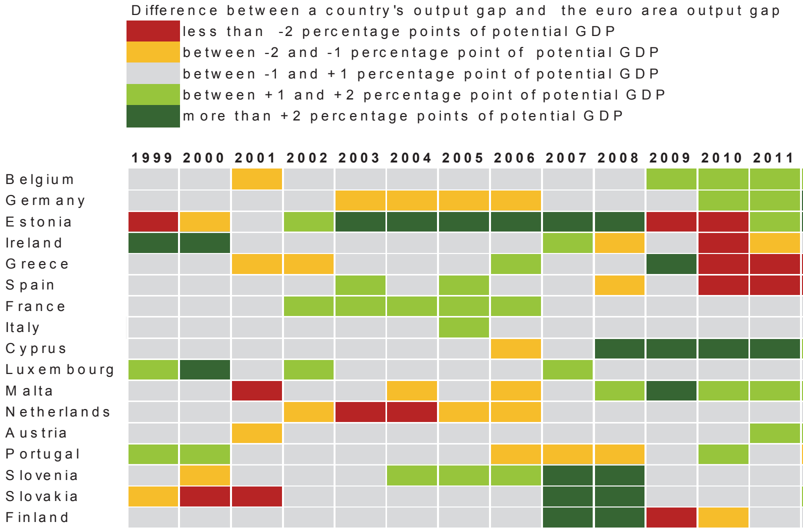
(5) Fiscal policy contributes to macroeconomic stabilisation not only at the top of the economic cycle, but also in a recession. At the top of the cycle, the automatic stabilisers serve to improve the budget balance (higher tax receipts, notably), helping to prevent the economy from overheating. Conversely, these automatic stabilisers cushion against falling activity in a contraction. This stabilising function can thus be viewed as an optimal inter-temporal allocation of net public savings.

(6) According to a recent article assessing the appropriateness of monetary policy in relation to the economic cycle of different regions in America and euro area Member States, divergences from optimal interest rates (those that would be obtained under the Taylor rule) are found to be wider in the euro area than in the United States. See Malkin and Nechio, (2012) "U.S. and Euro-Area Monetary Policy by Regions", *FRSBSF Economic Letter.*

(7) See Mundell, R., (1961), "A theory of Optimum Currency Areas", *American Economic Review*, 51 (4).

(8) See Furceri, D. and Karras, G., (2008), "Business Cycles Synchronization in the EMU", *Applied Economics.*

Chart 1: Macroeconomic shocks and fluctuations in the euro area



Source: European Commission, Spring Forecast 2013.

Box 1: The theory of optimum currency areas and internal adjustments within the euro area

The theory of optimum currency areas suggests that internal adjustments serve to offset fixed exchange rates in a currency union: according to this view, the difficult adjustment in response to the crisis stemmed not so much from the currency union's design flaws as from the lack of factor mobility (labour especially) and the lack of price and wage flexibility. This view draws on the literature on "optimum currency areas", which initially highlighted the mobility of production factors and price and wage flexibility as factors serving to compensate for the fixed exchange rate in a currency union (Mundell, 1961). It has indeed been shown in the United States that migration of people between states has served to cushion local rises in unemployment[1], even if the scale of this phenomenon has been disputed in the case of the recent financial crisis[2].

However, this type of adjustment appears to be both hard to achieve in the euro area and in any case insufficient for a currency area to function properly.

On the one hand, labour mobility has historically been low in the euro area, as it faces higher barriers (linguistic, cultural, the non-portability of certain welfare entitlements, etc.) than in other currency areas[3]. On the other hand, as in most developed economies, there is a certain degree of downward nominal and real wage rigidity[4] in the euro area, which hampers adjustment through prices. Moreover, this adjustment to an asymmetric shock via a fall in prices and wages–akin to internal devaluation–looks especially costly when the economy in question is heavily indebted since lower prices and wages would push up the real value of this debt[5].

Furthermore, the literature that has built up around Mundell's work on optimum currency areas has placed the spotlight on the role of factors other than labour mobility or price flexibility. In addition to trade openness[6] and diversification of the productive structure[7], or even the endogeneity of the optimum currency area criteria (trade integration leading to cyclical synchronisation[8]), subsequent work has pointed to the central role fiscal integration plays in the proper working of a currency union[9]. Finally, one should not overlook the paramount role of institutions in determining whether a currency area is optimum.

(1) See Blanchard, O. and Katz, L., (1992), "Regional Evolutions", *Brookings Papers on Economic Activity.*
(2) There is an academic debate over the possibility that labour mobility in the United States may have diminished since the 2008 crisis, due in particular to the rising number of homeowners and the slump in prices at the height of the crisis. Several articles, however, have shown that this assumption was probably unfounded. (see in particular Aaronson & Davis, (2011), "How much has house lock affected labor mobility and the unemployment rate?", *Chicago Fed Letter*).
(3) See Bonin, Eichhorst, Florman, Hansen, Skiöld, Stuhler, Tatsiramos, Thomasen, and Zimmermann, (2008), "Geographic mobility in the European Union: Optimising its Economic and Social Benefits." *IZA.*
(4) These downward wage rigidities were particularly pronounced before the crisis (see Holden, S. and Wulfsberg, F., (2008), "Downward Nominal Wage Rigidity in the OECD." *The B.E. Journal of Macroeconomics*), but they have abated since then as a result of labour market reforms enacted in certain countries.
(5) See Fisher, Irving, (1933), "The Debt-Deflation Theory of Great Depressions" *Econometrica.*
(6) See McKinnon R., (1963), "Optimum Currency Areas", *American Economic Review.*
(7) See Kenen P., (1967), "The Theory of Optimum Currency Areas: An Eclectic View", *Monetary Problems of the International Economy.*
(8) See Frankel and Rose, (1997), "The Endogeneity of the Optimum Currency Area Criteria", *NBER Working Paper.*
(9) See Werning and Farhi, (2013), "Fiscal Unions", *NBER Working Paper.*

1.3 The crisis has shown that, even when coordinated, national fiscal policies do not suffice to ensure optimum macroeconomic and financial stabilisation in the euro area

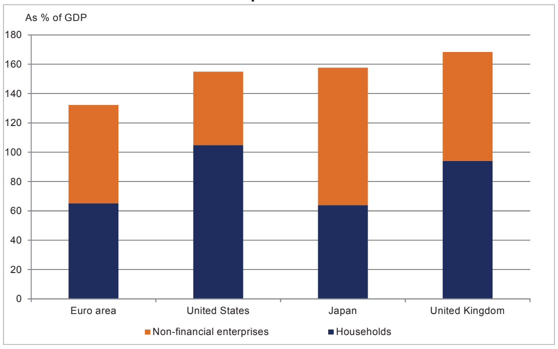
The sovereign debt crisis revealed inherent flaws in the area's initial design, which is too dependent on national fiscal policies to cope with asymmetric shocks. After the initial phase of the crisis, imported from the United States and with largely global consequences (2008-2009), a second phase of financial tension (2010-2012) – in the sovereign debt market notably – more specifically affected the euro area, even though its aggregate fundamentals were more favourable than in the major industrialised countries (see Chart 2). This crisis was unprecedented, raising the spectre of a breakup of the euro area. In response, far-reaching reforms were implemented which helped to alleviate the financial tensions and totally dispelled misgivings as to the integrity of the currency union. Nevertheless, this period brought to light specific flaws in the architecture of the euro area, namely: i) the fact that fiscal responsibility remains at national level can lead to situations in which certain Member States' policy mix is sub-optimal, despite the flexibilities allowed for under the budgetary rules; ii) this institutional configuration, characterised by insufficient risk-sharing and limits on the central bank's scope for action as a lender of last resort, can also pose risks to financial stability.

In a recession, decentralised fiscal policies framed by European budget rules can lead to a sub-optimal policy mix:

- the capacity for countercyclical action by national fiscal policies may be constrained by fiscal rules, even if the latter have been improved considerably. As evidenced by the imbalances accumulated in the course of the 2000s, European fiscal rules are an essential brake on moral hazard and help to prevent non-virtuous behaviour. Since 2011, reforms to economic governance (e.g. the six-pack, the Treaty on Stability, Coordination and Governance – also referred to as TSCG or the Fiscal Compact –, and the two-pack) have tightened these rules on Member States[9] while making them more suitable for acting as a macroeconomic stabiliser[10]. In addition, countercyclical capabilities in the euro area have been strengthened by a shift in the the policy mix in favour of growth, combining targeted measures (the Compact for Growth and Jobs in June 2012, the Youth Employment Initiative in February 2013, and an investment plan targeting SME funding in June 2013), and application of the fiscal rules based on commitments in terms of structural deficit, making due allowance for the economic situation. Nevertheless, the need to coordinate all of the national fiscal policies has naturally resulted in a protracted and complex negotiating process, incurring the risk of a time lag between the economic situation and the fiscal policy response to it. The necessary scope for discretion and bargaining[11] to ensure the mechanism's flexibility and adaptability to economic conditions make it harder for economic agents to anticipate the euro area's policy mix. Thus, one cannot altogether rule out the risk of the fiscal surveillance rules imposing a procyclical policy on Member States already in recession.
- when the euro area is in recession, and when Member States' public finances diverge widely, decentralised fiscal policies create a sub-optimal situation even though the aggregate position is relatively sound. This is because, while fiscal stimulus may be desirable at the aggregate level, the euro area finds itself in a position where vulnerable countries have no room for fiscal manoeuvre to stimulate their economy, and the others have no interest in carrying the burden of stimulus alone. The situation of the euro area in 2012-2013 is not far removed from this configuration. Economic stabilisation may thus be seen as a public good for the euro area as a whole, in which case it ought to be financed centrally.

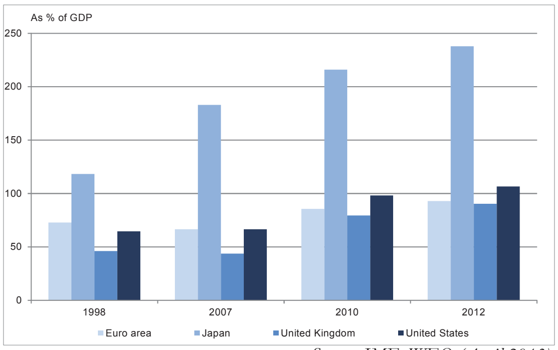
Chart 2: The euro area aggregate fundamentals are sound relative to other global regions

Non-financial private debt (2012Q4)



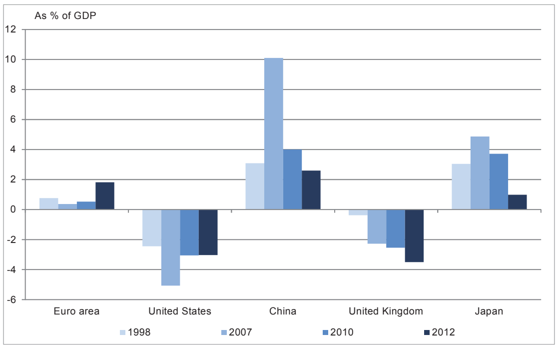
Source: Banque de France.

Public debt



Source: IMF, WEO (April 2013).

Current account balance



Source: IMF, WEO (April 2013).

(9) Tougher sanctions for euro area Member States; introduction of a structural balance rule at the national level, with a correction mechanism; possibility for the Commission and the Eurogroup to intervene prior to the adoption of national budgets if drafts appear seriously in breach of European rules.

(10) The TSCG focuses the oversight of public finances on commitments in terms of structural deficit . Moreover, the revised SGP allows the effects of the elasticities of tax receipts, which are outside the government's control, to be taken into account when assessing compliance with budgetary targets.

(11) For example, in order to identify the "relevant factors" justifying a government's breaching the 3% public deficit threshold, or cases of exceptional circumstances liable to lead to a temporary suspension of the Stability and Growth Pact rules.

1.4 This policy mix flaw is one of the factors that exposes the euro area to sharp financial instability

Heavy dependence on national fiscal policies to achieve macroeconomic stabilisation leaves the euro area exposed to the risk of instability in the sovereign debt market. In the wake of the financial crisis, the countries deemed weak by investors, in particular those affected by specific factors (such as Greece, where public finances were out of control, or by the bursting of property bubbles in Ireland and Spain), were confronted by a sudden surge in interest rates, leaving them unable to borrow in the markets without outside assistance. This in turn posed major challenges for their policy mix, with market pressures forcing them to adopt highly procyclical fiscal policies. This vulnerability to self-fulfilling crises in public finances, especially acute in the euro area Member States[12], can prove devastating, pushing countries into a vicious cycle of recession and excessive fiscal consolidation, further exacerbating the financial tensions on their sovereign debt. The *ex post* introduction of different forms of financial solidarity (with the creation of the European Financial Stabilisation Mechanism-EFSM and the European Financial Stability Facility-EFSF, then of the European Stability Mechanism-ESM, and the implementation of financial assistance programmes) has nonetheless provided the euro area with a credible firewall to navigate the transition period, pending a return to the markets for these countries. For the firewall to be activated, however, financial tensions must actually materialise, which makes this an effective crisis management tool, but a costly one in terms of GDP and jobs. From that perspective, an upstream instrument contributing to the prevention of financial tensions by absorbing part of the shocks sustained by countries would make a useful adjunct to the firewall.

Although it would not fully resolve these issues concerning the policy mix, the creation of a Banking Union should help to diminish the linkage between sovereign risks and banking risks and so attenuate financial tensions, provided it comes with a public backstop at European level[13]. Concerns as to the viability of certain countries' banking sectors have ratcheted up investor pressures, since these were passed on to the sovereign debt market in a context in which the public finances alone were supposed to absorb the cost of bank recapitalisation, thus creating a negative feedback loop between sovereign risk and banking risk[14]. The creation of a full Banking Union (with 3 pillars: supervision, resolution and a deposit guarantee scheme) should serve to break this loop. It would also serve in future to limit "sudden stop" phenomena, i.e. a sudden halt to cross-border funding, which occurred on a substantial scale during the crisis and had to be offset by the Eurosystem[15] (mechanically, via debts and claims between central banks, i.e. TARGET2 "imbalances"), and, for programme countries, by European financial assistance and the IMF. But the Banking Union's effectiveness ultimately depends structurally on the existence of a public backstop at the European level to be able unambiguously to fulfil its resolution and deposit-guarantee functions.

Nevertheless, only a combination of a central bank and a significant budget for the euro area can fully address the problem of instability in the sovereign debt market. In other currency unions such as the United States, for example, even if strict "monetary financing" (i.e. purchases of public debt on the primary market) is likewise prohibited, central banks make clear their determination to intervene if necessary (in the public debt market, unconditionally and without limit) via the secondary market in order to preserve financial stability[16]. In the euro area, due to the existence of national public debts only, it was decided to not let the ECB play this role in the same way[17]. However, the treaties do leave room to intervene in the secondary market as confirmed by ECB announcements in the summer 2012 (see Mario Draghi's speech in London on 26 July, followed by the announcement of "Outright Monetary Transactions" (OMT) in August and September 2012). The impact of these announcements on the markets illustrates the importance of a central bank's role as a lender of last resort to the sovereign in ensuring financial stability. Ultimately, the ECB could be made more comfortable with this type of positioning by the existence of a central public debt, which would lend full legitimacy to its role as a lender of last resort, without requiring intervention in the debt of any country in particular[18].

(12) De Grauwe and Ji (2012) show that the rise in the risk premium on euro area Member States attacked by the markets in 2010-2011 cannot be explained by their underlying economic fundamentals, but that it resulted from self-fulfilling speculative attacks (see "Self-Fulfilling Crises in the euro area: An Empirical Test", *CEPR working paper*).

(13) A public backstop at European level is needed in order to give credibility to the bank resolution funding mechanism and to the common deposit-guarantee scheme that should be put in place as part of the Banking Union. Any such backstop should come into play only (i) in a subsidiary manner, i.e. after soliciting the private sector and drawing on the fund's own resources, and (ii) exclusively in the form of loans, the funds advanced by the backstop being repayable *ex post* by the resolution fund/deposit guarantee scheme, thereby ensuring no impact in the medium term on public finances of Member States.

(14) Conversely, the great majority of the banks in each Member State hold sovereign debt issued by their own sovereign, leaving them heavily exposed to a restructuring of this debt. This dual exposure is precisely what lies at the origin of the sovereign-bank loop (see Merler & Pisani-Ferry, (2012), "Hazardous tango: sovereign-bank interdependence and financial stability in the euro area", *Banque de France Financial Stability Review*).

(15) See Buiter, WH., Rahbari, E., and Michels, J., (2011), "The implications of intra-eurozone imbalances in credit flows", *CEPR Policy Insight* No. 57.

(16) Note, however, that the Fed does not intervene in the federated states' debt markets.

(17) Indeed, the ECB is obliged to defend its independence and credibility in the face of 17 national fiscal authorities and avoid encouraging free-rider behaviour, a problem not directly encountered in the case of interventions on a central debt.

(18) Moreover, apart from this specific institutional aspect, the euro area lacks an undisputed single safe asset for the area, which is costly for the proper functioning of Europe's financial markets and has notably fostered the process of financial fragmentation observed since 2011 (see Gourinchas and Jeanne, (2012), "Global Safe Assets", *11th BIS Annual Conference*).

2. A significant central budget, coupled with a borrowing capacity, would fully ensure the macroeconomic and financial stabilisation of the euro area

The creation of a euro area budget with its own resources and spending would significantly improve the capacity to ensure the macroeconomic stabilisation of the currency union, and would address the problems of financial stability that the weakest Member States and the euro area as a whole are liable to encounter. The creation of this budget would involve the transfer of part of the automatic stabilisers (taxes and social security contributions, unemployment-related spending), and of certain national expenditures that would be centralised at euro area level. Therefore, it would not, in itself, entail any additional public expenditures or revenues. An authorised temporary borrowing capacity backed by this central budget would be necessary to finance cyclical deficits at the bottom of the cycle, at the very least. In addition, the introduction of a genuine euro area policy mix presupposes a capacity to launch fiscal stimuli financed by borrowing.

2.1 The introduction of a euro area budget would complete the monetary union by strengthening its capacity for stabilisation and its resilience in the face of crises

In the first place, if it consisted primarily of revenues and spending that fluctuate with activity, the constitution of a centralised fiscal capacity for the euro area would serve to mutualise a portion of the automatic stabilisers, thus acting as a countercyclical insurance mechanism able to absorb fluctuations in activity more effectively. This is because countries experiencing a downturn will contribute less to the central budget, with the latter capturing part of their cyclical deficit. Conversely, the nominal balance would be reduced at the top of the cycle, thereby acting as an incentive to sound fiscal policies (in a property bubble, for example, this could reveal a lax fiscal policy, which would have been "hidden" by a large cyclical surplus without the central budget). This would have a positive impact on the workings of the currency union:

- in terms of financial stability, this would reduce the risk of tension in the national sovereign debt markets in the event of a sharp contraction, since the national public accounts would deteriorate less;
- in terms of macroeconomic stabilisation, a central budget would enable fiscal policy to be adapted to economic conditions: the automatic stabilisers transferred to the central level would be sheltered from market pressures, thereby ensuring they would be effective in smoothing variations in activity; at the national level, a country experiencing a severe shock would be less likely to adopt a procyclical fiscal policy.

Moreover, the central budget could support activity in a recession by means of discretionary stimulus measures, thus complementing the decentralised measures, which are limited by the national rules on the structural deficit. This capacity for central discretionary activity would have the advantage of coordinating stimulus plans across the euro area in the event of a shock to activity, and would therefore multiply their effect[19]. What is more, this would improve the policy mix between fiscal and monetary policy, especially during major crises where monetary policy comes into conflict with the zero lower bound constraint on interest rates[20]. Finally, the central budget would also play a role in an overheating economy, through fiscal tightening.

The possibility of ECB intervention would ensure the stability of the market for debt issued to finance the euro area budget. The absence of any risk of free-rider behaviour at the level of central public debt would enhance the legitimacy of the ECB's power to act as lender of last resort, as with the Fed or the Bank of England. That would help to greatly improve financial stability in the euro area. Even so, fiscal rules at the national level would have to be applied in full, and there would have to be appropriate fiscal governance at the central level to justify this mechanism and ensure the sustainability of public finances in the euro area. Further, the ECB's function as a lender of last resort to sovereigns will have a decisive impact on the central budget only if the central budget is sufficiently large. Finally, and more generally, the issuance of debt to finance the central budget would be an additional source of safe assets, improving the state of banking sectors throughout the euro area.

The function of a public backstop at European level within the framework of the Banking Union could also depend ultimately on the euro area budget. This would have the advantage of being especially credible as a backstop, since its capacity is not limited in advance.

(19) Indeed, the empirical literature has shown the existence of substantial international externalities connected with national fiscal policies. Through their financial and trade links, certain countries' fiscal policies affect not only their own national economy but that of their partners also. Given this kind of externality, there is a problem of coordination, since no one would want to bear the cost of a fiscal stimulus (see for example Corsetti and Müller, (2012), "Multilateral economic cooperation and the international transmission of fiscal policy", *NBER Working Paper*).

(20) Indeed, a number of empirical and theoretical articles have shown that fiscal policy becomes particularly effective (i.e. with a fiscal multiplier well in excess of 1) when fiscal policy runs up against the zero lower bound constraint on interest rates. This can be explained by the fact that when the zero bound constraint on interest rates is reached and when inflation is low or negative, the interest rate may remain too high to absorb a demand deficit, with the Central Bank unable to do anything to bring it down. In that case, fiscal policy can be especially effective, since the growth in aggregate demand brought about by the fiscal stimulus leads to a rise in inflation, thereby lowering the real interest rate. See in particular: Eggertsson, G. and Woodford, M., (2004), "Optimal monetary and fiscal policy in a liquidity trap", *NBER Working Papers* and Christiano, L. J., Eichenbaum, M. and Rebelo, S., (2011), "When is the government spending multiplier large?", *Journal of Political Economy.*

Box 2: **A stabilisation fund, an unrealistic solution in practice**

One alternative solution to the creation of a genuine euro area budget might be the establishment of a stabilisation fund serving as a mechanism for simple lump-sum fiscal transfers between Member States depending on their cyclical position. A Member State at the top of the cycle would contribute to the fund, whereas funds would be transferred to a Member State at the bottom of the cycle. In theory, this mechanism would therefore be particularly effective in the event of a cyclical shock.

However, attractive as this solution may seem at first sight, since it requires no transfer of common resources or expenditures at the European level, it is operationally flawed due to the seemingly impossible task of estimating a country's position in the economic cycle. It is indeed extremely hard to estimate in real time an economy's position in the cycle (i.e. the output gap, namely the gap between observed GDP and estimated potential GDP, the latter being unobservable). Comparison between estimates of the output gap as forecast at the end of one year for the following year with output gaps as now revised illustrate the point: frequently there are wide discrepancies between the two estimates, sometimes even with opposite signs (see table below). This inability to estimate output gaps in real time considerably limits the possibility of designing a fluidly-functioning countercyclical stability fund.

Moreover, in the absence of centralised revenues, expenditures and borrowing, this fund would continue to depend on the Member States' budgets, making transfers between countries, even temporary ones, more politically complicated. Nor would it give the ECB added powers to intervene in public debt, since this would remain national.

A variant of this stability fund, consisting in organising fiscal transfers based on the difference between a Member State's output gap and that of the euro area, also looks impracticable. This fund, proposed by Enderlein, Guttenberg and Spiess (2013)[1], would admittedly have the advantage of minimising output gap errors, and would in theory function without debt, but it would again be based on dubious output gap estimates. Moreover, the counter-cyclical stabilisation effect would be sub-optimal: for example, in the event of a symmetrical shock, the least-affected countries would have to finance the worst-affected ones, even though their own output gap may be negative.

Table : Difference between output gap estimates in real time and current revised output gaps

		2004	2005	2006	2007	2008
Germany	Estimate in "real time"*	–1.4	–1.0	–0.8	0.3	0.6
	Review spring 2013	–1.5	–2.0	0.2	2.1	1.9
Spain	Estimate in "real time"*	–1.7	–2.7	–0.2	–0.5	–0.9
	Review spring 2013	0.8	1.0	1.8	2.1	0.5
France	Estimate in "real time"*	–1.1	–0.5	–0.9	–0.3	–0.3
	Review spring 2013	1.7	1.7	2.4	3.0	1.5
Ireland	Estimate in "real time"*	–1.8	–1.9	–2.2	–0.7	–1.2
	Review spring 2013	–0.6	0.4	1.5	3.7	0.4
Italy	Estimate in "real time"*	–1.2	–0.9	–1.2	–0.8	–0.9
	Review spring 2013	0.8	0.9	2.3	3.1	1.7
Portugal	Estimate in "real time"*	–3.4	–2.8	–2.4	–1.7	–1.2
	Review spring 2013	–1.0	–1.1	–0.6	1.0	0.1

Source: European Commission.

* Output gap estimated in the autumn of the previous year.

(1) See "Blueprint for a Cyclical Shock Insurance in the Euro Area", *Notre Europe Studies and Report*, September 2013.

2.2 The effectiveness of the euro area budget's stabilising effect depends on how the mechanism is calibrated in terms of content, size, and capacity for discretionary intervention

The composition of the budget can be chosen so as to maximise its stabilising effect, which implies selecting the most cyclical revenues and expenditures, i.e. those that have a strong correlation with economic activity (see Box 3). For example:

- On the revenue side, corporate income tax, which is highly sensitive to the cycle – with an average elasticity to GDP of 1.4 for the euro area[21] – looks like an ideal candidate, especially since its taxable base is highly mobile, which would also help discourage tax competition among euro area Member States. In that regard, it might also be worthwhile capitalising on work carried out on the proposal for a Directive on the Common Consolidated Corporate Tax Base (CCCTB)[22]. To a les-

(21) An elasticity of revenues of x% relative to activity means revenues rise x% in response to a 1% increase in activity (more precisely, following a rise in the output gap of 1 percentage point of potential GDP).

(22) The draft CCCTB directive, one of Europe's most ambitious tax harmonisation projects, proposes that businesses operating simultaneously in more than one Member State should report their consolidated profit on a single return at the European level (based on a definition of a common tax base). Revenues resulting from the taxation of these profits would then be distributed among Member States according to a method of apportionment based on the share of the company's employment, payroll, fixed assets and sales in each Member State. This would permit the application of a common rule for determining taxable income, and would offer multinationals the possibility of consolidating realised profits and losses at the European level.

ser degree, and depending on the scale and type of expenditure one wants to finance in common within the euro area, the transfer of a portion of VAT (whose tax base is harmonised already) and social security contributions[23] could also be envisaged. In addition, one could also consider allocating the proceeds of innovative taxes to the budget, such as the financial transactions tax or an environmental tax, especially as it would make more sense to implement these taxes at euro area level as a whole, thereby avoiding possible distortions within the area.

- On the expenditure side, taking over a portion of unemployment-related spending, which is particularly cyclical, at the central level could contribute to the aim of stabilising the economy. Including unemployment benefits in the euro area budget could take the form of a common base for the euro area as a whole that would be topped-up by specific national systems. One could also envisage a basic level of active employment policies covered by the euro area budget, such as vocational training, assistance to public employment services and support for mobility.

The size of the euro area budget is another key factor regarding its stabilising effect (see Box 3). That is because the larger the size of the central budget, the greater its stabilising effect, and the greater the share of the cyclical balance assumed by the central level. Thus, a euro area budget representing 2% of GDP could assume 20% of the stabilisation effected by the national budgets if one opted for the most cyclical revenues and the most countercyclical expenditures, thereby overlooking possible questions of feasibility. By way of illustration, according to Commission forecasts, Spain's 2013 public deficit would have been reduced by 0.4% of GDP and that of Greece by 1.3%. This effect would be further augmented in the context of a complete Banking Union, since the investors would tend to anticipate the stabilisation effect - in other words, the existence of a fiscal stabiliser would act as a catalyst on the stabilising role played by capital and credit markets.

To the extent that there is little purely cyclical expenditure – in a first approximation this is limited to unemployment-related spending – a sufficiently large budget presupposes the pooling of other expenditure items. The value added to be derived from the centralisation of certain expenditures can come from economies of scale or externalities. In the first instance, costs can be reduced through the pooling of expenditures; in the second, the gain stems from more efficient decision making processes given the need for coordination or harmonisation on issues of common concern. These expenditures, which are also intended to bolster the euro area's growth potential, could concern items that are currently poorly or not at all centralised at the European level, but that are classically dealt with at the central level in the main currency areas. Examples of these include infrastructure spending (energy, IT and communications, transport), and/or other investment beneficial to long term potential growth (human capital, R&D, innovation). A variety of arrangements could be considered. For example, pooling these kinds of expenditures could involve transfer to the central level of powers required to implement the policies concerned; conversely, these powers could remain at the national level, with only the financial resources being centralised (they would then be allocated to Member States in order to implement the policies concerned, on the basis of criteria established collectively).

Finally, giving the euro area budget discretionary powers to intervene on top of the automatic stabilisers would considerably reinforce its capacity to stabilise the economy in the event of severe shocks. Giving the budget a capacity to provide fiscal stimulus in the event of a simultaneous contraction of activity in all euro area Member States would complete the action of monetary policy, thus instituting a more comprehensive policy mix in the euro area. This would be especially useful when the contraction is so great that monetary policy comes up against its interest rate constraint. Moreover, over and beyond its fiscal stimulus function, one could envisage authorising a limited structural deficit, for example in order to finance investments for the future common to the euro area as a whole. Nevertheless it is worth recalling that this central borrowing would be added to national public debts, so this central budget would have to be governed by adequate budgetary rules in order to ensure the overall sustainability of euro area public debt (see Box 4).

(23) It should be noted, however, that any transfer of social security contributions to the central level would raise difficulties of an institutional order, insofar as in many countries these are administered by the social partners.

Box 3: **Measuring a budget's stabilising effect**

The stabilising effect of a budget on activity can be formalised[a]. To do so, let S be the budget balance and T_i the different types of tax receipts (counted positively) and public expenditures (counted negatively) such that $S = \sum_i T_i$. To measure the stabilising effect of a budget, it is necessary to define for each budget item T_i:

- the associated elasticity to activity, η_i : the fiscal balance varies with the state of the economy, but this variation depends on the budget item concerned (in particular, taxes and social security contributions – based on consumption, the total payroll or company profits – and unemployment benefits are highly cyclical). For each budget item concerned, it is possible to measure a historical average elasticity relative to a variation in GDP. The OECD[b] supplies the following values for the euro area, on average:

T_i	Public revenues						Public expenditures	
	Personal income tax	Corporate income tax	Indirect taxes	Social security contributions	Other compulsory levies	Revenues other than compulsory levies	Unemployment benefits	Other expenditures
η_i	1.48	1.43	1	0.74	1	0	–4.2	0

- the associated fiscal multiplier, m_i : This is because, on the one hand public expenditure is directly counted in GDP, and on the other agents react to variations in revenue, prices and, where applicable, to changes in tax rates brought about by the variation in the fiscal balance. Multipliers may vary sharply depending on the budget item under consideration, on the structure of an economy and on the economy's position in the cycle, as illustrated by the debates on the value of multipliers initiated by the IMF in early-2013[c].

Suppose economic activity *Y* sustains an exogenous shock with an *ex ante* value of dY_0. Fiscal revenues and expenditures respond to this shock as a function of elasticities: $dT_i = \eta_i \frac{T_i}{Y} dY$.

Through the action of fiscal multipliers m_i, they affect activity in return: $dY = dY_0 - \sum_i m_i dT_i$.

By combining these two equations, one obtains an attenuated final impact on GDP relative to the *ex ante* shock, which corresponds to the direct stabilising effect of the budget (α):

$$dY = \frac{dY_0}{1 + \sum_i m_i \eta_i \frac{T_i}{Y}} = (1-\alpha) dY_0$$

The parameters that determine this direct stabilising effect of the budget are elasticities, budget volumes and multipliers. **The stabilising effect of a euro area budget will therefore mechanically be a function of its content and size.** Moreover, the *ex post* impact on the public finances is given by:

$$dS = \sum_i dT_i = \sum_i \eta_i \frac{T_i}{Y} dY = \frac{\sum_i \eta_i \frac{T_i}{Y}}{1 + \sum_i m_i \eta_i \frac{T_i}{Y}} dY_0 = \beta dY_0$$

Euro area members' budgets currently have an average direct stabilising effect of around 17% assuming revenue multipliers equal to 1/3 and expenditure multipliers equal to 1: in other words, an initial exogenous shock to activity is reduced by 17% thanks to the automatic stabilisers: $dY=0{,}83\ dY_0$ (for example, with a negative exogenous shock to GDP of 6%, GDP will ultimately fall by only 5%).

Illustrative budget (as % of GDP) close to the average of euro area Member States' budgets	
Budget size: 46%	
Unemployment spending: 1.5% Other spending: 44.5%	Personal income tax: 8.1% Corporate income tax: 3.5% Indirect taxes: 12.6% Social security contributions: 12.7% Other compulsory levies: 3.6% Revenues other than compulsory levies: 5.5%
Direct stabilising effect of budget: α = 17%	

Regarding the euro area budget, transferring part of the automatic stabilisers to the central level ought not to modify the direct overall stabilising effect (which would be split between the euro area budget and national budgets). Nevertheless, apart from this "direct" stabilising effect, the very existence of a central euro area budget could also improve each country's national level countercyclical fiscal tool kit, via an "indirect" effect. On the one hand, it deals with part of the deterioration in the national public finances in a recession, thereby boosting macroeconomic stabilisation at the euro area level. On the other hand, by structurally improving the workings of the currency area, and by providing a credible and permanent mechanism for solidarity between Member States, the euro area budget would give markets less reason to attack troubled Member States and force them to implement procyclical fiscal policies. This "indirect" effect of the budget, part of which is captured by the share of the cyclical balance assumed at the central level, looks difficult to estimate formally, but it could be highly significant and thus boost the stabilising effect of even a small central budget.

By way of illustration, assuming revenue multipliers equal to 1/3 and expenditure multipliers equal to 1, here are a few examples of the stabilising capacity of a euro area budget, depending on its size and composition. Thus two budgets of the same size can have very different stabilising effects depending on the cyclical nature of the spending and revenues under consideration (examples 1 and 2 show that the stabilising effect of a budget representing 2% of GDP can vary by a factor of 1 to 2). Example 3 shows that one would need to reach a budget representing 12% of GDP to capture half of the national cyclical balance (i.e. the stabilising effect does not increase proportionately with size, owing to a composition effect).

Example 1 of a euro area budget (as % of GDP)	
Budget size: 2.0%	
Unemployment spending: 0.8% Other spending: 1.3%	Corporate income tax: 0.7% Indirect taxes: 0.7% Social security contributions: 0.7%
Direct stabilising effect: α = 4%	
Share of cyclical balance covered at the central level: 1/10	

Example 2 of a euro area budget (as % of GDP)	
Budget size: 2.0%	
Unemployment spending: 1.5% Other spending: 0.5%	Corporate income tax: 2.0%
Direct stabilising effect: α = 7%	
Share of cyclical balance covered at the central level: 1/5	

Example 3 of a euro area budget (as % of GDP)	
Budget size: 12.0%	
Unemployment spending : 1.5% Other spending: 10.5%	Corporate income tax: 3.5% Personal income tax: 8.1% Indirect taxes: 0.4%
Direct stabilising effect: α = 11.0%	
Share of cyclical balance covered at the central level: 1/2	

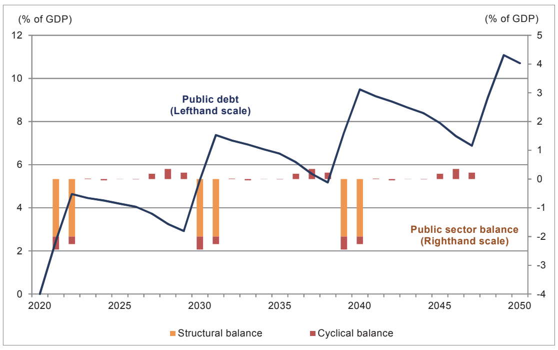
a. These estimates are based on work performed by Agnès Bénassy-Quéré (2013), 'No Euro Budget Without Eurobonds", an extract from "Reconciling Governance and Model: A Five-Fold Narrative for Europe", *Madariaga Foundation*.
b. See Girouard, N. and André, C., (2005), "Measuring cyclically-adjusted budget balances for OECD countries", OECD *Economics Department Working Paper* n°434.
c. See Blanchard, O. and Leigh, D., (2013), "Growth forecasts errors and fiscal multipliers", *IMF Working paper* n° WP/13/1, and IMF, (2012), "Fiscal Multipliers and Contractions", *Fiscal Monitor* (Appendix 1).

Box 4: **Simulating a euro area budget debt trajectory**

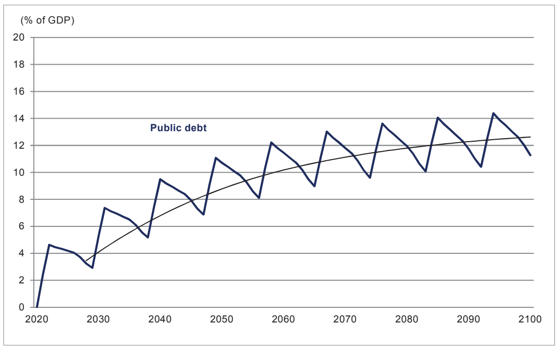
Here we simulate a debt trajectory scenario for the euro area budget to which a quarter of the national automatic stabilisers have been transferred. In our scenario, the 9-year economic cycle is characterised by a sudden contraction of activity in year 1, resulting in a change in the output gap from +1.6% to −3.4% of GDP (the first shock is assumed to occur in 2021), as happened in 2009. The long term assumptions used here are derived from Commission forecasts[1]: average growth rate 1.4%, real interest rate 3%, and deflator 2%. We assume here that discretionary stimulus measures representing 4 percentage points of GDP are taken at euro area level in the year of the shock and the following year (2 percentage points each year)[2], and that there is no compensating measure for the fiscal stimulus (the budget is structurally balanced in the other years). **This scenario is deliberately extreme where debt is concerned, for the sake of argument,** i.e. the assumption of such a large negative shock to activity every 10 years, together with no compensating measure for the fiscal stimulus, are highly pessimistic.

Even under these extreme assumptions, euro area budget debt levels would remain relatively moderate in the medium to long term, with the debt ratio stabilising at around 13 percentage points of GDP looking to 2100. The overall sustainability of the public finances would therefore not be endangered, especially as at the same time provision is made for reducing the excessive debt of Member States, through implementation of the revised SGP.

Chart 3: Simulation: a maximalist debt scenario



Source: 2012 Ageing Report, DG Trésor calculations.



Source: 2012 Ageing Report, DG Trésor calculations.

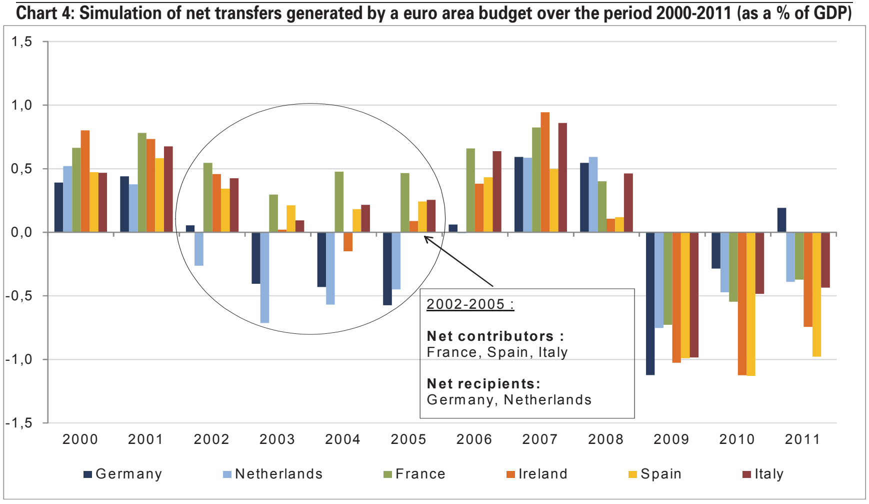
(1) See European Commission (2011), "The 2012 Ageing Report: Underlying Assumptions and Projection Methodologies", *European Economy* no. 4/2011.

(2) Representing a stimulus capacity twice as large as that put in place in the euro area in 2009-2010 and comparable to the scale of the United States' response at that time.

2.3 The creation of a euro area budget raises the question of transfers between Member States

The countercyclical stabilising function of a euro area central budget would entail transfers between countries depending on their cyclical situation. In theory, these transfers would be temporary and neutral in terms of redistribution in the medium term, each country being net recipient and net contributor in turn, depending on its own cycle. Thus, with hindsight, if a common budget had existed, and assuming that on average each Member State benefited or contributed to the budget in proportion to its cyclical balance, countries such as Germany or the Netherlands would have received transfers from the common budget between 2002 and 2006, whereas the countries now most in difficulty would have been net contributors to this budget (see Chart 4).

Chart 4: Simulation of net transfers generated by a euro area budget over the period 2000-2011 (as a % of GDP)



Source: European Commission, DG Trésor calculations.

Explanations: For the sake of argument, we represent net transfers from a budget to Member States corresponding to half of the cyclical deficits of each Member State as estimated by the European Commission. This would correspond to a budget in which a significant portion of the automatic stabilisers had been transferred to the central level.

In reality, the assumption of a neutral budget on average for each Member State is a very bold one. It would no doubt be hard to design a budget resulting in only temporary transfers for all Member States as a whole, unless one were to opt for a mechanism with complex rules (based on an estimated output gap, for example), whose stabilisation function would ultimately be relatively ineffectual (see Box 2). Moreover, given the highly heterogeneous structure of the individual Member States' economies, and the existence of potential agglomeration effects[24] within currency areas leading to the concentration of activity at the area's core at the expense of peripheral states, some regions could experience greater and more recurring difficulties than others. It could therefore be justifiable, in economic terms, for these peripheral regions to benefit from the common budget more frequently. In practice, the extent of these transfers will depend on the nature and procedures for the execution of central budget expenditures; these could be calibrated in such a way as to increase or minimise them.

Given the risk that the common euro area budget might give rise to durable transfers, it is essential to avoid encouraging free-rider behaviour. Consequently, the resulting moral hazard will need to be compensated for through greater mutual surveillance and stronger governance, which already exist to a large extent. Indeed, economic and fiscal governance in the euro area has already been strengthened significantly through mechanisms such as the six-pack, the TSCG and the two-pack. The creation of a euro area budget, reflecting greater solidarity between Member States, could ultimately justify a further strengthening of European economic governance, subject to the democratic legitimacy of the arrangement.

***

The introduction of a specific euro area budget would complete the monetary union's initial architecture, by means of an *ex ante* risk-pooling mechanism capable of ensuring optimum macroeconomic and financial stabilisation. This argument had already been put forward in 1977 in the MacDougall Report written by a group of experts at the Commission's behest. This report underlined the need for a common budget mechanism featuring a federal budget representing between 7.5% and 10% of GDP[25]. The Delors Report took up the idea in the late-1980s, proposing the creation of a federal budget representing around 2.5% of GDP; this was smaller than the one proposed in the MacDougall report since the Commission took the view that asymmetric shocks were likely to be small.

Over and beyond its economic value, this project is first and foremost part of a medium term political project and presupposes a decisive step towards integration. This is because a euro area budget needs to be based on a further sharing of sovereignty, and on an overhaul of governance reflecting a greater degree of democratic legitimacy, notably through parliamentary control over the budget's content and execution. Deeper euro area integration also raises the question of the articulation between the euro area format and the EU format, even if in the longer run practically all EU Member States are expected to join the euro area. Whatever happens, any such project presupposes institutional changes that will ultimately require a revision of the treaties.

Moreover, a euro area budget would have structural implications in many other areas. Given the risks of moral hazard, greater solidarity in the face of economic risks would be a justification for closer coordination of national economic and fiscal strategies. The creation of own resources would pose the question of harmonising tax bases in operational terms. The creation of solidarity mechanisms, for example via a common core unemployment benefit, would represent a practical embodiment of Europe's social dimension. As a result, the creation of a euro area budget could at last be a logical extension to a deepening of the internal market.

Nicolas CAUDAL, Nathalie GEORGES, Vincent GROSSMANN-WIRTH,
Jean GUILLAUME, Thomas LELLOUCH, Arthur SODE

(24) The effects of currency integration have been the subject of debate ever since the creation of the single currency. For some authors such as Krugman (1993), the introduction of the currency ought to reinforce the agglomeration effects within the euro area, whereas according to others, such as Frankel and Rose (1997), this ought on the contrary to reinforce the homogenisation of economic cycles. While this latter vision seemed to have prevailed before the crisis, cycles appear to have diverged durably since then. (*cf.* Krugman, P., (1993), "Lessons from Massachusetts for EMU" in Torres, F. & Giavazzi, F., (Editors) Adjustment and Growth in the European Monetary Union, and Frankel, J. and Rose, A., (1996), "The Endogeneity of Optimum Currency Areas", *CEPR discussion paper*).

(25) The MacDougall report concluded that in the absence of any such development, "a monetary union would be impraticable".

The view of... Agnès Bénassy-Quéré

What purpose would a euro area budget serve?

To shed light on the fiscal union debate, it is worth looking at Musgrave and Musgrave's classification system for the three economic functions of government, i.e. the allocation of resources, the redistribution of income and the promotion of macroeconomic stabilisation. The authors of this Trésor-Economics focus mainly on the macroeconomic stabilisation function while mentioning that some of the spending on resource allocation could be transferred to euro area level. We could be mistaken for thinking that the financial markets are there to lend to governments when the economic climate makes fiscal stimulus necessary and that it is up to these same governments to ensure their fiscal sustainability by meeting debt repayments at the top of the cycle. In reality, when a country is in real need, the financial markets tend to lend to them at higher interest rates or to not lend to them at all. A federal budget would help get round this problem. However, to enable a (small) euro area budget to play a truly significant role on the macroeconomic stabilisation front, fiscal deficits during the cycle would have to be permitted, as well as joint loans and, therefore, a European tax. A project of this type would clearly require an extremely effective governance. The current fiscal adjustments are aimed at restoring confidence among Member States, an essential condition if progress is to be made towards fiscal union.

Agnès Bénassy-Quéré,

Paris School of Economics, Université Paris 1, Economic Policy Adviser

Publisher:

Ministère de l'Économie, et des Finances et Ministère du Commerce Extérieur

Direction Générale du Trésor
139, rue de Bercy
75575 Paris CEDEX 12

Publication manager:

Sandrine Duchêne

Editor in chief:

Jean-Philippe Vincent
+33 (0)1 44 87 18 51
tresor-eco@dgtresor.gouv.fr

English translation:

Centre de traduction des ministères économique et financier

Layout:

Maryse Dos Santos

ISSN 1962-400X

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