From Monetary Union to a Differentiated Europe

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Executive summary

A monetary union among heterogeneous countries with no adjustment mechanism except wage deflation can only lead to divergent developments. On the eve of the crisis of 2008 the disequilibria were still hidden but were characterised by an undervalued euro for the countries of the German bloc and an overvalued euro for the countries in the South of the eurozone. The financial crisis revealed these disequilibria. Exchange rate changes being impossible, the financial markets finally realised that the debts of the South were not equivalent to those of the North and interest rates exploded in the South. Faced with the crisis of the euro European governments in general adopted austerity policies to bring about internal devaluation and reduce public sector deficits. They established new European rules and institutions in order to provide the necessary financing (ESM, OMT, Banking Union, QE, Capital Markets Union). But the monetary and financial federalism guided by the ECB, together with the rules of the Fiscal Treaty (Treaty on Stability, Coordination and Governance in the Economic and Monetary Union) do not make it possible to overcome the eurozone crisis. Beyond the “muddling through”, several alternative structures have been suggested: a reaffirmation of the no bail-out clause for member state governments; the American model with some cosmetic changes; the model of European budgetary integration with public debt centralised at European level. These alternatives raise serious problems and/or are hardly realistic in political terms. A pragmatic compromise around a European investment programme, the launch of a eurozone budget, a restructuring of Greek debt and a clean-up of bank balance sheets would ease these constraints. In the absence of such a compromise, the question of exiting the euro would be posed again in the short-medium term, with three conceivable regimes: Germany leaving the monetary union; a system of several euros with an overall euro; a euro bancor system. Once established, any of these regimes would provide a better response to the structural heterogeneity of the eurozone, but the transitional period would be perilous. Supporting structural policies would be needed. Whatever the outcome may be, we are heading towards a more differentiated Europe.
The Trap of the Single Currency

Divergent developments in heterogeneous economies

The proponents of the single currency hoped that a process of economic convergence would take place through more sustained growth promoted by lower interest rates, a reduction in transactions costs, the stimulation of competition, the expansion of intra-European trade and deeper financial integration (see i.a. Commission of the European Communities, 1990 and 1991). Right from the start, on the other hand, numerous economists considered that a monetary union among countries displaying great structural heterogeneity and with no adjustment mechanism except internal devaluation through wage deflation could only lead to divergent development and a polarisation of economic activity on the most competitive bloc.

There was no federal budget to play the role of stabilisation and redistribution and one could not envisage the establishment of such a budget even in a minimal form. It was difficult in practice to strengthen the coordination of national economic policies. The mobility of labour within Europe was low because of language differences and differences in social systems. Even in the United States where labour mobility is much higher it cannot play an important adjustment role in the short term. During the 2000s, international capital mobility and deeper financial integration were presented by the ECB and the Commission as an alternative, with "international risk sharing." Intra-European funding would help to finance investments in the weaker regions. This approach is to a large extent mistaken (Clévenot and Duwicquet, 2011).

The euro resulted from a political compromise between France and Germany which paid little attention to economic realities. France wanted to avoid simply being integrated into an expanded mark zone. Germany agreed to the elimination of the mark in return for the acceptance of its reunification but imposed its own rules. The initial compromise of 1992 presupposed a limited eurozone because it was thought that the restrictive Maastricht criteria for inflation and public finances would prevent the two main southern countries – Italy and Spain – from participating. But the adjustment efforts made by these countries in the first half of the 1990s so as not to be left outside allowed them to qualify although the criteria were far from being strictly satisfied, especially as regards the level of public debt in Italy.

In fact, a convergence of inflation rates and interest rates did take place. At the beginning of the 2000s the debt securities of Greece, Spain or Portugal appeared to be equivalent to German debt securities. This led to an investment boom, with capital flowing in from northern Europe, including massive speculation in Spanish and Irish real estate. Growth was slower in Germany, held back by wage adjustments under the Schröder reforms of the early 2000s. This apparent convergence disguised important imbalances. There was a wide divergence in unit wage costs with, in relative terms, big increases in Spain, Ireland, Greece and Italy and falls in Austria, Finland and, above all, Germany. Current account imbalances widened enormously, with deficits in the South in contrast to surpluses in the North. But these current account disequilibria were regarded as a secondary matter in the monetary union where the overall current account was close to balance. Rather, the key issue for governance in the eurozone was seen as public finance. Here things seemed to be going well: European countries had reduced their public sector deficits; Germany returned to balance in 2007 while Spain, Portugal and Ireland were regarded as models of budgetary rigour in complete conformity to the Maastricht norms.

On the eve of the financial crisis the wide disequilibria due to heterogeneity appeared to be hidden. They were characterised by an undervalued euro for countries in the German bloc and an overvalued euro for the countries of southern Europe (including France) while for the eurozone as a whole the euro was close to its equilibrium value (Duwicquet et al., 2013). These misalignments of real exchange rates among the countries of the euro zone were the source of important transfers at the expense of the export sector of countries with an overvalued exchange rate and to the
advantage of export sectors where there is an undervaluation. Taking into account the size and the degree of openness of the different economies it can be estimated that, for a misalignment of 10% in the real exchange rate, the implicit transfers are of the order of +4% to +5% of GDP for Germany and -3% to -4% for France, Italy and Spain.

These maladjusted exchange rates reflected the structural heterogeneity between northern and southern Europe with France in several respects in an intermediate position. The North of Europe is more specialised in manufactures while the South of Europe is increasingly specialised in non-tradeable goods. The size of industrial firms is clearly smaller in Greece, Portugal, Spain and Italy than in the rest of Europe. In general, small firms have lower productivity. Innovation efforts are significantly weaker in the South than in the North and the active population is clearly less qualified (OECD, 2010).

From the Financial Crisis to the Crisis of the Euro

The financial crisis of 2008 worked to reveal these disequilibria. Economic activity declined and the banks were shaken, especially in countries where a real estate bubble was bursting, such as Spain and Ireland. Current account deficits were reduced because of the fall in imports brought about by the recession. Public sector deficits widened in order to support economic activity and rescue the banks. Exchange rate adjustments being impossible, the markets realised that the debts of southern Europe were not equivalent to those of Germany. Interest rates exploded in the South leading to the crisis of the euro and of public debt. The measures adopted in a series of steps since 2010 in the face of this crisis have been partial responses to the threat of immediate breakdown. They have gained some time without providing a solution for the structural imbalances of the eurozone. The strategy of European governments has been in two directions: the general adoption of austerity policies to implement internal devaluations (that is, reductions in wages, employment and prices); and, in a series of steps, the introduction of new European rules and institutions in order to provide finance to the countries in difficulty.

Wage Deflation and Budgetary Austerity

Mechanisms of adjustment by relative prices are only effective in the long term and in the short term they lead to a brake on growth and an increase in unemployment. They are not equally effective across different countries. They are more effective in small countries with a big sector exposed to international competition, such as Ireland or the Baltic Republics. They are less effective in countries less open to the outside, even when they are small (the case of Greece and of Portugal). The effectiveness is even more limited when the same policy is implemented generally across a large number of interdependent countries as was the case in the eurozone. Budgetary cuts made in an indiscriminate way amplified the decline in economic activity. This policy was imposed throughout the EU and especially in the countries of southern Europe. The results are not surprising: a decline in production and a rise in unemployment, while the reduction in budgetary imbalances and deficits could only be partial, or indeed non-existent because of the collapse of production and tax receipts.

The surveillance of budgetary policies was reinforced in the framework of the reform of European governance known as the “six-pack,” which established new rules for budgetary and economic supervision and which came into force in December 2011 (taking into account new indicators – current account deficit and level of public debt in particular – and the “European semester” procedure intended to structure national budgetary policies). The Treaty on Coordination, Stability and Governance (2012) went further in the same direction but focussing solely on the issue of budgetary discipline and giving the “golden rule” a constitutional dimension. The “fiscal pact,” included in the treaty, sets as a medium-term objective a structural deficit of no more than 0.5% of GDP and a level of public sector debt below 60% of GDP. There is no serious economic justification for this quasi-equilibrium in the public finances. The true
“golden rule” for public finance would rather be that public investments (around 3% to 4% of GDP) can be financed by debt because they give rise to wealth in the future. There is however some methodological difficulty. Public investments now include public spending on R&D (more than 1% of GDP) but in all logic it would be necessary to include some part of educational expenditures which are wrongly considered as current expenditures when they in fact lead to the production of human capital and are therefore an investment. The notion of a structural deficit is also debatable because, to allow for the phases of the business cycle, it requires a measure of potential GDP, and there is no consensus about how to estimate that magnitude. Thus it becomes very contestable to impose very restrictive budgetary rules on such a fragile basis.

As regards coordination the TSCG did not bring any real advance. Many studies carried out over several years to try to make progress on coordination have led to very few operational results from the multiplication of packets, pacts, procedures and reports – mostly of little practical significance. There is nothing to encourage surplus countries, even those with massive surpluses, especially Germany, to expand their economies. The European semester, supposed to reinforce the coordination of economic policies, is a very conventional exercise where liberal guidelines are reaffirmed in a somewhat repetitive manner. The Fiscal Pact imposes a path of rapid convergence and return to balanced budgets on deficit countries, together with a programme of “structural reforms.” The latter is certainly the real motive behind the TSCG. Its economic justification is weak but, as has been shown in practice, it is an effective instrument to pressurise European governments to implement liberal policies, the liberalisation of labour, output and capital markets. In particular, the social protection systems which, in different ways in each country, are one of the foundations of European societies, are increasingly called into question under budgetary pressure.

In France, after the assessment of the competitiveness constraints faced by the French manufacturing sector, the policy followed since 2013 has been a tax credit given to firms without any counterpart and any target (as it was given to all firms, exposed or not to international competition). The amount was initially already high (20 billion euros, around 1% of GDP) and has been doubled later on. Wage deflation has been avoided but the cost for the public finance was considerable and limited any action in the other fields. While trying to improve competitiveness and to preserve at the same time employment, the policy didn’t succeed to reach any target. The result appears poor for a prohibitive cost.

Moderation of Monetary Policy and Financial Federalism

Tensions increased in 2011 with attacks on Spanish and Italian government bonds and on the banks with big holdings of those bonds. Measures adopted in the last quarter of 2011 made it possible to gain some time. Firstly the ECB experimented with a new policy, offering three-year credit at 1% to European banks on two occasions – December 2011 and January 2012 – for the substantial sum of 1,000 billion euros (Very Long Term Refinancing Operation, VLTRO). This policy aimed to restore confidence in the banking sector, which had been shaken by the reappearance of the debt crisis, to encourage the take-up of credit by the non-financial private sector and to reduce pressure on government debt prices by encouraging banks to purchase bonds in order to exploit the difference between the high yields on government debt and the low rate at which they were borrowing from the ECB. It was no miracle cure but time had been gained. Confidence was partly restored. Significant quantities of Spanish and Italian bonds had been purchased, which brought down the interest rates paid on government borrowing, but at the risk of putting banks in trouble if bond prices fell back again. But there could be no new take-up of credit by the private sector because of the deep recession. With a similar approach the key interest rate of the ECB was brought down to 0.75% in 2012, 0.05% in 2014, then 0% in 2016. The interest rate paid to banks on their deposits with the ECB was brought down to 0% in 2013, then to negative figures of -0.3% in 2014 and -0.4% in 2016.
encourage banks to lend more or to buy foreign and domestic assets.

The European Stability Mechanism (ESM), created in 2010, in the midst of the Greek crisis, and starting operations in 2012 replaced the European financial stability fund and the European Financial Stability Mechanism, which were temporary structures. It offers loans to countries in difficulty or buys their government bonds, with, in return, strict control of their budgetary policies in the framework of the Fiscal Pact. Its main limitations are the low total of available funds (700 billion euros) relative to the potential risks, the budgetary tutelage imposed on countries who borrow and the fact that they face continuing constraints in seeking other credit because the loans from the ESM have priority over other debts and thus increase the risks in holding the latter.

In July 2012 the president of the ECB broke new ground in undertaking to do “whatever it takes” to save the eurozone. With this perspective the procedure of Outright Monetary Transactions (OMT), that is the purchase on the secondary market, with no limit, of the government bonds of countries in difficulty was put in place in September 2012. Purchase on the secondary bond market rather than direct purchase from the issuing government is a concession to the formal rules of the ECB but does not change anything fundamental. However, the procedure only applies, in a restrictive way, to governments which have concluded a recovery plan with the ESM. Although the procedure has not yet been put into practice, its introduction helped to reduce interest rate spreads substantially on the interbank market.

The Banking Union, also launched in 2012 despite German reluctance and coming into effect in 2014, was a further stage in the move towards more supportive monetary conditions. It aims to overcome the fragmentation of regulatory authorities in banking and finance, which proved to be paralysing in the first phase of the crisis. Countries not in the eurozone are free to participate or not as they choose. The Banking Union makes possible direct aid from the ESM to banks in trouble without going through member state government budgets. This is an important step forward but there are three problematic points.

Only the 123 largest banks are involved. The smaller ones are not subject to direct central control and relate rather to national regulators. This is understandable from an operational point of view but small accidents can have big consequences.

More seriously, because of the reluctance of member states the other two functions needed for bank regulation have not been fully established. The rules of a single resolution mechanism in the case of a bank failure have been in force since January 2016. Shareholders and creditors will have to pay. This mechanism, which aims to bail in private sector actors may work in the case of a small bank but becomes destabilising if a big bank is affected. The dilemma of “too big to fail” is still there. It can only be dealt with effectively by a strict regulation of financial actors. But so far the regulatory framework is inadequate because of international competition and the inability of states either to establish a global regulatory regime or to call into question the supposed benefits of international capital flows. Furthermore, the resolution fund, supposed to assist financial institutions in difficulty will only be provided with 50 billion euros between now and 2024, which is too little, too late.

Finally the guarantee of deposits up to 100,000 euro remains a member state responsibility. In other words the Germans don’t want to guarantee Greek deposits – which may reflect the actual situation in Europe but which could well destabilise the whole European structure in the event of a banking crisis. To sum up, there has been progress with the architecture of banking and financial regulation but the situation is still complex, mixing member state competence, eurozone competence and competence of the EU as a whole. A certain centralisation has taken place for banks but not for other financial corporations and insurance companies in particular.

A final step was taken in January 2015 with the launch of quantitative easing (QE) intended, in principle, to combat the risk of deflation. This programme consists of the purchase, with newly created central bank money, of asset-backed securities and
private and public bonds for an initial sum of 60 billion euros a month, which rose in March 2016 to 80 billion. By adding to liquidity the programme was meant to reinforce the low interest rates and to encourage the banks to increase their loans or to buy financial assets. It has had only a limited impact on real growth and inflation. Most of the liquidity created by the ECB has gone towards financial markets, both in the eurozone, pushing up the price of assets, and outside, with a corresponding outflow of capital and a decline in the euro exchange rate. In spite of the very low interest rates little stimulus has been imparted to productive investment because of the low level of demand and a climate of uncertainty which favours the holding of financial assets. The two main channels through which QE has affected the economy are the boom on financial markets which can give rise to wealth effects on expenditure but also lead to asset price bubbles in the future, and the depreciation of the euro which can advantage sectors producing tradable goods and services. All in all, limited effects. The ECB has helped to put out the fire but not to relaunch economic growth.

In 2015, the Commission opened up a new field, the capital markets union, which is to be brought about by 2019. The aim is to integrate capital markets in order to direct capital towards enterprises, including SMEs, and towards infrastructure projects. It promotes increased use of market-based finance, in particular through the securitisation of loans to SMEs, with the aim of facilitating the free movement of capital and providing more finance for investment. All it will do is expand the financial market-linked activities of banks with increased risks for the new securitised assets.

The Incoherence of the Eurozone Regime

Monetary and financial measures (unlimited purchase of bonds by the ECB, ESM, Banking Union, Capital Markets Union) combined with the rules of the Fiscal Treaty do not make it possible to resolve the crisis of the eurozone. The crisis results from structural imbalances linked to the heterogeneity of the countries in the zone and from the persistently divergent development which characterises them and from the inadequacy of the mechanisms to deal with these problems. The “monetary federalism” of the ECB and “financial federalism” are not enough.

The non-conventional monetary policy of the ECB is more limited than it seems. QE is not allowed to absorb more than one third of the debt of any issuer of bonds and bond purchases have to be in proportion to the economic weight of the country concerned. This limits the assistance which can be given to countries in difficulty and makes it difficult over time to keep the promise of “whatever it takes.” The limits on purchases of German bonds are close to being reached – it is the largest economy but with a declining amount of debt – while it would be easy to buy more Italian bonds but that would exceed the Italian quota. Moderation of the rules would be necessary (raise the fraction of debt that can be bought to 50% for example, and permit bond purchases above the economic weight of the country concerned) but this would be difficult to negotiate. The provision of emergency liquidity assistance (ELA) to banks which are solvent but under pressure raises a further problem: the decision is taken by the central bank of the country concerned and not, as would be logical, the EU-level authority responsible for banking supervision. Here again we see the incomplete nature of the federal project and the different levels of confidence in different countries.

ECB policy poses a further problem. The ECB has helped to put out the fire or, at least, to stop it spreading. QE has only been effective to a limited extent, as we have seen, and works to feed the boom on financial markets. Given the weak state of the economy, equity prices seem very high with the possible development of a financial bubble. The risk of a bubble on bond markets is even more worrying. European banks and central banks have bought enormous quantities of bonds. If bond prices should fall because of a political crisis, because of financial problems in one country or because interest rates rise in the rest of the world there could be significant losses on bond holdings which, in the last resort, would impact on the central bank. The central bank
would have to recognise the losses in its accounts and this would require it to be recapitalised. In itself this can be a difficult operation; it would be all the more difficult in the eurozone because, unlike the Fed in the US, the central bank is not backed by a single state but by seventeen. Recapitalisation of the European system of central banks would be financed by all member states in proportion to their share in its capital while it might be only one country, or a limited number of them, which was involved in the losses on bonds. This could make the operation even more complex.

Finally, even though current account imbalances have been reduced, overall payments imbalances are still widening. The ECB plays the role of a clearing house and records in its TARGET2 system (Trans-European Automated Real-time Gross settlement Express Transfer) the deficits of the South and the surpluses of the North, that is for each country the sum of its current account and net inflows of capital. Until 2008 the current account deficits of the South were matched by capital inflows so that the TARGET2 system as a whole was close to balance. Since 2009 this has no longer been the case. The deficits and surpluses now being registered in TARGET2 reflect net outflows of capital from South to North which cannot be sustained indefinitely because they arise from a loss of confidence by investors in the countries concerned. These deficits rose even further in 2016 and reached very high sums for Italy and Spain because of the size of the two countries. In the American case, where Fedwire is the equivalent of TARGET2, supervisory mechanisms exist at the level of the regional central banks. Balances are brought back close to equilibrium every year through incentives for local banks to help finance intra-regional imbalances and, above all, by asset transfers among the regional central banks. Such mechanisms do not exist at the level of the eurozone and, in present circumstances, it is hard to envisage them, given the incomplete character of European integration.

In spite of everything, a sustainable regime?

In a context of continuing tension, some modifications can be seen since 2015. Wages have risen more in Germany under pressure from IG Metall and infrastructure investment (becoming in any case increasingly necessary) has been relaunched. Although these changes are much less than Germany could achieve they head in the right direction. At EU level the Juncker Plan, launched in 2015, contains some very impressive numbers, but one should not be mistaken. In theory 315 billion euros of additional investment are expected by the end of 2018, that is 0.8% of EU GDP and an increase in investment of 4% per year. In practice the Juncker Plan is to be managed by the EIB where a special fund has been set up but endowed with only 21 billion euros (of which 16 are being raised from an existing line of credit). The EIB can lend up to 60 billion by borrowing. The rest must come from the participation in the plan of other public or private investors. Overall, although the size of the plan has been increased to 500 billion and its period of operation extended to 2020, the value added by the plan is very small. Its implementation is also open to question (few genuinely new projects, not enough effort being made to reinforce cohesion through the investments, a risk of dissipating the effect of the funds directed towards SMEs). These difficulties remind us of the problems faced by European-level plans to relaunch investment since the 1980s. However, since 2014 a more favourable climate for public investment is to be observed within international organisations such as the IMF and the OECD.

Macroeconomic conditions in several countries have improved somewhat since 2015, sustained by depreciation of the euro, the fall in petroleum prices and a slight relaxation of the severe budgetary constraints imposed the Commission. In the Netherlands, characterised by a very high level of household debt and by banks affected by doubtful assets, recovery has been drawn by a more expansionary budgetary policy (reduction in income tax and measures to receive refugees) but also
by liberal measures, labour market reforms (easier dismissals, reduction in the duration of unemployment indemnities, raising the retirement age to 67) and by a recovery in the real estate sector resulting from low interest rates and higher prices. Since 2015 Spain has begun to harvest some of the fruits of its policy of wage deflation but unemployment, precarious employment and inequality remain at high levels. Small, very open countries, such as Slovakia and the Baltic states, after deep adjustments, are experiencing a rapid recovery, based on automobiles in the former country but also on investment in their very inadequate infrastructures financed on a large scale by European funds. France is still on a knife-edge, with a limited recovery and persistent unemployment. In 2016 constraints on the Portuguese economy were modestly relaxed. A successful modification of budgetary policy was compatible with a reduction in the public sector deficit (-2.1% of GDP) but the fragility of the banking sector and the high level of public debt (131% of GDP) continue to pose significant risks. Italy remains locked into slow growth with high public debt also and banks undermined by their bad or doubtful loans. Waiting for the next restructuring of its debt, Greece, in spite of a small improvement, is mired in endless austerity.

One should not build false hopes on this slightly sunnier interval – and this for two reasons. Firstly, although a real recovery is taking place in the eurozone in 2017, unemployment remains very high in the South of the zone and income inequalities very wide. All this leads to persistent social tensions. Secondly, destabilising factors remain, with high levels of both public and private debt, fragile banks and the threat of higher interest rates to come. There continue to be serious misalignments of real exchange rates among the countries of the zone, mainly at the advantage of Germany. For countries where the real exchange rate does not adjust, this means the slow asphyxiation illustrated by the French and Italian cases. The sustainability of the euro zone growth regime in the absence of thoroughgoing reforms remains a completely open question.

Analogies can be drawn with several experiments in the past. The international gold standard which prevailed until 1914 is a first example. In this regime fixed exchange rates were rendered compatible with open economies and capital mobility through the pronounced flexibility of domestic markets and, in first place, of the labour market. As a result growth was highly cyclical and trend growth was low, with extreme income inequalities. Exchange rate constraints have blocked growth over long periods on many other occasions in the past: in the UK after its return to the gold standard in the 1920s; in France in the 1930s with its refusal to devalue and its resort to a policy of wage deflation; in the UK again in the 1950s and 1960s with an overvalued pound and the problem of sterling balances; in France with the franc fort from the end of the 1970s to the beginning of the 1990s.

Persistence with a growth regime which performs so badly may seem surprising. It is to be explained by the interests of two groups – on the one hand the countries of northern Europe on the other the European elite. The first, grouped around Germany, benefit from an undervalued currency and do reasonably well even if they are affected by the weakness of the southern countries. The small, very open economies can also adapt easily. The second, the “European elite”, consisting of the dominant strata in industry and finance and the European technocracy, uses the crisis to deepen and extend neo-liberal policies: increased flexibility on the labour market; reduction in social expenditures leading households to resort increasingly to private insurance, tighter budgetary frameworks to reduce the role of the state and relaunch the process of privatisation, refusal to increase taxes on financial revenues, high incomes or big wealth holdings, which have all seen considerable tax reductions, failure to impose adequate constraints on the financial sector. These express also the relative indifference to developments in the internal market of the big European corporations which are more global than European.

The status quo might last with limited modifications. This would correspond to Scenario 1: Carrying On in the Commission’s white paper (2017) which downplays the dysfunctions of the eurozone and of the solutions that might be found for
them. The dangers of disaster inherent in this scenario, however, are so great as to have led to the emergence of many proposed alternative solutions.

**Unconvincing or Unlikely Alternatives**

Three alternative architectures have been proposed for the eurozone: a return to the no bail-out clause; a softer version of the American model; and European budgetary integration (Gouardo and Ausilloux, 2016). To these three regimes might be added a more pragmatic compromise, combining a moderation of the budgetary rules, a cleaning up of the balance sheets of the banks with a European investment plan.

**A return to the no bail-out clause**

In this regime the original principles of the monetary union are restored and completed. States preserve or recover their budgetary sovereignty at the national level but reassert the no-bail-out clause. States are no longer constrained by inappropriate rules such as the limit of 3% of GDP for the deficit or 60% of GDP for the debt, but are subjected to the discipline of the markets. There is no solidarity between states. In the event of over-indebtedness and default on the debt of a state the investors (that is, essentially, the banks) suffer a loss. In theory this is made easier because states are protected from bank failures by the Banking Union. To reduce the risk of crisis the banks have to cover their purchases of government debt with more of their own capital. Government bonds are no longer regarded as risk free from the point of view of prudential supervision. Experience shows, however, that investors do not always assess accurately the solidity of states. To avoid large-scale panics the ESM could be activated and the debt rescheduled by means of a strictly controlled adjustment plan.

This regime is compatible with two scenarios envisaged in the latest white paper: Scenario 2: Nothing But the Single Market, where the EU falls back on the deepening of the single market alone with no other interventions to secure the functioning of the eurozone; but also Scenario 4: Doing Less More Efficiently, where the EU concentrates its efforts in certain fields (such as high technology, banking supervision, frontier control) while reducing its interventions elsewhere.

This model has resonated to some extent in Germany (Fuest and al., 2016). In theory it gives autonomy back to the states while retaining the possibility of a stabilisation role for the EU in the event of an asymmetric shock, at least while the state concerned was regarded as solvent. It avoids both the ex ante and ex post coordinations and controls which function very badly.

But there are many difficulties. The possibility of a crisis of over-indebtedness leading to debt restructuring inhibits a state’s capacity to use budgetary policy to respond to an asymmetric shock. We come up against the basic problem posed by the functioning of the eurozone. To avoid costly, difficult to control, dislocations, general patterns of convergence in tax regimes and public expenditure would be necessary. The budgetary autonomy which is supposedly recovered would be a trap. Government bonds would lose their status as risk-free assets which is one of the pillars of the financial system and the functioning of the financial system would be impaired. There is a risk that crises in the public finances could be amplified. This regime rests partly on the Banking Union which is, as we have seen, unfinished. The failure of a very big bank would be difficult to manage and the resolution fund does not have sufficient resources. Lastly, in the event of a restructuring of its debt the size of the state concerned could raise a problem. The limits of market-based regulation would appear if a large state such as Italy were affected.

**A softer version of the US Model**

In this model a stabilisation function is introduced at the level of the eurozone by establishing a federal budget financed by new taxes (a tax on financial transactions, a carbon tax) or by moving some taxes from national to eurozone level in order to avoid a ruinous race to the bottom (taxes on interest on savings and on dividends, taxes on
corporate profits). In the very probable case of difficulties in establishing such a fiscal base, a simple borrowing capacity would be introduced for crisis periods. In both cases transfers or investments could be undertaken to assist states affected by negative shocks. As for the previous regime budgetary sovereignty would be restored to member states with no constraining European rules but this would be matched by a reassertion of the no bail-out principle. Consequently there is a possibility of debt restructuring in cases of over-indebtedness. This is what can be observed in the US, where the states of the union and cities are responsible for their own debts and where the federal government does not impose rules. Chapter 9 of the bankruptcy code provides the framework for debt restructuring of cities, counties, townships and school districts and of public agencies (case of Jefferson County, Alabama in 2011, Detroit in 2013). But states cannot access chapter 9.

In the event of a negative shock, as well as the stabilisation effects linked to the working of the federal budget, there may be transfers or loans from the federal budget, accompanied by sanctions and direct budgetary control (New York in 1975, Columbia in 1996). More recently, however, a debt restructuring procedure has been carried out in Puerto Rico together with controls over its budget.

Transposing this American model into the European context would involve several problems which would be difficult to overcome. The establishment of a federal budget is hardly probable because of the absence of any spirit of solidarity among eurozone countries and the scale of the changes which it would require. A less ambitious solution would involve opting for a mechanism where there were no permanent transfers across states (states being net contributors or net beneficiaries according to the changing circumstances) and where, over the long run, accumulated transfers would be close to zero. Several studies, of which the first go back to the early 1990s (Italianer and Pisani-Ferry, 1992) have shown that a common system of unemployment insurance at the European level would meet this objective and achieve a certain macroeconomic stabilisation at a limited cost (Benassy-Quéré, Ragot and Wolf, 2016). It would be limited to periods of crisis and based on changes in the unemployment rate rather than its level. To illustrate the possible order of magnitude one can point to the American unemployment insurance system which supported some 0.4% of GDP each year between 2008 and 2011. But the successful introduction of even such a relatively modest mechanism would presuppose that a minimal harmonisation of labour markets had been achieved in order to avoid the same shock having opposite effects in different countries. Now the labour markets are very heterogeneous and even a minimal harmonisation would take time. And the more successful countries fear having to contribute more than the countries with a weaker performance.

Finally, the no bail-out principle would raise the same problems as in the previous regime. The American model, combining a federal budget with a no bail-out principle cannot be transposed to the eurozone. In the US the federal debt represents 100% of GDP, that of the states and municipalities about 30%. In the eurozone there is neither a federal budget nor European debt and all public debt is at the national level. To reassert the no bail-out principle for member states would be a destabilising factor and a constraint on national budgetary policies.

A Model of European Budgetary Integration

This model draws lessons from the problems raised by the two models considered above. It starts from the observation that the principle that each state is individually responsible for its debt leads to an increased risk of crises of public debt even for countries regarded to begin with as solvent. To make it possible for the eurozone to function a mutualisation of at least part of the debt would be introduced. Mutualisation could take different forms.

The most natural form would be a European fund for the redemption of public debt, issuing long-term debt instruments (Eurobonds) and mutualising national debts above the threshold of 60% of GDP. Debts below that threshold would remain the
responsibility of the member states because it would be too costly to mutualise the whole of the debt. Another solution which is sometimes put forward, to mutualise debts below the 60% threshold and leave debts above that level to the member states, does not seem to be realistic because it would leave the most indebted states under market pressure. The ESM could play this role of redemption fund and organise the exchange of national debt for the European debt it would issue. This would require a substantial increase in its capital to allow it to carry out operations not in its original mandate. It is sometimes considered that the ECB, in buying public bonds on the secondary markets is also carrying out a mutualisation of debt. This is partly true, but there is no issuance of European bonds as counterpart. QE and the OMT procedure follow a different logic.

However that may be, the mutualisation of debts would help to bring down the cost of the debt and to reduce the risk of default by the most indebted countries. There would be a transfer to the disadvantage of the less indebted countries linked to the difference in interest rates and the collective management of risks. With the diffusion of Eurobonds as substitutes for national ones, the banks which hold the bulk of national bonds would be protected against the tensions which could come from the most fragile countries.

But to counterbalance the mutualisation of debts there would have to be substantial control over national budgets to avoid the risks of slippage in countries which are insufficiently disciplined in their public finances. Two contrasting methods can be envisaged. The first would rely on the greater budgetary discipline imposed by some independent body such as the European Fiscal Board, created by the Commission in 2005, whose role might be extended. On the basis of its diagnosis (favourable periods permitting budgetary surpluses, unfavourable ones allowing wider deficits) it would fix binding limits to the overall position of national budgets. The second method would be based on democratic progress with the establishment of a parliament of the eurozone which would determine broad budgetary guidelines for the eurozone as a whole and the allocation of corresponding targets to individual countries. The comparative strength of different countries within this eurozone parliament (23% for Germany, 50% for France, Italy and Spain if they formed a bloc, 27% for the others) allows some commentators to hope that a majority less inclined towards austerity might emerge. It’s far from obvious that this would happen. In any case, whether the procedure is technocratic or more democratic, it would establish tutelary supervision over the broad structure of national budgetary policy. The importance of that problem should not be underestimated. Further, there is the reluctance (or even the straight refusal) of the Germans to accept the largest part of the costs of this mutualisation. All this explains why nothing has come of this idea which was put forward at the beginning of the 2010s, in spite of the way it could make the monetary union more viable.

Beyond these observations, two basic problems would remain unresolved: macroeconomic stabilisation; and the heterogeneity and unequal competitiveness of member states or, in other words, the persistence of misaligned real exchange rates.

The problem of stabilisation would arise since, because of the budgetary rules to be introduced, the highly indebted countries would have no more room for manoeuvre in the case of a negative shock. In theory the solution would involve a federal budget. This would be difficult unless it took the form, as discussed above, of a small budget making temporary transfers to stabilise economic activity but required to balance these out over the cycle, or the form of a European unemployment indemnity which, as we have seen would be equally difficult to organise. Another mechanism which has been suggested is the creation of national adjustment accounts to smooth out public expenditure over the cycle (Benassy-Quéré et al., 2016). In a period of crisis certain expenditures could be taken out of the calculation of the deficit and transferred to the adjustment account. They would be taken back into the budget calculation when things had returned to normal. The ECB would play a central role in the functioning of this technocratic arrangement in order to
avoid it becoming a basis for excessive budgetary autonomy at member state level.

The persistence of misaligned intra-European real exchange rates, illustrated by current account surpluses in Germany and deficits in France, is more problematic, even though they have been reduced. In 2016 the euro remained under-valued for Germany and over-valued for France (Duwicquet et al., 2016). In the framework of a monetary union there is no mechanism which can respond in a satisfactory way. If wage deflation in the South of Europe is rejected and wage increases in Germany are difficult to bring about, then there only remain reductions in taxes and other charges such as the CICE\(^1\) which have a high budgetary cost and thus cannot deal with the problem. Structural policies aimed at improving non-price competitiveness could also contribute to the response to the problem. They ought to be used but are difficult to design and to implement and only make a difference in the long term.

European budgetary integration would amount to a considerable leap forward. The mutualisation of national debts might be used to avoid the need for a federal budget. Member states would no longer be threatened by the no bail-out principle but the counterpart for this would be a loss of autonomy in national budgetary policies which would be controlled by an independent European institution or a eurozone parliament. This would be a difficult hurdle to clear and beyond it two problems would remain. For stabilisation purposes some substitute for a federal budget would have to be introduced and it is not obvious how this could be done. Nor would a mutualisation of debts resolve the problem of misaligned real exchange rates among European countries and the structural imbalances linked to the heterogeneity of the eurozone.

The three alternative architectures for the eurozone considered above (return to a no bail-out clause, an American model, European budgetary integration with a mutualisation of debts) raise a multiplicity of problems and/or are hardly realistic in political terms. More pragmatic proposals of varying kinds have been put forward to render the status quo more sustainable.

**Compromise and reflation**

Stronger coordination of national economic policies (expansion where the state of public finances permits it, continued pressure where deficits or indebtedness is high) is the first such option. It is not original and is difficult to put into practice as experience over the last thirty years has shown. In particular it is not easy to persuade Germany to pursue a more expansionary policy. Concessions in that direction may well be limited.

Coordinated wage policies (bigger wage increases in the surplus countries than in the deficit ones) is a second option and would be in principle a very appropriate response to the structural imbalances of the eurozone. It is not obvious, however, that this would be feasible. To convince Germany to let its costs and prices slip while its partners practised a more rigorous policy might not be possible. Wage policy is not, strictly speaking, a tool in the hands of the authorities, except, in a certain way, in countries with a social-democratic tradition. A coordinated and differentiated increase of minimum wages could also be considered but difficulties would remain.

A modification of the budgetary rules with a golden rule that expenditure be covered by revenue over the cycle applying only to current expenditure, not to public investment, would be a welcome idea. It is logical to finance public investment by public debt because this leads to an increase in economic growth which makes it possible to service the debt while increasing the stock of public capital (Blot et al., 2016). But implementing this approach is more complex than it may appear. The notion of public investment is ambiguous. By one definition it includes investment by local authorities but not major investments in transport infrastructure (airports, railways, motorways), nor in the energy sector. It includes certain R&D expenditures but not spending on training.

Debt restructuring will be necessary in certain southern European countries to

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\(^1\) Crédit d’impôt pour la compétitivité et l’emploi; tax credit for competitiveness and employment.
escape from permanent budgetary austerity. But the countries of northern Europe are reluctant to accept the corresponding losses. Restructuring would be most necessary in Greece to put an end to the gradual strangulation in the context of endless negotiations for each instalment of the assistance plans. But this comes up against persistent opposition from Germany and its allies. More than the cost of restructuring Greek debt itself it is the principle and the fear of Portugal and above all Italy seeking similar treatment which pose a problem.

Cleaning up the balance sheets of the most fragile banks (in Greece, Italy, Portugal, but also Germany) would also be necessary to ensure a more solid recovery in economic activity and to deal with the risks of turbulence. The banking union is not in a position to do this. Resolution of the substantial stock of dubious assets (more than 1,200 billion euro with provisions having been made against less than half this sum in 2016) could be implemented by the creation of one or more bad banks, responsible for purchasing these dubious credits, which would rid the banks of their toxic assets. Several different procedures could be defined concerning the income or sales revenue to be derived from these assets, the level – national or European – at which the bad banks would be set up, the existence of a guarantee fund, and the intervention of a European agency to avoid increasing the government deficits of member states. These are all complex problems and, given the existing circumstances, it is improbable that a comprehensive solution to all of them could be found.

Launching a European investment programme centred on the energy transition could be useful both for sustaining economic activity and at the same time laying the basis for a new growth model much more sparing in CO2 emissions (Aglietta, 2015). The fields to be promoted would be the supply of renewable energy, smart networks for energy distribution, retrofitting buildings to conserve energy, urban and rail transport networks. The sums advanced are to be 1,000 billion euros over five years, that is 200 billion a year (roughly double the Juncker plan). These investments could be financed by certified credits (through a certification agency for the CO2 reductions which would be obtained) and refinanced by the ECB. This financial structure is interesting but inadequate for an increase of investment on this scale. The investments would consist of public investment (where there are possibilities of an initiative but for relatively modest amounts) and private investment by households and enterprises (where the relevant incentives are complex). The financing of certain programmes could be through eurobonds or project bonds issued at the European level.

Beyond the energy transition, investments producing European public goods could be financed in the same framework. This kind of programmes would be very useful but their macroeconomic impact would be more modest because of the difficulties of implementing it (as witness the problems which European investment plans have come up against in the past).

The introduction of a eurozone budget with a minister of finance is also a valid proposal. It would be desirable to go further in a democratic direction with the creation of a eurozone parliament but this would involve several institutional problems (a new Treaty to be negotiated and ratified, the specification of relations with countries outside the eurozone).

As regards European structural policies, changes would be needed in two fields, competition policy and trade policy. Competition policy has been dominant since the 1990s, in the opening up of public services to competition and the limits on state aid for national industries. The rehabilitation of industrial policy and regional policy would be desirable to give more autonomy at the member state level. However, the implementation of such policies is a complex matter and they are only effective in the medium to longer term. Thus they are of no use in addressing short-run imbalances and they presuppose a capacity to maintain a policy stance over time. As for trade policy, it has favoured free trade agreements to integrate the major trading blocs and to give more guarantees to investors. The EU, divided on the basic issues, has to a large extent disarmed itself. The big “European” corporations are, strictly speaking, more global than European. Better
protection of the European economic space would be desirable with a *Buy European Act* for public procurement and controls over foreign investment in strategic sectors.

A more or less comprehensive compromise could emerge from this group of proposals, including an investment program, restructuring of Greek debt, a clean-up of bank balance sheets, and indeed the beginnings of a eurozone budget. But, starting from the present situation, it would be very difficult to achieve such a compromise. European countries are committed to structural adjustments to very different degrees. Spain, Ireland and the Baltic countries have, with great pain, devalued their real exchange rates. Portugal and above all Greece are being strangled. Germany is accumulating its surpluses. France and Italy have, to a large extent, delayed having to deal with the most difficult questions. The most important misalignments of real exchange rates in Europe centre on Germany (for whom the euro is undervalued) and France and Italy (for whom the euro remains overvalued). In Spain and Ireland the euro is no longer overvalued because of the real adjustments which have been brought about. Lastly, none of the measures discussed provides a stabilisation mechanism to respond to future developments if these continue to be asymmetric.

If a compromise cannot be found to increase economic growth in the eurozone and at the same time establish appropriate stabilisation mechanisms, then the situation could develop in two ways. France and Italy could be, in their turn, forced to undertake real exchange rate devaluations, with negative consequences for growth and employment. This would be the culmination of a scenario where the eurozone is trapped in stagnation (*Carrying on*). Or, on the other hand, the question of quitting the euro could be reposed once again in the relatively short run.

### Changing the monetary regime

Quitting the euro would not be a panacea. It would be a way of not staying locked into ineffective adjustment policies by resolving in the short run the problem of persistently misaligned European exchange rates and by putting in place a mechanism of exchange rate correction and stabilisation in the case of future disequilibria among structurally heterogeneous countries. Short term measures would have to be taken to ensure its success. The exchange rate regime would have to be combined with renewed structural policies. Several different European monetary regimes could be envisaged (Mazier and Valdecantos, 2015).

### Germany Exits

A first possibility is for Germany to leave the euro. The German mark would be reintroduced and would float as would the euro which the other countries would keep. The Bundesbank would be re-established in Frankfurt and the ECB moved to another city. The countries of the German bloc (Austria, Netherlands, Slovakia) would, no doubt, follow Germany. The mark would appreciate substantially while the euro depreciated. Such a regime would resolve one of the main asymmetries of the actual eurozone. An essentially monetary view of Franco-German relations would be called into question. The obstacles to this kind of regime are political rather than economic.

### A System of Multiple Euros with an Overall Euro

A second possibility is a system of multiple euros. The euro would be maintained as an international currency floating freely on the markets with the ECB fixing the rate of interest which would serve as a reference rate for debts issued in this overall euro. This overall euro would be used for international trading and investment transactions but national euros would be introduced at member state level for internal transactions. National central banks would refinance domestic banks at a key rate which would also be a reference rate for bonds issued in national euros. National euros would be linked in a system of fixed but adjustable parities, with parities being adjusted in relation to the external performance of the countries concerned. In the framework of this system of fixed but adjustable parities, central banks would hold their reserves in
foreign exchange constant and would balance their books by buying or selling public bonds denominated in domestic currency. The foreign currency reserves of the ECB would also be held constant with the free float of the overall euro. The national euros would not be convertible at international level, which means exchange controls at member state level. Households would only be able to borrow or hold domestic euros but states (and possibly enterprises and banks) could borrow in both domestic and overall euros. Actors outside the eurozone would only be able to hold overall euros. This system would reintroduce the possibility of adjustment via the exchange rate and, when the external performance of a country deteriorated, it would avoid having real devaluation as the only recourse, as is the case at present. For the system to be stable it would have to be based on parities close to what could be called “equilibrium exchange rates.”

A System with the Euro as Bancor
The third possibility, inspired by the Keynes Plan of 1945, is based on the introduction of a euro in the role of bancor. National currencies would be re-introduced and would float at the international level with key interest rates set by national central banks. Unlike the global euro discussed above, the euro would not be a currency but a unit of account and a basket-money composed of national currencies in proportion to the economic weight of the participating countries. It would be very similar to the ECU as it existed between 1980 and 1990. As before, the national currencies would be linked in a system of fixed but adjustable exchange rates relative to the bancor-euro, depending, as above, on the external performance of the country. This would imply that one member state money serve as anchor to the system. Each European country would have an account, denominated in bancor-euro, with the ECB which would be transformed into a simple clearing house and would settle the total of its real and financial transactions with the rest of the zone. This type of account would be analogous to the TARGET2 system which exists at present at the level of the European payments system SEPA in the framework of the ECB.

In this system, in which the European currencies float, European countries would hold their foreign currency reserves constant. The central bank whose money is acting as an anchor would balance its account by buying or selling domestic bonds. For the central banks of the other European countries it would be transfers from the clearing house which balanced their accounts, which would reflect the intra-European flows inwards and outwards linked to trade and capital movements. The TARGET2 balance of these transactions would be registered at the clearing house. Parity changes in response to registered disequilibria would prevent these transfers becoming too large. Above all these parity changes would avoid the costs of real deflations in the event of structurally divergent developments in the participating countries.

If the recommendations of Keynes were followed to the letter, not only would deficit countries pay interest on their balance at the clearing house but also surplus countries, to encourage the latter to reduce their surpluses by more consistent public expenditure policies. Although this measure is fundamentally just, it would not be easy to win its acceptance by countries obsessively seeking competitiveness. Such a mechanism, completed by transfers to deficit countries carried out by the clearing house, would work to stabilise the system and to limit the asymmetric effects of a system in which one national currency acts as an anchor.

Transition Period
Once permanently established, these new European monetary regimes would ensure that the structural heterogeneity of the eurozone was dealt with in a much better way. However, putting them into effect would raise several sets of problems. Apart from France and Italy most of the countries which had to adjust their real exchange rates have already done so at enormous cost. Misalignments of intra-European real exchange rates are much less pronounced
than they were in 2009. The decline of the euro against the dollar, although it does nothing to correct misalignments within the zone, has provided some room for manoeuvre while giving Germany truly massive advantages on international markets. The countries in most difficulty, Greece and, to a lesser extent, Portugal, are in a specific situation. Relative to their small size they are not very open economies and this means that both monetary devaluation and real deflation are less effective than elsewhere.

The change in monetary regime would have differentiated effects on the countries of the euro zone. With the end of the single currency, Germany and the associated northern countries would lose the implicit subsidy from which they benefit through the undervaluation of the euro, their current account surpluses would be reduced and their output, measured in domestic currency, would fall. A part of their credits to the southern countries could also be lost in the framework of a restructuring of debts. But to compensate for this, Germany would not be involved in a move towards a federal budget to which it would have been a major net contributor. In time it could also benefit from the improved economic situation in Europe and the recovery which would result. But maintaining the status quo, from which it is the main beneficiary, could seem more advantageous to it in a short run view, even though the stagnation of the eurozone penalises Germany as well in the longer run.

As for the countries of the South, they would benefit from the depreciation of their currencies and would gain in price-competitiveness. This is a necessary but not sufficient condition to help to resolve the structural problems which they face, in particular by making it easier to finance the redeployment of resources across different economic activities. In the medium term growth could be restored on a new basis. The main difficulties would be the transition period, the restructuring of external debt which would have to be negotiated, and the risks of monetary instability and banking crises which would have to be controlled.

In fact the introduction of a new monetary regime would be perilous. There would be capital outflows in anticipation of the depreciation of the new currencies. Capital controls would have to be introduced and temporary bank closures might prove to be necessary. “Incomes policies” should be used to ensure that the return of inflation, induced initially by the increase in import prices, remained under control. An end to deflation and a moderate rate of inflation are desirable especially in order to reduce the burden of accumulated debt. But if the benefits of depreciation are to be maintained it would be necessary to avoid accelerating inflation. From this point of view one cannot envisage exit from the euro being combined with a significant rise in wages to start with. Finally it must be emphasised that although growth and employment would be certainly stimulated by depreciation, national income in terms of international purchasing power would be severely reduced.

One of the most sensitive questions is the management of external, euro-denominated, debt. Where such debt is governed by national legislation, repayment could take place in depreciated national euro without any increase. The fraction of the debt governed by national legislation varies a lot over countries and different economic agents (Durand and Villemot, 2016). The vulnerable countries and sectors subject to foreign legislation are not numerous (public sector debt in Greece and Portugal and the debt of the Greek financial sector where, in any case, debt sustainability is problematic; the debt of the financial sectors of small open economies where large-scale depreciation will not be needed). The public debt of France is almost entirely subject to national legislation.

In practice, the way in which such problems are managed would depend on which monetary regime was adopted. If it was the system with national euros and an overall euro (only the latter being convertible) debt redemption would have to be in overall euro, with no penalty for the creditor but with an increased burden for the debtor. If it was either the bancor-euro system or a eurozone without Germany, repayment could be made, where conditions permitted, in national euros, that is with a reduction for the creditors but without additional costs for the debtor countries. However, in such circumstances the interest rates on the debt could be raised.
which would increase the burden of the debt. On the other hand these costs have to be considered relative to overall balance sheets, that is, taking into account both liabilities and assets. In terms of net external positions, the costs of depreciation would be lower for France (net external position -15% of GDP in 2015) and for Italy (-30%) than for Spain (-45%) but the Spanish euro would not need, a priori, to depreciate. It may be recalled that the United Kingdom and Poland had big devaluations in 2010 and the United Kingdom again in 2016. Their economies did not collapse.

**Renewal of Structural Policies**

Exit from the euro could help to lay the foundations for a more viable growth regime at the European level but would by no means represent a sufficient condition. Exchange rate adjustment would bring about an important transfer to the advantage or disadvantage, according to its direction, of the exposed sector. This would help to strengthen positions which have become fragile, as in France or Italy. It would also contribute to the take-off of an export sector in Greece or Portugal. But exit from the euro would have to be complemented by structural policies in several fields (industry, research, infrastructure, education, transition to sustainable energy sources, urban regeneration) through the mobilisation of European programmes, national policies and local initiatives.

National structural policies, principally industrial policy and regional policy, would recover more autonomy as against a less dominant European competition policy. Aid from the public sector would be less subject to Commission control and would take different forms according to the country (for example, more at state level in France, more at regional level in Germany or Italy). More generally, industrial policies would be organised in different ways in different countries (national investment banks, national champions, industrial development funds). Specific cooperation agreements would be developed among certain member states according to their particular strengths and their specialisms (European agencies with a limited number of participants, shared investment programmes around specific large-scale projects).

The diversity of social models would continue without institutional convergence (no European minimum wage, a range of different pension systems, varying importance of trade unions and of collective bargaining). But a limited convergence could come about as the weaker economies catch up and growth is more sustained.

The federal budget would continue at its present very low level (1% of European GDP) in order to ensure the continuation of certain European policies in the fields of agriculture and research. European regional policies or budgetary transfers across regions would no longer be needed because of the adjustments which could be brought about through modification of intra-European exchange rates.

**A Differentiated Europe**

Whatever the outcome may be, maintenance of the status quo, successful reform of the eurozone or the possible break-up of the monetary union, we are heading towards a more differentiated Europe.

The division between members and non-members of the euro zone

This division will remain for a long time, even after Brexit. Given the intractable problems of the eurozone the countries outside it will hardly be inclined to join it even though they are in theory obliged to do so. This division leads to a deep differentiation within the EU which is by no means limited to monetary and exchange rate policies alone.

Budgetary policies are more constrained within the eurozone which limits the capacity to intervene in case of shocks. The pursuit of tax harmonisation, for income from capital and savings, is a necessity to preserve the eurozone even though it meets strong resistance from countries using fiscal dumping to attract foreign investment. The result is lasting differences with countries outside the zone where more heterogeneity can persist.

Regional policies are important within the eurozone in order to help to reduce its internal disequilibria. They do not have such
a strong rationale outside the zone since exchange rate adjustments can be used to make big moves towards equilibrium. It would be logical to reduce the structural and cohesion funds but this could have a big cost for the countries of eastern and central Europe outside the eurozone.

A sharp contrast also appears as regards the mobility of labour. Mobility plays a non-negligible role within a monetary union as a partial substitute for exchange rate adjustments over the medium term. It can however have perverse results (widening inequalities between growth centres, brain drain to the disadvantage of countries where workers receive their training and education). For countries outside the eurozone which are still able to adjust their exchange rates, mobility is less necessary. Although the free circulation of people is fundamental to the EU, this distinction could open up a path to differentiated mobility regimes.

A successful re-foundation of the eurozone, based on its own budget, financial transfers and a minister of finances for the zone and, in time, its own parliament, is a long-term perspective which presupposes that many difficulties could be overcome. On this hypothesis the differentiation with the rest of the EU would be even more marked. The parliament of the eurozone would have an increasing role in setting the eurozone budget, but also in fixing limits to national budgetary policies. This would be in striking contrast to the EU as a whole where the parliament would have a more limited role as with the present European parliament.

**Enhanced cooperation**

In the context of this kind of differentiation, a Europe à la carte could develop in other fields on the basis of enhanced cooperation. This procedure exists since the Treaty of Amsterdam and was repeated in the Treaty of Lisbon in 2009 but so far very little use has been made of it because of certain frictions when it is invoked. A very representative example of the difficulties which are encountered is the case of cooperation on financial transactions taxes which have still not been implemented after multiple efforts to do so. Other possible fields are opening up, however, such as surveillance of frontiers with the creation of a corps of guards for frontiers and coasts. With the rise of external threats, defence has become another field often referred to. It covers at the same time the armaments industry, advanced research in the armaments sector, public procurement policies, integration of intervention capacities and the conduct of joint operations. This is a vast and complex field, with numerous difficulties if only because of the management of nuclear deterrence.

Technological and R&D programmes, and industrial programmes on specific projects are more customary fields where variable geometry structures can be put in place provided those with overall responsibility are clearly identified and given full autonomy. Alongside the well-known successes of Airbus and Ariane, the experience with the troop-carrier aircraft and, to a lesser extent, Galileo, show how difficult international cooperation can be.

Finally, a potential end to the monetary union would allow social models which would have kept their specificity to coexist within the EU thanks to exchange rate adjustments which could be used if disequilibria became too wide. However, this diversity would not, as such, prevent cooperation projects among groups of states or groups of firms to take advantage of specific strengths and complementarities in each project, or projects regarding defence or the security of frontiers, if the political conditions for them were met.
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