

## Will only an earthquake shake up economics?

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**Abstract.** “Natural rate theory”, the Efficient Market Hypothesis and its labour market application dominated interpretations of economic trends and policy prescriptions from the 1970s onwards, with their views of public policy and regulation as distorting otherwise well-functioning free markets. The upheaval of the current crisis is shaking these theories to the core. In this context, Schettkat examines European experience from the 1990s onwards and shows the theories to be unsubstantiated: high unemployment persisted post-recession despite structural reforms to labour market institutions, and the resumption of economic growth was hindered by then-dominant deflationary monetary and fiscal policies inspired by these theories.

### When radical views become mainstream

In 2009, GDP in the European Union (EU) dropped by 4 per cent and in the United States by 3 per cent, levels not experienced since the Great Depression of the 1930s. To many economists and politicians, the current worldwide economic crisis has come as a great surprise; for decades, the theoretical foundations on which economic policy was built assumed stable markets returning quickly to equilibrium. Indeed, policy was regarded as the disturbing element which prevented markets from working efficiently and even caused business cycles rather than smoothing them. Policy, not markets, was declared the cause of instability. Yet in the current crisis it was policy that came to the rescue of financial institutions and of destabilized economies with the infusion of the massive funds required. Financial markets in particular, which were thought to be closest to the idealized market of the theory, were viewed as sufficiently effective to squeeze out all inefficiencies in economies, thus pushing them onto the most efficient trajectory. “You cannot beat the market” is the popular conclusion drawn from the Efficient Market Hypothesis (Fama, 1965), which states

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that financial markets are efficient in the sense that all available information is reflected in prices. Bubbles cannot develop because clever arbitrageurs will trade them away. Deregulate financial markets, financial managers know best, they do God's work (claimed Lloyd Blankfein, Chairman/CEO of Goldman Sachs (2009)), and they need to be compensated better than well for doing so much good to society. Financial markets were declared to be stabilizing, efficiency-enhancing machines of modern capitalism (see also Freeman, in this issue). Markets find their equilibrium immediately; prices cannot be wrong – unless something unpredictable happens.

“Something unpredictable happened” is the favourite fallback position of the proponents of the Efficient Market Hypothesis (EMH), reducing the cause of the current crisis to the bankruptcy of Lehman Brothers. Naturally, Robert Lucas (a major proponent of the EMH) noticed the enormous drop in economic activity in 2009, but for him it was an unpredictable accident. Who could have predicted the collapse of Lehman Brothers? In his defence of the EMH, Lucas (2009) denies that anybody could have predicted it and argues that even if someone had, the costs would have been prohibitive. But he confuses cause and effect. The Lehman bankruptcy evidently sent shockwaves over the financial markets, but it was the consequence rather than the cause of their malfunction. Lehman went bankrupt because assets were drastically overvalued. Financial markets got prices fundamentally wrong!

Why did almost everyone accept the predictions of theories based on perfect, stable markets? By what means do we navigate through the complex and voluminous information involved in real economies? How can we derive feasible policy options? Religion emphasizes values and beliefs, but economics emphasizes theory – though a theory not independent of values and one often written in algebra – in the interpretation of economic trends and design of policies regarded as feasible to handle the economy. Economic theory is necessary to guide policy, but if the theory gets the fundamental relations wrong, the resulting policies cannot be much better. Economic theory is therefore necessary and powerful, seriously affecting what we regard as feasible economic policy options. “The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else,” wrote John Maynard Keynes, three-quarters of a century ago (Keynes, 1936, p. 383). Clearly, the development of economic policy guided by the EMH and “natural rate theory” since the 1970s provides dramatic confirmation of Keynes' statement.

John Taylor (1998, p. 29) claims that the research on rational expectations and the historical experience of high inflation in the 1970s and 1980s were as profound a force for change on the thinking of economists as the Keynesian revolution and the Great Depression of the 1930s had been. In his 1967 presidential address to the American Economic Association, Milton Friedman, whose 1968 publication was arguably the most influential paper ever published in a professional economic journal (Friedman, 1968; Tobin, 1995), applied the EMH to labour markets and argued that expansionary fiscal and/or monetary

policy can (at best) reduce unemployment below the “natural rate” in the short run; but that in the long run, it can only cause inflation. The economy will always return to the “natural rate of unemployment”, which depends on the incentive structure. Economic agents will discover that only nominal values have changed once the “money veil” has been lifted and the economy returns to former equilibrium.

A few years later, in 1974, the industrialized world was hit by the oil-price shocks and inflation rose while unemployment increased. The Great Inflation of the 1970s (rising prices together with rising unemployment) has been taken as historical evidence that the Keynesian theory was fundamentally wrong (see Lucas and Sargent, 1978). What started as a revolt in economic theory mainly at the University of Chicago turned into an economic policy revolution against Keynesian economics. Revolutions leave victims behind, but counter-revolutions seem to be especially bloody in their attempts to extinguish the besieged. In the aftermath of the “natural rate” revolution, all of the Keynesian insights were declared intellectually flawed and useless. Unfortunately, radical ideas deduced from assumptions of efficiently operating markets pushed to extremes did not remain what they actually were, namely, the extreme results of an idealized theoretical model; instead, they became general guidelines for economic policy, first affecting radical conservatives such as Margaret Thatcher in the United Kingdom and Ronald Reagan in the United States, but later morphing into “common sense”. The benchmark for evaluating real-world institutions was the perfect market: the frictionless and timeless artificial economy, where no severe disturbances occur and in which only the equilibrium is analysed. The EMH, the “natural rate of unemployment”, and rational expectations were the yardsticks used to evaluate economic policy. Markets always performed optimally and public policy was declared as disturbing well-functioning markets; the public sector should therefore be reduced to a minimum.

There were certainly critics of these foundations within economics but they were disregarded as unscientific, intellectually dishonest, or simply not clever enough to understand the EMH (see Krugman’s (2009) reply to the “fresh-water” backlash). Most policy institutions bought into the fashionable “new macroeconomics” models. The OECD’s Jobs Study, the IMF, and the EU institutions in particular were designed according to the “new macroeconomic” doctrine. Yet, in actual fact, there was not much evidence to support the theory of the “new macroeconomics”, which was based on artificial micro-foundations. Only its assumptions made it a coherent model.

If one views the economy as being in a unique equilibrium, at its “natural rate”, any intervention to stimulate it must be foolish; “if it disturbs the natural equilibrium, it cannot work” was the message. However, according to this paradigm, “natural” was everything but natural; it was a misnomer. Milton Friedman displayed considerable rhetorical talent when he labelled “natural” a specific unemployment rate which can barely be specified numerically (Staiger, Stock and Watson, 1997). For, in essence, it was a misleading policy: unemployment is actually the worst form of inefficiency but, like classical economists

before Keynes, “natural rate theorists” claim that it is the result of optimization in the given institutional environment; it is a choice not a burden. Unemployment was thus no longer seen as the worst inefficiency, as unused capacity, but rather as the sign of a distorted incentive structure.

Three major principles derived from the “new macroeconomics” guided economic policy:

- markets are efficient (and therefore the private sector outperforms the public sector);
- monetary policy is neutral to the real economy; and
- fiscal policy (deficit spending) is ineffective because rational citizens expect public debt to be future tax increases (Ricardian equivalence).

And now, like an earthquake, the worldwide economic crisis is shaking the theoretical ground underlying “natural rate theory”, just as the forces awoken by the Great Depression shook the ground under classical economics. And in the current crisis, established theoretical structures and “common sense” are not stabilizing the shaking ground on which real economies sit, but adding to the shakes.

Economic theories are very influential in shaping our views of the workings of the economy and of feasible economic policies. This article argues that the institutions of the European Union, which are geared to price stability and low public budgets (low taxes), are over-restrictive and force the European economies onto a path of low growth. Central bankers’ idea of paradise is where monetary policy does good only if emphasizing price stability but cannot be held responsible for anything else. European institutions were designed to prevent governments from overspending, thus preventing overheating and inflationary bias, but were not provided with effective instruments to prevent the under-utilization of capacity. As such, the EU framework lacks effective instruments to stimulate economic activity.

## Popular interpretations of economic trends: Theory has blinkered the analysts

“The Great Inflation” (the simultaneous rise of unemployment and inflation in the 1970s) contrasts with the trade-off between unemployment and inflation emphasized in the Keynesian Phillips curve (Samuelson and Solow, 1960). High rates of capacity utilization reduce unemployment and make room to raise prices; however, simultaneously rising prices and unemployment (supply-side phenomena) were not well analysed in Keynesian economics (Blinder, 1988). Chicago economists used the simultaneous occurrence of rising prices and unemployment in the 1970s to declare this to be evidence that Keynesian economic theory was fundamentally wrong, and declared the end of Keynesian economics (Lucas and Sargent, 1978). Not even in the short run, Robert Lucas argued, would monetary and fiscal policies affect unemployment (the real economy) because economic agents would rationally expect price effects only (rational

expectations). Assuming that the economy is in equilibrium at the “natural rate” (that all resources are fully used, of course), expansionary policy can only disturb this equilibrium. Public debt must crowd out private investment; public expenditure must reduce private consumption, etc. Consequently, expansionary policies can only result in rising prices but they will not change the fundamental equilibrium, the “natural rate”. However, on investigation the economy’s state of equilibrium proves simply to have been assumed, deduced from the assumption that markets return to equilibrium quickly (Blinder and Solow, 1973).<sup>1</sup> In Friedman’s “natural rate theory,” expansionary fiscal and monetary policy could affect the real economy, at least in the short run; i.e., it took time to lift the “money veil”. According to Lucas’ rational expectations, however, the “money veil” was transparent. Lucas’ concept of rational expectations may have relevance in a static environment, but that is not the real world, with its incomplete markets and forward-oriented decision-making, dependent on animal spirits rather than on rational expectations (Akerlof and Shiller, 2009).

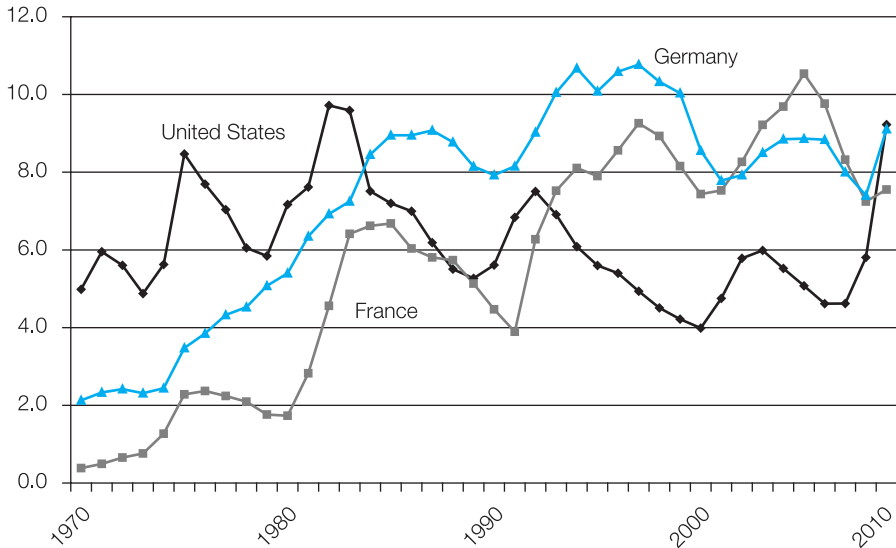
In the 1970s, unemployment rates in Europe started to rise and persisted at high levels after every recession (figure 1), which contrasted with unemployment in the United States where it returned to its pre-recession levels (though unemployment was initially much higher in the United States than in Europe). Why did unemployment persist after recessions in Europe? An unblinkered economist might think that the explanation concerned restrictive monetary and fiscal policy (deflationary policies) and/or distortions in the functioning of labour markets. Yet “natural rate theory” excluded macroeconomic policies as potential causes of persisting unemployment and focused entirely on labour market institutions (Solow, 2008), which determine the “natural rates”. If “natural rate theory” is correct, only an ever-increasing natural rate could explain that European unemployment failed to return to its pre-recession levels. Only welfare state measures (ever more generous at every recession and changing the incentive structure and, thus, the “natural rates”) could be consistent with the theory. More generous unemployment benefits, more aggressive unions, stricter employment protection laws, and a more compressed wage structure (to name the favourite “suspects”) might result in a less well-functioning labour market.

However, the structural reforms introduced in most European countries should have lowered rather than raised “natural” unemployment rates: unemployment benefits were reduced, eligibility became stricter, union power declined, employment protection laws were relaxed, and the wage structure widened. In Germany, for example, the unemployment rate should have fallen because of institutional reforms (Carlin and Soskice, 2008). In short, it was the wrong moment to ascribe rising and persistently high European unemployment to more generous welfare state measures. But, as already noted, “natural rate theory” blinks the analysts: the theory was taken so literally that anecdotal

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<sup>1</sup> Actually, Lucas often did not mean to discuss real-world economics, limiting his analysis to a situation of a stable equilibrium, where only very small deviations occur, if at all (Lucas, 1986).

Figure 1. Unemployment rates in the United States, France and Germany, 1970–2010



Source: Based on OECD Economic Outlook database.

evidence was considered sufficient, serious empirical studies were ignored, and ever-increasing “natural unemployment” rates along with sclerotic labour markets in Europe (Euro-sclerosis) became the dominant explanation for Europe’s unemployment problem. “This rather remarkable hypothesis seems to have been accepted without a qualm” (Solow, 1998, p. 9). The only evidence in support of “natural rate theory” was comparison with the United States, where labour markets were less regulated and unemployment rates did not rise (although they were above the rates in many European countries until the late 1980s – see figure 1). So the less regulated United States labour market was declared to be more flexible and United States-type labour market institutions were regarded as best.

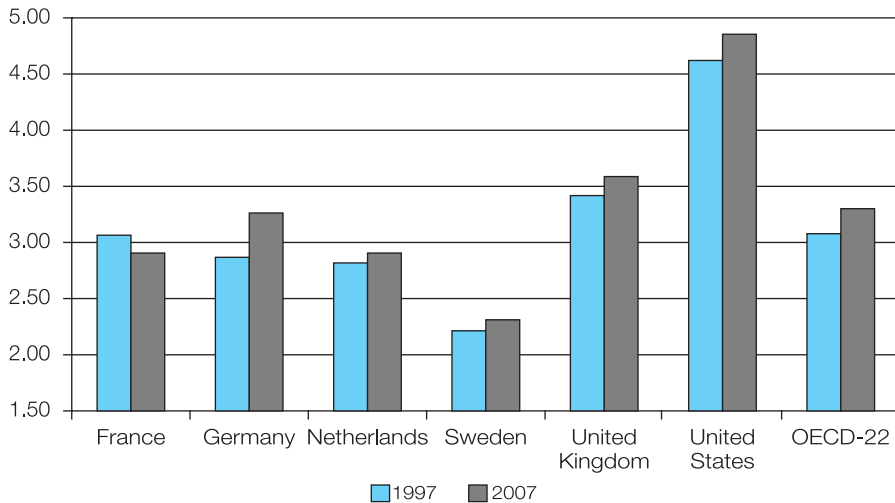
Consequently, the political response to Europe’s ever-increasing unemployment rates favoured by economists and the OECD’s Jobs Study was that labour market reforms, labour market reforms, and even more labour market reforms were needed to correct this pattern. If all other reasons for unemployment are excluded from the theory by assumption, only distortions of the market mechanism are left and a full circle is thus described (Tobin, 1972). “Shape real market institutions to fit the theory and unemployment will disappear” is a succinct way of expressing the message sent out by the influential OECD Jobs Study. “Old Europe” changed its institutional structure largely according to the blueprint: labour market institutions were deregulated, welfare state measures were tightened, taxes were lowered, a common market and a common currency were introduced, the Stability and Growth Pact (SGP) was implemented, and

many other changes were made. It was promised that all these changes would result in higher productivity growth, more prosperous economies and improved employment, but the results were disappointing: productivity and GDP growth slowed and unemployment remained at unacceptably high levels.

The OECD's Jobs Study (1994) was clearly based on "natural rate theory," favouring the Anglo-American model of less regulated labour markets. Yet within the OECD, it did not go unnoticed that certain countries with drastically different institutions performed equally well with respect to unemployment and participation rates, and better with respect to inequality (see Freeman, 2005). The 2004 revision of the Jobs Study was therefore much more cautious and modest in its conclusions, and admitted that different institutional arrangements might lead to similar outcomes (OECD, 2004). Heckman, Ljunge and Ragan (2006) fiercely criticize the revised OECD view, arguing that the analysis of aggregates is flawed, and that the unemployment rate is not the right measure because corporatist countries hide unemployment in active labour market programmes, early retirement, etc. So they suggest making use of the results of microeconomic studies from Latin America, which show that the "free market approach" and the "natural rate theory" are correct. Making use of microeconomic studies seems a valid point, although Latin American economies may not be the right benchmark for highly developed European economies. However, as the OECD (2004) states, microeconomic studies focusing on wage compression in Europe (the main argument used to explain high European unemployment) fail to establish evidence that wage compression caused labour market problems in Europe (the OECD cites Nickell and Bell, 1996; Card, Kramarz and Lemieux, 1996; Krueger and Pischke, 1997; and Freeman and Schettkat, 2000).

Nevertheless, fully in line with "natural rate theory", it was argued that rising wage inequality in the United States was the market response to demand shifting away from less skilled labour (skill-biased technological change). In Europe, minimum wages (statutory or negotiated) and generous unemployment benefits prevented rising wage inequality, but the result was the unemployment of this group. The less skilled, so the argument went, were excluded from jobs, being priced out of the market by enforced, excessively high minimum wages. Again, the evidence for this argument was the wider wage dispersion in the United States (figure 2), which was interpreted as a powerful incentive for human capital investment. Wage dispersion between skill groups may enhance human capital investments, but within skill groups wage dispersion raises the riskiness of human capital investments, and is a disincentive (Agell, 1999). Yet, in the United States wage dispersion is greater within narrowly defined skill groups, even greater than overall wage dispersion in many European countries (Devroye and Freeman, 2001). Furthermore, there are two sides to wage flexibility (Bell and Freeman, 1985) and coordinated market economies seem to create stronger wage restraint in expansionary periods than do liberal market economies (Hall and Soskice, 2001). Empirical evidence for Germany compared with the United States appears not to support the labour market rigidity hypothesis (Schettkat, 1992; Carlin and Soskice, 2008). At best,

Figure 2. Earnings dispersion (D9/D1) 1997 and 2007



Source: OECD Employment Outlook database, 2009, table H.

cross-country comparisons using rough macro indicators would produce some support for the argument made by Heckman, Ljunge and Ragan (2006).

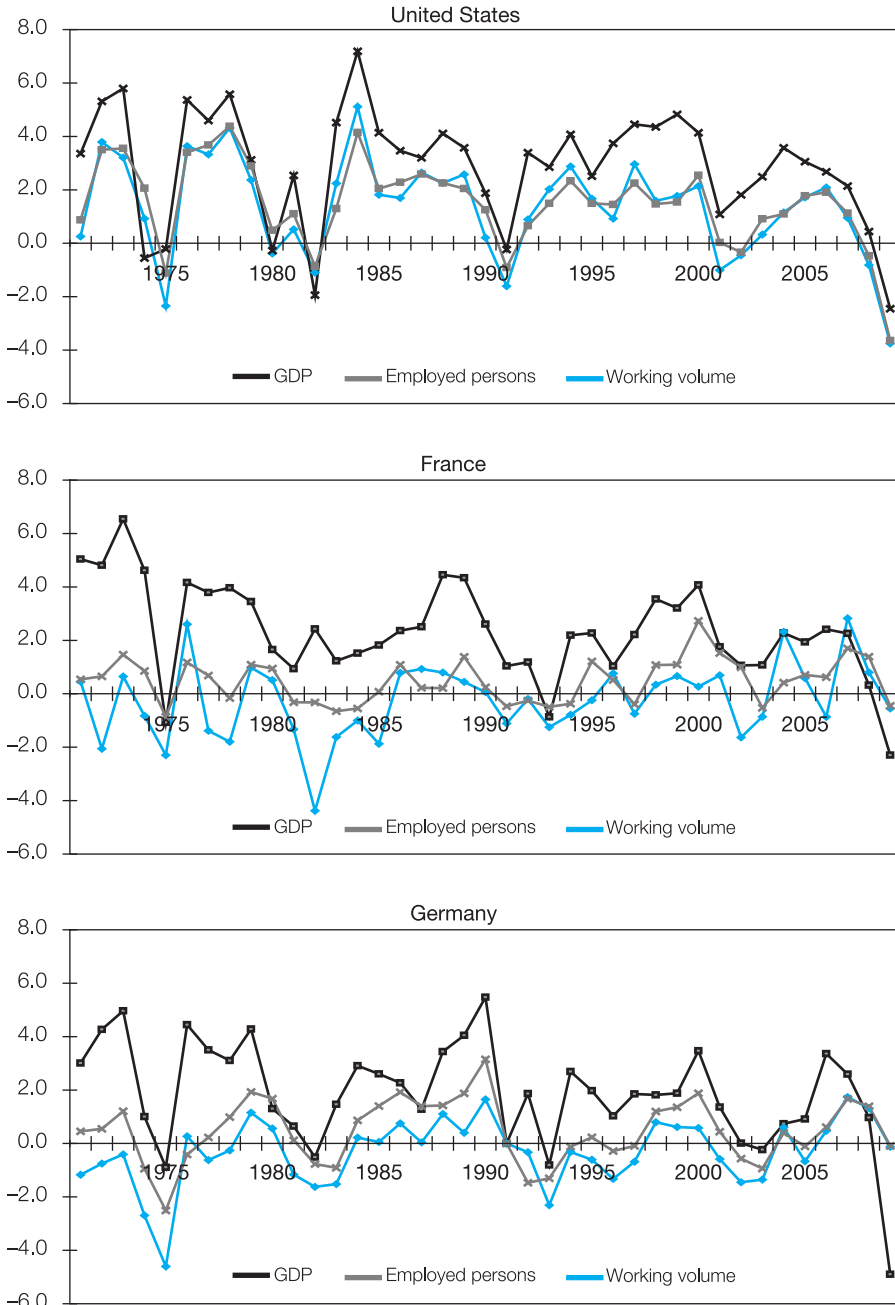
For the United States, Dew-Becker and Gordon (2005, 2008) showed not only that the upper 10 per cent of the wage distribution received 50 per cent of the income growth, but also that within this privileged group the top 1 per cent captured half of that increase. At the lower end, the 20 per cent of the wage distribution with the lowest incomes received 2 per cent of the income growth. These authors argue that too much emphasis was put on demand and supply issues to explain the widening wage dispersion in the United States. The increasing wage pressure at the lower end was probably due to declining unionization and shrinking minimum wages, whereas at the upper end of the distribution peer-group behaviour raised the incomes of CEOs and financial managers. Changes in income distribution also affect financial markets, since income growth at the upper end scarcely increases consumption, going instead on investments and speculation.

Have labour market reforms paid off in the current recession? Many countries implemented the policy recommendation proposed in the OECD's Jobs Study (1994). The OECD summarizes thus the employment reactions in the current crisis:

...there does not appear to be any strong reason to expect that recent structural reforms mean that OECD labour markets are now substantially less sensitive to severe economic downturns than was the case in the past ... it does appear that these reforms have had a significant effect on cyclical dynamics, since the initial response to a negative demand shock is now greater, but output also tends to recover more quickly ... from the perspective of employment and social policies, these tentative findings suggest that unemployment may rise more rapidly at the



Figure 3. Growth of GDP, employed persons and working volume in the United States, France and Germany



Source: Computations based on OECD Economic Outlook database.

onset of a recession, but is less likely to plateau at a high level for a long period (OECD, 2009, p. 39).

In so far as there are any signs of output recovery, the hopes of the OECD may be coming true – yet it seems that economies still rely on infusions of government funds.

Germany's GDP declined by 5 per cent in 2009 (more than the decline in many other countries), yet the country displays the most remarkable labour market reaction. Unemployment increased modestly by less than 1 percentage point and the number of employed persons was held roughly at pre-recession level. The German economy reacted to the recession by reducing the average hours worked (due to a decline in overtime, subsidized short-time work, and the use of time buffers). However, this reaction was not due to the labour market reforms implemented in 2004, it was the result of substantially extending that well-known measure: subsidized short-time work. The number of workers in Germany remained constant, but the volume of work fell strongly by 3.2 per cent (Spitznagel and Wanger, 2010; also ILS, 2009). Employers reacted by using flexible hours rather than firing workers, which may be more efficient for workers and companies than dismissals and rehiring in the upswing. This pattern was probably more pronounced on this occasion (at least by comparison with the more generous measures taken by the Federal Government), but it is hardly new. Indeed, it has typified a major difference between the German and the United States labour markets for decades (Abraham and Houseman, 1988; Möller, 2010), though it has been used to a far greater extent in the current recession (figure 3).<sup>2</sup>

## Monetary policy slowing down growth in Europe

Another (widely neglected) explanation for unemployment rates remaining at high levels in Europe is that recoveries have not been strong enough, because macroeconomic policy was over-restrictive for fear of inflationary pressure during expansions. According to this theory, the rise in European unemployment was not caused by more generous welfare-state provision and a subsequent rise of “natural rates of unemployment”, but rather was the result of deflationary macroeconomic policies. For unemployment rates to return to pre-recession levels, there needs to be economic growth in the upswing, substantially above the respective growth of potential output and of productivity. If growth remains below this rate, employment will not recover and unemployment will persist.

Assuming that the economy is always in equilibrium, “natural rate theory” excluded monetary and fiscal policy as policy options and introduced a new division of labour: central banks were responsible for price stability only, governments for (de-)regulation, and unions for (low) wages. This division was based on the assumption that monetary policy serves the economy best when it follows a low-inflation path. Although it only became powerful after the collapse of the

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<sup>2</sup> Nevertheless, short-time work is criticized for putting off the restructuring of the economy.

Bretton Woods fixed exchange-rate system, monetary policy was declared to be neutral to the real economy. Thus, policies of high price stability were assumed not to compete with growth; on the contrary, high price stability was said to be the precondition for economic growth. Monetary policy was declared to be innocent: it did not affect growth and unemployment directly, only indirectly through its effects on expectations. In the words of central bankers: “Other than by maintaining price stability and thereby reaping its benefits in terms of economic performance . . . , there is no trade-off at longer horizons between inflation, on the one hand, and economic growth or employment, on the other hand, that can be exploited by monetary policy makers” (Issing, 2000, p. 4). This led to a broad consensus that the only appropriate objective of monetary policy is the maintenance of price stability, full stop. “To reduce unemployment, structural reforms are needed” was the loudly trumpeted economic policy message. In fact, this doctrine led to the immunity of central bankers, who, while insisting on their independence, feel free to give advice on all aspects of economic policy.

Although the independence of the Bundesbank (Germany’s central bank) was established in 1957, the Bank’s action was limited by fixed exchange rates under the Bretton Woods system because it had to maintain the exchange rate fixed by the Government. Under fixed exchange rates, monetary policy is ineffective (Mundell, 1963). After the collapse of the Bretton Woods system in 1973, fixed exchange rates gave way to flexible ones, which increased freedom of monetary policy at a fundamental level and turned central banks into major players in economic policy. The Bundesbank embraced both its post-Bretton Woods freedom and “natural rate” theory, and decided to apply its new option to target price stability (Baltensperger, 1999; von Hagen, 1999).

In its pursuit of a policy of price stability, the Bundesbank became Europe’s de facto central bank. Some countries pegged their currencies directly to the Deutschmark (Austria, the Netherlands) and others were influenced by Bundesbank policies through the European Exchange Rate Mechanism (ERM) (Baltensperger, 1999). David Marsh (1992) subtitled his book on the Bundesbank, *The bank that rules Europe*. Indeed, the Bundesbank came to regard itself as the European central bank: the web page celebrating the 50th anniversary of the Bundesbank is titled “Stable money for Germany and Europe, 50 years of the Deutsche Bundesbank” (Deutsche Bundesbank, 2008), clearly indicating the dominant role of the Bundesbank in Europe and that it served as a blueprint for the European Central Bank (ECB). Consequently, in many European countries the establishment of the ECB was perceived as a way of breaking the dominance of the Bundesbank and of regaining influence over monetary policy (Wyplosz, 2008).

Shortly after the collapse of the Bretton Woods system, the Bundesbank adopted a policy of targeting monetary aggregates (the ECB still officially claims that monetary aggregates constitute a pillar of its policy). The Bundesbank announced targets for the growth of monetary aggregates, but Bernanke and Mishkin (1997, p. 1041) argued that the Bundesbank’s money growth targets are derived, using the quantity equation, to be consistent with an annual

inflation target, given projections of the growth of potential output and of possible changes in the velocity of money. In their terminology, the Bundesbank was a kind of “hybrid” inflation and monetary targeter (Bernanke and Mishkin, 1997). Over time, the Bundesbank (implicitly) set ever more ambitious inflation targets, from 4.5 per cent in the 1970s to 1.5 per cent shortly before the introduction of the euro, thus establishing the ECB target of an inflation rate of under 2 per cent.

Recent analysis (Schettkat and Sun, 2009) shows that the Bundesbank’s fear of inflation led it to run an asymmetric monetary policy. When actual output was above potential output, the Bundesbank acted precautiously, deviating from the long-run orientation and raising the interest rate. When actual output was below potential output, the Bundesbank kept the long-run orientation and did not lower the interest rate accordingly. This pattern supports the hypothesis that the Bundesbank responded to output gaps asymmetrically in different economic situations. When output gaps were positive – when the economy grew faster than potential output – the Bundesbank feared inflationary pressure and reacted strongly by raising the interest rate. Therefore, the Bundesbank slowed economic expansions. By contrast, when the output gap was negative, the Bundesbank did not reduce the interest rate significantly, it did not counter recessions. Germany became the champion of price stability, hampered in its world market expansion only by a rising value of the Deutschmark; however, this restriction disappeared with the euro.

The Bundesbank’s great success with respect to price stability is the basis of its legendary reputation; if it was true that monetary policy does not affect the real economy, if money was only a veil neutral to the real economy, a policy of high price stability would be costless. But again, the evidence (both theoretical and empirical) is not as clear as ECB bankers appear to believe. Actually, both the German and the European economies have paid a high price for low inflation achieved through under-performance in economic growth and employment. Even if monetary policies were neutral in the long run, an asymmetric monetary policy would severely affect the real economy. If economic growth slows after a recession, the economy cannot return to its initial growth path, and so the long-run growth trend is reduced, too.

The dominance of price stability has been carried over from the Bundesbank to the ECB – in contrast with the principles of the United States’ Federal Reserve (FED). The FED has a dual mandate, being required both to use monetary policy to achieve price stability, and also to promote effectively the goal of maximum employment.<sup>3</sup> For the Bundesbank (and later, the ECB), price stability became a priority and the pursuit of other considerations became conditional on its achievement. One important institutional difference is therefore

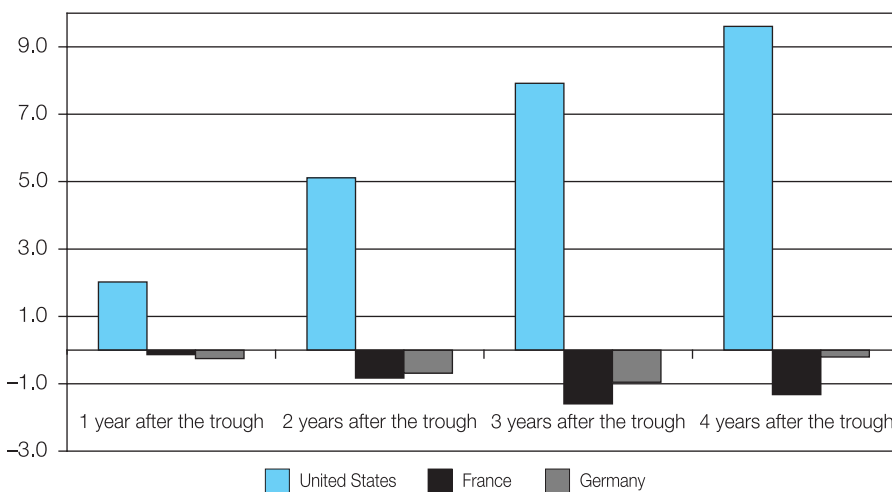
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<sup>3</sup> The Federal Reserve Act, 1913, places employment before price stability: “The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy’s long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates” (Art. 225a).

the deviating laws determining the tasks of the central banks, which may affect growth patterns, especially in expansions.

Given the institutional differences governing monetary policy (De Grauwe and Costa Storti, 2008), it is not surprising that European unemployment remained at ever-higher levels after each recession. A comparison of the employment-effective cumulated growth rates over four business cycles between Germany and France (representing Europe) and the United States illustrates this point (figure 4). The United States employment miracle was the result of economic growth overshooting productivity growth substantially in upswings; whereas, European employment was barely able to recover after recessions and, thus, unemployment persisted at a higher level after each one. In Europe, the growth that occurred during expansionary periods scarcely allowed unemployment to fall to pre-recession levels. Clearly, there was much more room for economic expansion during periods of recovery, but it was slowed down by the over-restrictive, asymmetric monetary policy of the Bundesbank. The clear conclusion to be drawn from figure 4 is that a more dynamic economic recovery in Europe would have raised output and, thus, substantially reduced unemployment rates. The cumulated differences in the employment-effective growth rates over four business cycles between the United States and Germany show that the Great American Job Machine was a growth machine. Four years after the trough, the employment-effective growth rate was about 9 per cent, but in France and Germany it was even negative! More expansionary policies in Europe would have allowed for higher labour force participation (less early retirement, and higher female labour force participation). Even some reductions in working

Figure 4. Cumulated employment-effective growth rates, means of four business cycles (from the 1970s to the 2000s) in the United States, France and Germany



Source: Computations based on the OECD's Economic Outlook database.

hours, which were introduced in the 1980s prompted by employment considerations, were probably unnecessary.

Economic growth is the *deus ex machina* of unemployment if structural features do not prevent the unemployed from becoming employed. The German economy underwent structural changes at least as strong as those affecting the United States economy and flow-based analysis shows that the dynamics in the German labour market were high. Furthermore, duration analysis of unemployment and vacancies suggests that German unemployment was clearly a job deficit phenomenon rather than one of labour market rigidity (Schettkat, 1992). Cross-country evidence casts doubt on the “institutional rigidity story” too (Glyn, Howell and Schmitt, 2006; Schettkat, 1992, 2005), and institutional change in Germany cannot explain the rise in unemployment (Carlin and Soskice, 2008). Dolado, María-Dolores and Naveira (2003) argue that rigid European labour markets did not allow the central banks in Europe to follow more “flexible inflation targeting” as the FED did, because wage rigidities in Europe would have caused inflationary pressure in expansionary periods. However, Schettkat and Sun (2009) found that in many European countries, wages are less sensitive to favourable economic conditions, thus creating less – not more – inflation in boom periods (see also Bell and Freeman, 1985).

## European macroeconomic institutions in “natural rate spirit”

“Natural rate theory” was the economic theory dominating politics when important steps towards a closer European Union were taken in the early 1990s. In 1992, the Maastricht Treaty (the Treaty on European Union) was signed, establishing convergence criteria to achieve economic and monetary union (EMU) in Europe. Fearing a loose economic policy (policies which did not give absolute priority to price stability), the German Government and the Bundesbank insisted on the following strict economic criteria:<sup>4</sup> inflation was not to exceed by more than 1.5 per cent the country with the lowest inflation rate in the EU; the government deficit was not to exceed 3 per cent of GDP and public debt was not to exceed 60 per cent of GDP (or steps would be taken to respect this limit); and applicant countries would be required to join the exchange-rate mechanism, a limited deviation from a fixed exchange rate being allowed (2.25 per cent initially but 15 per cent later).

After the rates of exchange between the currencies of the participating countries were fixed, the euro was introduced on 1 January 1999, thus establishing a currency common to the major European countries (actual euro coins and bills were introduced in January 2002). In connection with the simultaneous establishment of the euro and the ECB, the Maastricht Treaty convergence criteria were carved in stone in the Stability and Growth Pact (SGP, also known as the Amsterdam Treaty, adopted by the European Council at its meeting in

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<sup>4</sup> However, Germany was the first country not to fulfil the 3 per cent criterion.

Amsterdam, 17 June 1997). With the arrival of the ECB, fiscal policy would have gained in importance had it not been limited by the Maastricht Treaty criteria (Allsopp and Vines, 2005). As a result, the design of major European institutions fitted a tight corset around macroeconomic policy. Euroland acquired the most independent central bank in the world, a self-defined inflation target of 2 per cent, and a stability and growth pact which allows the European Commission to start a “deficit procedure” if the public deficit reaches 3 per cent of GDP. The Commission supported a policy of declining tax rates, in the belief that a smaller public sector would leave more room for private-sector activity which was declared (though not proved) to be more efficient.

The influence of “natural rate theory” is clearly perceptible in the tenth Presidency Conclusion of the Extraordinary European Council Meeting on Employment (the Jobs Summit), held in Luxembourg in November 1997: “With regard to the macroeconomic context, it is essential for the Union to pursue a policy of growth geared to stability, sound public finances, pay restraint and structural reform” (European Union, 1997, No. 10). In this context, “stability” meant price stability, “sound public finances” meant low public budgets, “pay restraint” meant low wage growth, and “structural reforms” meant a withdrawal of welfare state provision. Fully consistent with “natural rate theory” and Issing’s (2000) view that the best monetary policy is one which emphasizes price stability, a tight price-stability orientation was selected: “...the introduction of the euro as from 1 January 1999, which will set the final seal on the efforts undertaken over a number of years and provide a permanent framework of stability conducive to growth and employment” (European Union, 1997, No. 11). Further, the conclusions also emphasized deregulation, as suggested in the OECD’s Jobs Study: “In spite of the efforts already made, Member States must continue to implement structural reforms required in all areas and must better coordinate their employment policies” (*ibid.*, No. 12).

The Amsterdam Treaty also included an employment chapter (later to result in the European Employment Strategy), and formulated specific employment targets in the 2000 Lisbon Agenda: for the population group aged 15 to 65, an overall employment rate of 70 per cent; and for the female population, an employment rate of 60 per cent were to be reached by 2010. These goals were obviously over-ambitious and in 2003, the first report produced by Wim Kok (Kok et al., 2003) warned that the EU would miss the “moon landing”. Shortly thereafter, the targets were lowered somewhat, in the so-called re-launch of the Lisbon Agenda in 2005: the target for the overall employment rate was now 67 per cent and for the female employment rate 57 per cent.<sup>5</sup> The Lisbon Agenda also aimed at making the EU the most dynamic, competitive, knowledge-based economic area in the world, but the national governments could not agree on binding ways of achieving these goals, thus creating a new approach, the “open method of coordination” – whereby every country proceeds at its own pace.

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<sup>5</sup> In addition, a target for the employment rate of older workers (55–65 years) was set at 50 per cent by 2010.

This is arguably the basic dilemma of the EU: that strictly binding procedures were established to keep track of price stability and to curb public deficits, but that an “open method” had to be applied whenever positive action was required. Although the Commission puts a gloss on the achievements of the Lisbon Strategy (“missing the target does not mean that the Lisbon strategy failed”), it is pretty clear that the major ingredient for a dynamic, knowledge-based economy (investment in education) is missing in many of the EU Member States. OECD statistics show that, with the exception of Austria, Denmark, Norway and Sweden, all EU countries spend less per student than the OECD average (OECD, 2008). Putting public spending under pressure, because the EU supported the tendency to lower taxes is hardly the best way of achieving the Lisbon Strategy’s goals, still less the outcome of national decisions.

The SGP criteria provided for sanctions against a country whose deficit exceeds 3 per cent of GDP, forcing that country to apply austerity measures. However, when Germany and France overshot the 3 per cent limit, no sanctions were taken. In spring 2010, strict EU control was applied for the first time, in the event to the Greek Government after its budget deficit overshot 12 per cent of GDP and rating agencies lowered Greece’s credit rating to junk bond status, which raised the risk premium Greece had to offer. Twelve per cent is four times the SGP deficit limit, but is surely not unique: the deficits of the United Kingdom and the United States were of that order, and the huge public deficits occurring everywhere were caused by injections into the financial system and by an enormous decline in economic activity following the financial crisis. The core problem of Euroland seems to be that there is a central bank but there is no Euroland government or Euroland economic policy; in their place there are national governments declaring that they must first act in their own country’s interest. In particular, Germany is insisting on “natural rate” policies, having recently introduced a “balanced budget constraint” into the German Constitution (*Grundgesetz*) limiting public deficits to 0.35 per cent of GDP.

Within Euroland, Germany’s deflationary policy led German net export surpluses (within but also outside Euroland) to be the main force behind its recovery in the mid-2000s. Germany, the largest economy in Euroland, followed the Netherlands’ deflationary strategy when the central bank of the Netherlands pegged the guilder to the Deutschmark following Bundesbank policy closely and, thus, held the nominal exchange rate of the guilder to the Deutschmark constant. Since wages and prices grew at a lower rate in the Netherlands than in Germany, the real exchange rate declined and Dutch products gained in price competitiveness (Schettkat, 2005), which was clearly evident in the Dutch net export surplus. If a small economy like that of the Netherlands boosts its net exports through improved price competitiveness achieved through deflationary policies, it affects Euroland only marginally, but it has a huge effect on the domestic economy because foreign trade is an important element in a small economy (for a model developing this theory, see Carlin and Soskice, 2008). If the largest player in Europe, Germany, follows the same deflationary policy, Europe’s economy is substantially affected. The low-inflation-export-surplus



country looks like the champion, but it is as much a part of the problem of European and international divergence as the high-inflation-export-deficit country. The one cannot exist without the other.

## New directions

“Markets are efficient”, “markets know best”, “financial markets in particular are efficient” – these were the messages of the counter-revolution in economics, which had discarded Keynesian economic theory. The coexistence of rising inflation and unemployment pushed “natural rate theories” out from academia into real-world politics. Unemployment was no longer seen as an indicator of unused production capacity, but rather as equilibrium, as the outcome of an optimization process, a signal that incentives were wrongly set. This trend in macroeconomics was the result of models which were based on so-called micro-economic foundations, i.e. super-rationality, maximizing behaviour, representative agents, in other words, uniformity. Economic policy (whether fiscal or monetary policy) was declared to be a disturbing, not a smoothing economic development and so labour market reforms became the key to improve employment. “Theoretical rigour” and “micro-foundations” were claimed by “natural rate theorists”, but actually the evidence in favour of their theory was shaky, at best. Yet, less regulated labour markets together with enormous employment growth in the United States were seen (through the lens of “natural rate theory”) as sufficient evidence that the deregulation of European welfare-state institutions would be able to start up a “Great European Job Machine”.

Without doubt, there are differences between the labour market institutions of Europe and those of the United States, as there are within Europe, but there are other differences, too, for example in the frameworks of monetary and fiscal policy. But these differences affecting macroeconomic policies were declared irrelevant in “natural rate theory”. Just when the breakdown of the Bretton Woods fixed exchange-rate system provided some leeway for monetary policy, “natural rate theory” re-established the classical position that money is neutral to the real economy. If that was true, a policy of very high price stability would be the most desirable since it does not harm employment and, moreover, it would be costless. Again, the evidence in favour of the neutrality thesis is shaky, and serious statements by central bankers reviewing the theoretical and empirical evidence for the neutrality thesis usually conclude with “nevertheless” attached to their theoretical priors (see Papademos, 2004). Meanwhile, even the Chief Economist of the IMF questions whether excessively low inflation rates do not over-constrain monetary policy options, given the zero interest bound (Blanchard, Dall’Ariccia and Mauro, 2010).

European macroeconomic institutions, which were designed in the 1990s at the peak of “natural rate theory”, made the ECB the only strong macroeconomic player at the European level completely independent of the European Commission and of national governments, which cannot borrow from the ECB and have to finance and refinance on capital markets instead. The ECB is the

most independent central bank: not only is it free to choose the instruments to achieve certain goals, but it can also define the goals itself. The ECB, which sees itself as the successor to the Bundesbank, opted for an ambitious price stability goal of 2 per cent inflation.

European welfare states came under financial pressure because persistent high unemployment raised spending and reduced revenues. However, financial stress may have been the result rather than the cause of sluggish employment growth. Currently all countries see public debt rising substantially, but increases of public debt relative to GDP of 10 to 15 percentage points occur not only in European countries but also in the United States and in other Anglo-American countries. However, all countries are suffering in the current crisis: from declining economic activity, declining income and subsequently declining tax revenues. In the current recession, rising public debt is mainly the result not of excessive spending on education, public infrastructure and the like, but rather of the enormous financial infusion into the nearly defunct financial system and of the deficit spending needed to substitute for diminishing private expenditures. Current public deficits are unsustainable and need to be reduced, but this can only be achieved through greater economic activity and rising revenues. Fears of accelerating inflation may lead to premature consolidation of public budgets, which will slow the necessary expansion of economic activity and may leave long scars on labour markets.

This was the case in the past, when fear of inflation reduced growth in upswings, not allowing unemployment to return to pre-recession levels. Long-lasting unemployment turned into long-term unemployment and became more and more prevalent among the low-skilled. But what caused this structuring of unemployment? Once path dependence is allowed for (through sorting, skill depreciation and other mechanisms), unemployment may be difficult to reduce after it has persisted at high levels for a certain period. This process, however, is not an argument against a more expansionary policy, but rather the opposite, because inactivity causes high, long-lasting costs (Stiglitz, 1997). A policy placing fewer constraints on economic growth in recoveries could have brought European unemployment rates back to pre-recession levels and prevented the structuring of unemployment.

At the informal meeting of the Heads of State or Government held on 11 February 2010, the President of the European Commission, José Manuel Barroso (2010), presented “Europe 2020 – A strategy for smart, sustainable and inclusive growth” and outlined three post-recession scenarios, two with severe long-term effects: *a lost decade* which would leave post-recession Europe on a lower growth path with permanently lower growth rates; *a sluggish recovery* which would permit a return to pre-recession growth rates, but without compensating for the losses incurred due to the recession; and *a strong recovery* which would accelerate growth, and bring Europe on to a higher growth path. How to speed up economic growth? Will the “natural rate theory” guide us out of the crisis? It does not prescribe anything other than “the markets will know best”, but the development of potential is not an exercise in equilibrium, it is a dynamic

task and does not consist in cost-efficiency alone – it is about new products and new production processes, as Schumpeter described. Furthermore, growth of potential alone is not sufficient, policies are needed to ensure that the potential is used, and that we live up to our standards, not below our abilities.

To maintain progress on European integration, the currency union needs to be complemented by full political union. The European Union needs to become a serious economic policy player, to prevent the permanent danger of deflation. European policies were supply-side oriented, which was necessary to improve their potential, but using that potential is another matter. The ambitious goals of the Lisbon Agenda to become the most dynamic, knowledge-based economy (which reappear in the “Europe 2020” Strategy) are pointers in the right direction. Barroso’s “three priorities for sustainable growth and jobs” (2010) emphasized at the February 2010 informal meeting of Heads of State or Government seem agreeable in principle. But better education provision and more university graduates require more rather than less public spending, which conflicts with ever-lower tax rates. There is no alternative to “green growth”, but achieving it cannot be left to the market. The market does not know where to go, it needs strong direction, environmental standards and targets, which reduce uncertainty for investors. However, it is questionable whether these complex, supply-side policies are congruent with the smallest possible public sector. Certainly, a knowledge-based economy requires a well-educated population, which in turn requires great investment in human resources; and it is pretty clear that a dynamic, knowledge-based economy cannot be achieved with below-average expenditure on education.

When the Prime Minister of Spain, José Luis Rodríguez Zapatero (who at time of writing holds the office of President of the Council of the European Union) suggested counterbalancing the SGP’s stability procedures with a “growth rule”, he met fierce opposition from the German Economics Minister who wants to limit the EU to the common market and to competition-enhancing measures. Mr Zapatero proposed that the European Commission should be able to insist on compliance with growth initiatives – like the Lisbon Agenda or the new “Europe 2020” strategy – and be able to sanction non-compliance. A European budget with funds that the EU can use to support growth initiatives would, of course, be an alternative to sanctions, but in any case, compensating for the low growth bias in European institutions requires a solution to the division between fiscal, monetary and wage policies. These policies are not independent, but highly interdependent and have a strong macroeconomic impact. They need to be integrated in a process of European coordination. Political union is required to make the remarkable progress of European integration sustainable. A mere currency union with a strong central bank facing governments which represent their national interests does not seem adequate or sustainable.

Net-export surpluses may help reduce foreign debt but continuous surpluses distort the balance and leave the country in surplus living below its potential because domestic demand slows down. Raising domestic demand – both private and public – in surplus countries would raise domestic living standards,

balance imports and exports, and allow for balanced growth within the European Union. In a currency union where nominal exchange rates cannot compensate for imbalances, it is especially dangerous when the major player, the largest country, follows a deflationary policy of net-export surplus and in addition excludes the use of private savings as the balanced budget constraint, as Germany does. If wages rise less than productivity, a deficiency in demand and deflationary pressure are likely to occur and societies fail to live up to their potential. This may be unavoidable in some circumstances, but it is not a sustainable policy in the long run. In the European context, it creates a race to the bottom, reducing potential living standards. In the past, prior to the introduction of the euro, adjustments to the exchange rates were sufficient to obtain a realignment, but now within the euro-zone the response can only be a deflationary policy, a vicious circle slowing growth in Euroland. The country with an export surplus may look like the champion, but actually the surpluses depend as much on the deficits as the other way round.

The greatest danger for Europe's employment in future stems from premature consolidation of public budgets. If governments and central banks fear inflationary pressure and raise interest rates or consolidate public budgets too early, the recovery will slow down and unemployment will remain at high levels. Christina Romer (Chair of President Obama's Council of Economic Advisers and an expert on policies during the Great Depression) stressed precisely this danger in the current recession. During the Great Depression, United States President Franklin D. Roosevelt consolidated public budgets too early and delayed the recovery of the American economy.

Recent decades of relatively shrinking public budgets have left many potholes to fill: educational systems need to be improved as educational expenditures in Europe are below OECD average (with the exception of a few, mainly Scandinavian countries), public infrastructure needs repair and modernization, environment-friendly products need to be developed, etc. All this would help to achieve at least some of the goals of the Lisbon Agenda, culminating in that of becoming the "most dynamic knowledge-based economic area in the world". Governments and central banks have learned a lot from the policy mistakes made in the Great Depression and have saved us from repeating the experience. Hopefully, they also understand that substantial economic growth is needed over a long period – a New Deal for Europe – to return to pre-recession employment levels. Tightening monetary policy and consolidating public budgets too early would be extremely costly for Europe and might result in a "lost decade".

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