

## **SCHUMPETER DISCUSSION PAPERS**

# Are earthquakes needed to shake economics?

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# Are earthquakes needed to shake economics?

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#### **Abstract**

The current crisis is like an earthquake for the theoretical foundations of economic policies, which have guided governments and central banks for the last few decades. The efficient market hypothesis and its application to labor markets –"natural rate theory"- dominated interpretations of economic trends and policy prescriptions since the 1970s. Public policy, public institutions, and regulations were generally regarded as distortions of the otherwise well functioning markets. Economic trends were filtered through the lens of the "natural rate theory," focusing on labor market institutions only and putting blinds on macroeconomic influences. Therefore, the recipe was a reshaping of institutional arrangements intended to allow markets to operate more freely, i.e. to bring the real world closer to the idealized theoretical model.

This paper confronts the economic trends with the interpretations of the "natural rate theory" and argues that they hardly fitting the facts. The paper argues that monetary policy gained importance in the 1970s and enforced deflationary policies — which, in turn reduced growth, especially in upswings — and allowed employment to recover to its initial pre-recession levels. Deflationary bias was also guiding the design of major EU institutions, reducing potential and actual growth.

#### 1. Introduction: When Radical Views Become Mainstream

since the Great Depression of the 1930s. To many economists and politicians, the current worldwide economic crisis came to a big surprise; for decades, the theoretical foundations on which economic policy was built were assuming stable markets returning to equilibrium quickly. Actually, policy was regarded as the disturbing element hindering markets to work efficiently and even causing, rather than smoothing, business cycles. Policy, not markets, was declared to cause instability. Yet, such policy needed enormous infusions to rescue In 2009, GDP in the EU dropped by 4% and in the US it fell by 3%, amounts not experienced financial institutions and to stabilize economies in the current crisis. Especially, financial markets – thought to be closest to the idealized market of the theory – were viewed as effective measures to squeeze out all inefficiencies of the economies, thus pushing them on the most efficient trajectory. "'You cannot beat the market' is the popular conclusion drawn from the Efficient Market Hypothesis" (EMH, Fama 1965), which states 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 (Blankfein CEO Goldman Sachs, 2009) and they need to be compensated better than well for doing so good for society. Financial markets were declared to be stabilizing, efficiency enhancing machines of modern capitalism (see also Freeman in this issue). Markets are in equilibrium immediately; prices cannot be wrong unless something unforeseeable happens.

"Something unforeseeable happened" is the favorite fallback position of EMH proponents reducing the cause of the current crisis to the bankruptcy of Lehman Brothers. Of course, Robert Lucas, one of the major proponents of the EMH, notices the enormous drop in economic activity in 2009, but for him, it is an unforeseeable accident. Who could foresee the collapse of Lehman Brothers? Robert Lucas (2009), in his defense of the EMH, denies that anybody could foresee it – if someone could, he argues, she would be unaffordable – but he confuses cause and effect. The Lehman bankruptcy evidently sent shockwaves to financial markets, but the bankruptcy was the consequence rather than the cause of malfunctioning financial markets. Lehman went bankrupt because assets were drastically overvalued. Financial markets got prices fundamentally wrong!

Why did almost everybody follow the prediction of theories based on perfect, stable markets? What navigates us through the enormous amount of information through the complexity of real economies? How can we derive feasible policy options?

Religion emphasizes values and beliefs, but economics emphasizes theory – although not independent of values and often written in algebra – to interpret economic trends and design policies that are regarded as feasible to handle the economy. Economic theory is necessary to guide policy but if the theory gets the fundamental relations wrong, the policies cannot be much better. Therefore, economic theory is necessary and powerful, affecting seriously 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). Clearly, the development of economic policy guided by the EMH and "natural rate theory" since the 1970s is drastically confirming Keynes' statement.

John Taylor (1998:29) claims that especially the research surrounding rational expectations and the historical experience of high inflation in the 1970s and 1980s changed the thinking of economists at the same magnitude as the Keynesian revolution and the Great Depression of the 1930s. Indeed, 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 (Tobin 1995), applied the EMH to labor markets and argued that expansionary fiscal and/ or monetary policy can, at best, reduce unemployment below the "natural rate" in the short run; however, in the long run, it will only cause inflation. The economy will always return to the "natural rate of unemployment", which depends on the incentive structure of the economy. Economic agents will discover that only nominal values have changed once the "monetary veil" has been lifted and the economy returns to former equilibrium.

A few years later, in 1974, oil-price shocks hit the industrialized world 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/ Sargeant 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 the attempt to extinguish the besieged. In the aftermath of the "natural rate" revolution, all of the Keynesian insights were declared intellectually flawed and useless. Radical ideas deduced from assumptions of efficiently operating markets pushed to extremes unfortunately did not remain what they actually were, extreme results of an idealized

theoretical model; rather, they became a general guideline for economic policy, first affecting radical conservatives like Britain's Margaret Thatcher and America's Ronald Reagan, but later becoming "common sense." The benchmark model to evaluate 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 analyzed. The EMH, the "natural rate of unemployment," and rational expectations were the yardstick to evaluate economic policy. Markets always did best and public policy was declared to disturb well functioning markets; therefore, the public sector should be reduced to a minimum.

Without doubt, there were critics of these foundations within economics but they were discarded as unscientific, intellectually dishonest, or simply not smart 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 especially the EU institutions were designed along the "new macroeconomic" doctrine. Yet actually, "new macroeconomics" based on artificial micro-foundations did not have much evidence in favor of their theory; only the assumptions made it a coherent model.

If one regards the economy as being in a unique equilibrium, at its "natural rate", any intervention stimulating the economy must be foolish; if it disturbs the "natural" equilibrium, "it cannot work" was the message. However, under this paradigm, "natural" was everything else other than "natural"; it was a "misnomer" or a "misleader." When labeling a specific unemployment rate — which can hardly be specified numerically (see Staiger/Stock/Watson 1997) — "natural" shows the genius rhetoric of its inventor, Milton Friedman. Yet, in essence, it was a misdirecting policy. Unemployment is the worst inefficiency but "natural rate theorists," like classical economists before Keynes, would claim that unemployment is the result of optimization under the given institutional environment; it is a choice rather than a burden. Unemployment was no longer seen as the worst inefficiency, as unused capacity, but rather as a signal for a distorted incentive structure.

Three major principles derived from the "New Macroeconomics" were guiding economic policy:

- 1. Markets are efficient (and therefore, the private sector outperforms the public sector)
- 2. Monetary policy is neutral to the real economy

3. Fiscal policy (deficit spending) is ineffective because rational citizens expect public debt to be future tax increases (Ricardian equivalence)

The current worldwide economic crisis is shaking the theoretical ground of "natural rate theory" like an earthquake. Established theoretical structures and "common sense" are crushing – not resisting – the shaking grounds of real economies similar to those within the Great Depression, which shook the ground under classical economics.

Economic theories are powerful in shaping our views of the workings of the economy and feasible economic policies. This paper argues that the EU institutions geared to price stability and low public budgets (low taxes) are overly restrictive and force the European economies on a path of low growth. Central bankers' paradise is where monetary policy can do good only when emphasizing price stability, but where that monetary policy cannot be made responsible for anything else. European institutions were designed to prevent governments from overspending, thus preventing overheating and inflationary bias, but without effective instruments to prevent the under-utilization of capacity. In such, the EU framework is lacking effective instruments to stimulate economic activity.

# 2. Popular Interpretations of Economic Trends: Theory Put Blinds on Analysts' Eyes

"The Great Inflation" - the simultaneous rise of unemployment and inflation in the 1970s - contrasted with the trade-off between unemployment and inflation as emphasized in the Keynesian Phillips curve (Samuelson/ Solow 1960). High degrees of capacity utilization reduce unemployment and give room to raise prices; however, simultaneously rising prices and unemployment - supply-side phenomena - were not well analyzed 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/ Sargeant 1978). Not even in the short-run, Robert Lucas argued, will monetary and fiscal policies affect unemployment (the real economy) because economic agents will rationally expect (rational expectations) price effects only. Assuming that the economy is in equilibrium, at the "natural rate"(i.e, 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, when it was investigated whether the economy is in a state of equilibrium, it was simply assumed, deduced from the assumption that markets return to equilibrium quickly. In Friedman's "natural rate theory," expansionary fiscal and monetary policy could, at least in the short-run, affect the real economy; i.e., it took time to lift the "money veil" but under Lucas's rational expectations, the "money veil" was transparent. In such a static environment, Lucas's concept of rational expectations may have relevance, but this is not the real world with incomplete markets and forward-oriented decision-making, depending on animal spirits rather than on rational expectations (Akerlof/ Shiller 2009).

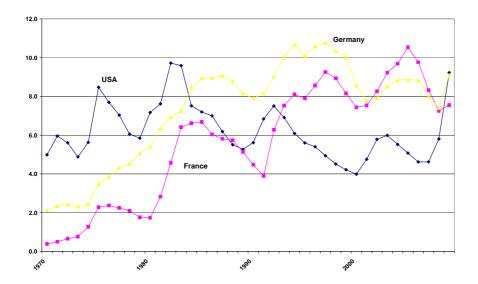
In the 1970s, unemployment rates in Europe started to rise and persisted at high levels after every recession (see Figure 1), which contrasted with US unemployment returning to its pre-recession levels (unemployment, however, was initially much higher in the US than in Europe). Why did unemployment persist after recessions in Europe? If seeing without blinds, the following might come up in an

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

economist's mind: restrictive monetary and fiscal policy – deflationary policies – and/or distortions in the functioning of labor markets. Yet, "natural rate theory" excluded macro-economic policies as potential causes for persisting unemployment and focused entirely on labor market institutions, which determine the "natural rates." Making European unemployment patterns not return to pre-recession levels consistent with "natural rate theory" required upward-jumping "natural rates." Only welfare state measures – becoming more generous with 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 (EPL), and a more compressed wage structure (to name the favorite "suspects") may lead to a less well functioning labor market.

However, structural reforms 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 (EPL) were relaxed, and the wage structure widened. In Germany, for example, the unemployment rate should have been lowered due to institutional reforms (Carlin/Soskice 2008) To explain rising and persistently high European unemployment with more generous welfare state measures, the timing is wrong. Yet, "natural rate theory" puts blinds on the eyes of analysts. The theory was taken so literally that anecdotal evidence was sufficient, serious empirical studies were ignored, and upwardjumping "natural unemployment" rates along with sclerotic labor markets in Europe (euro-sclerosis) became the dominant explanation for Europe's unemployment problem. "This remarkable theory was accepted without a qualm" (Solow 1998). The only evidence in support of "natural rate theory" was the cross-country comparison with the US, where labor markets were less regulated and unemployment rates did not rise although they were above the rate of many European countries until the late 1980s (see Figure 1). Therefore, the less regulated US labor market was declared to be more flexible and US-type labor market institutions were regarded as best.

Figure 1: Unemployment rates in the US, France and Germany



Source: Based on OECD Economic Outlook database

Consequently the political response – pushed by economists and the OECD's Jobs Study to Europe's upward jumping unemployment rates – was that it needs labor market reforms, labor market reforms, and labor market reforms to correct this pattern. If one excludes all other reasons for unemployment from the theory by assumption, only distortions of the market mechanism are left – thus, a full circle (Tobin 1972). 'Shape real market institutions to the theory and unemployment will disappear' may be a shortcut for the message sent out by the influential OECD Jobs Study. "Old Europe" changed its institutional structure largely following the blueprint: labor market institutions have been deregulated, welfare state measures have been tightened, taxes have been lowered, a common market and a common currency (!) have been introduced, the Stability and Growth Pact (SGB) has been implemented, and many more. All these changes were promised to result in higher productivity growth, more prosperous economies and improved employment, but the results are 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," favoring the Anglo-Saxon model of less regulated labor markets. Yet within OECD, it did not go un-recognized that some countries with drastically different institutions performed similarly well with respect to unemployment and participation rates, but superior with respect to inequality (see Freeman 2005). Therefore, the revision of the

Jobs Study in 2004 was much more reluctant and modest with its conclusions and admitted that different institutional arrangements may lead to similar outcomes. Heckman et al. (2006) fiercely criticizes the revised OECD view, arguing that the analysis of aggregate is flawed, and that the unemployment rate is not the right measure because corporatist countries hide unemployment in active labor market programs, early retirement, etc. Heckman et al., therefore, suggest making use of the results of micro-econometric studies from South America, which show that the "free market approach," that "natural rate theory," is right. Making use of micro-econometric studies seems to be a valid point, although South American economies may not be the right benchmark for highly developed European economies. However, as the OECD (2004) states, micro-econometric studies focusing on the wage compression in Europe – the major argument for high European unemployment – fail to establish evidence that wage compression caused labor market problems in Europe (the OECD cites Nickell/Bell 1996, Card et al. 1996, Krueger/Pischke 1997, Freeman/Schettkat 2000).

Nevertheless, fully grounded on "natural rate theory" it was argued that rising wage inequality in the US was the market response to demand shifting away from less skilled labor (biased technological change), a reaction European institutions - i.e. minimum wages (legal or negotiated), generous unemployment benefits - prevented, which resulted in unemployment of this groups in Europe. The less skilled, so the argument, were excluded them from jobs, priced out of the market by enforced overly high minimum wages. Again, the evidence for the argument was higher wage dispersion in the US than in Europe (see Figure 2) interpreted as powerful incentives for human capital investment. Wage dispersion between skill groups may enhance human capital investments but within skill groups wage dispersion raises the risk of human capital investments, it is a disincentive (Aggell 1999). Yet, US wage dispersion is higher within narrowly defined skill groups, even higher than overall wage dispersion in many European countries (Devroye/Freeman/2001). Furthermore, wage flexibility has two sides (Bell/Freeman 1985) and coordinated market economies (Hall/Soskice 2001) seem to create stronger wage restraint in expansionary periods than "liberal market economies." Empirical evidence for Germany in comparison to the US seems not to support the labor market rigidity hypothesis (Schettkat 1992, Carlin/Soskice 2008). At best, cross-country comparisons using rough macro indicators would produce some support for Heckman's thesis.

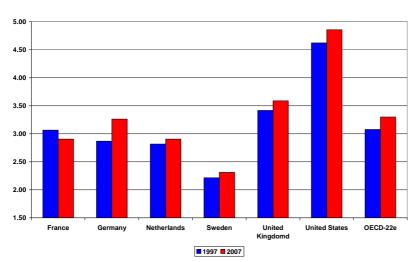


Figure 2: Earnings Dispersion (D9/D1) 1997 and 2007

Source: OECD Employment Outlook, 2009, Table H.

For the US Dew-Becker and Gordon (2005, 2008) showed that the upper 10% of the wage distribution not only received 50% of the income growth but that within this privileged group the top 1% captured half of the increase. On the other end, the 20% with the lowest income got 2% of the income rise. The authors argue that too much emphasize was put on demand and supply issues to explain the widening wage dispersion in the US. The increasing wage pressure at the lower end is likely due to declining unionization, shrinking minimum wages whereas at the upper end of distribution peer group behavior raised the income of CEOs and financial managers. Changes in the income distribution also affect financial markets since income growth at the upper end will hardly increase consumption but instead searches for investment and speculation.

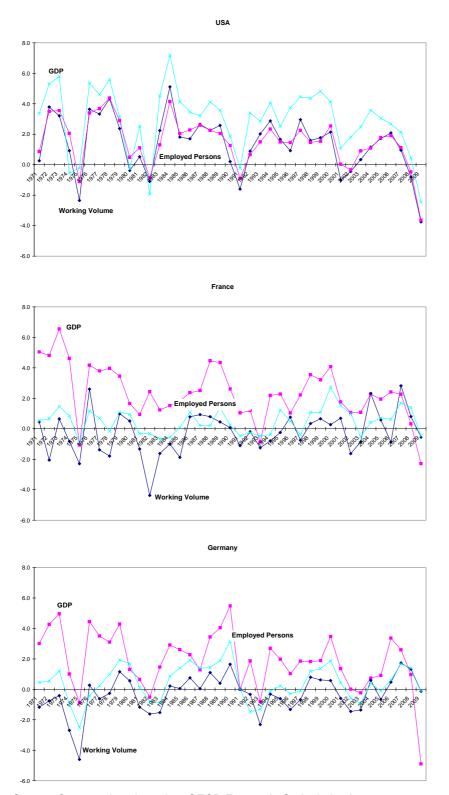
How did labor market reforms pay off in the current recession? Many countries implemented the policy recommendation proposed in the OECD's Jobs Study (1994). The OECD (2009:39) summarizes the employment reactions in the current crisis: "...there does not appear to be any strong reason to expect that recent structural reforms mean that OECD labor 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 onset of a recession, but is less likely to plateau at a high level for a long period." However, as far as any output recovery could be observed, the hopes of the OECD may be coming true – yet it seems that the economies still rely on government infusions.

Germany, whose GDP declined by 5% in 2009 (more than the decline in many other countries), seems to show the most remarkable labor market reaction. Unemployment increased only modestly by less than 1%points and the number of employed persons was held roughly at the pre-recession level. The German economy reacted to the recession with a reduction of average hours worked (due to a decline in overtime, subsidized short-hour work, and use of time buffers). This reaction, however, is not due to the labor market reforms implemented in 2004; rather, it is the result of a substantially extended but well-known policy, namely subsidized short-hour work. The number of Germany's employees remained constant but the working volume reacted strongly by 3.2% (Spitznagel/Wanger 2010, also IILS 2009). Employment reacted with flexible hours rather than firing workers, which may be more efficient for workers and companies than dismissals and rehiring in the upswing. This pattern is probably more pronounced (at least to more generous measures taken by the Federal Government) but it is hardly new; instead, it presents a major difference between the US and the German labor markets for decades (see: Abraham/Houseman 1988, Möller 2010), although it was used at a much higher magnitude in this recession (see Figure 3).2

<sup>&</sup>lt;sup>2</sup> Nevertheless, short hour work is criticized of procrastinating the restructuring of the economy.

Figure 3: Growth of GDP, employed persons and working volume in the US, France and Germany



Source: Computations based on OECD Economic Outlook database

#### 3. Monetary Policy Slowing Growth in Europe

Another, albeit widely neglected, explanation for upward jumping unemployment rates remaining at high levels in Europe is that recoveries have not been strong enough because macroeconomic policy was overly restrictive, fearing inflationary pressure in expansions. According to this theory, the rise in European unemployment was not caused by more generous welfare states and a subsequent rise of "natural rates of unemployment," but it was rather the result of deflationary macroeconomic policies. For unemployment rates to return to pre-recession levels, it needs economic growth in the upswing, substantially above the growth of potential output and productivity growth respectively. If growth remains below this rate, employment will not recover and unemployment will persist.

Assuming the economy to be always in equilibrium, "natural rate theory" excluded monetary and fiscal policy as feasible policy options and introduced a new division of labor: 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 following a low inflation path. Monetary policy - although only becoming powerful after the fall of the Bretton-Woods fixed exchange rate system - 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 does not affect growth and unemployment directly but 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 2000:4). 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, it would need structural reforms,' was the economic policy message loudly trumpeted and heard. In fact, this doctrine led to immunity of central bankers insisting on their independence, but who feel free to give advice on all areas of economic policy.

Although the Bundesbank was already independent according to the Bundesbank law from 1957, fixed exchange rates under the Bretton Woods system

were limiting the Bank's actions because it had to keep the exchange rate as fixed by the government. Under fixed exchange rates, monetary policy is ineffective (Mundell 1963). After 1973, when the Bretton Woods system collapsed, fixed exchange rates gave way to flexible exchange rates, which increased the degrees of freedom for monetary policy at a fundamental level and made Central Banks major players in economic policy. The Bundesbank embraced its post-Bretton-Woods freedom and "natural" rate theory, deciding to use the new option to target price stability (Baltensperger 1998, von Hagen 1998).

Following a policy of price stability, the Bundesbank became de facto Europe's central bank. Some countries pegged their currencies directly to the DM (Austria, The Netherlands) and others were influenced by Bundesbank policies through the European Exchange Rate Mechanism (ERM, see Baltensperger 1998). David Marsh (1992) titled his book on the Bundesbank, *The Bank that Rules Europe*. Also in its self-perception, the Bundesbank regarded itself as the "European Central Bank." The web page celebrating the 50<sup>th</sup> anniversary of the Bundesbank is headed by "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 the bank served as a blueprint for the ECB. Therefore, the establishment of the ECB was seen by many European countries as a measure to break the dominance of the Bundesbank and to regain influence on monetary policy (Wyplosz 2008).

Shortly after the breakdown of the Bretton Woods system, which freed central banks from binding exchange rates, the Bundesbank adopted a policy of targeting monetary aggregates (today, the ECB still officially claims that its policy is based on monetary aggregates as one pillar). The Bundesbank announced targets for the growth of monetary aggregates but Bernanke and Mishkin (1997) argue 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 Bernanke and Mishkin's terminology, the Bundesbank was a kind of "hybrid" inflation and monetary targeter (Bernanke/Mishkin, 1997). Over time, the Bundesbank set (implicitly) increasingly ambitious inflation targets from 4.5% in the 1970s to 1.5% shortly before the introduction of the Euro, and this way, established the ECB target of less than 2% inflation.

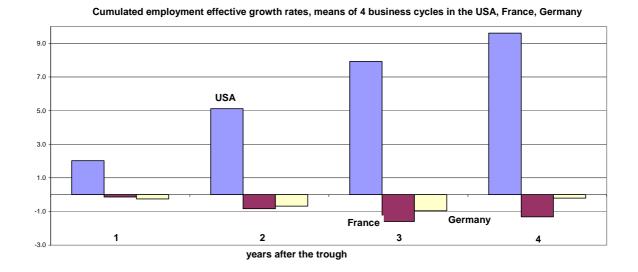
Recent analysis (Schettkat/Sun 2009) shows that the Bundesbank's fear of inflation led it to run an asymmetric monetary policy. When actual output was above potential output, the Bundesbank acted precautious, deviating from the long-run orientation and raising the interest rate. When actual output was 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 — i.e., when the economy grew faster than the potential — the Bundesbank feared inflationary pressure and reacted strongly by raising the interest rate. Therefore, the Bundesbank slowed economic expansions. In contrast, when the output gap was negative, the Bundesbank did not reduce the interest rate significantly, i.e., it did not counter recessions. Germany became the champion of price stability, only hampered in its world market expansion by a rising value of the Deutschmark; however, this restriction disappeared with the Euro.

The Bundesbank was very successful with respect to price stability, which is the basis of the widely celebrated Bundesbank legend; if it were true that monetary policy does not affect the real economy, if money were only a veil neutral to the real economy, a policy of high price stability would be costless. But again, the evidence theoretical and empirical – is not as clear as ECB bankers seem to believe. Actually, the German - and European - economy paid a high price for low inflation achieved through underperformance with respect to economic growth and employment. Even if monetary policies were neutral in the long run, asymmetric monetary policy will severely affect the real economy. If economic growth after a recession is slowed, the economy cannot return to the initial growth path and this way, the long-run growth trend will be reduced as well. The dominance of price stability has been carried over from the Bundesbank to the ECB and is in contrast to the principles of the Federal Reserve System (FED). The FED has a "dual mandate" and is required to use monetary policy to achieve price stability, but also "to promote effectively the goals of maximum employment, and stable prices." For the Bundesbank (and later, the ECB), price stability became priority and other considerations should only be pursued conditional on the achievement of price stability. Therefore, an important institutional difference are

<sup>&</sup>lt;sup>3</sup> The FEDERAL RESERVE ACT puts 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."

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

Figure 4: Cumulated employment effective GDP growth in four upswings, US, France,
Germany



Source: Computations based on OECD Economic Outlook database

Given the institutional differences governing monetary policy, it does not come as a surprise that the European unemployment remained at ever-higher levels after each recession. Comparing the employment effective cumulated growth rates over four business cycles between Germany and France, as representing Europe and the US, illustrates this point (see the Figure 4): The US employment miracle is the result of economic growth overshooting productivity growth substantially in upswing; whereas, European employment could hardly recover after recessions, and thus, unemployment persisted at higher level after every recession. Growth in the expansionary periods was hardly allowing unemployment to fall to pre-recession levels in Europe. There was clearly much more room for economic expansion in recoveries but it was slowed by the overly restrictive, asymmetric monetary policy of the Bundesbank. The conclusion from Figure 4 clearly is that a more dynamic economic recovery in Europe would have raised output, and thus, reduced the unemployment rates substantially. The cumulated

differences in growth over four business cycles between the US and Germany show that the "Great American Job Machine" was a growth machine. More expansionary policies in Europe would have allowed for higher participation (less early retirement, higher female labor force participation). Even some working hours reductions, which were introduced in the 1980s and were motivated by employment considerations, would likely have been unnecessary.

Economic growth is the "deus ex machina" of unemployment if structural features do not prevent the employed to become unemployed. The German economy underwent structural changes at least as strong as the US economy and flow-based analysis shows that the dynamics in the German labor market were high. In addition, duration analysis of unemployment and vacancies suggests that German unemployment was clearly a job deficit rather than a labor market rigidity phenomenon (Schettkat 1992). Cross country evidence causes doubt on the "institutional rigidity story," as well (Glyn/Howell/Schmitt 2006, Schettkat 1992, 2005) and institutional change in Germany cannot explain the rise in unemployment (Carlin/ Soskice 2008). Dolado et al. (2003) argue that rigid European labor markets did not allow the central banks in Europe to follow a 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 (2008) found that in many European countries, wages are less sensitive to favorite economic conditions, thus creating less – rather than more – inflation in boom periods (see also Bell/ Freeman 1985).

#### 4. European Macroeconomic Institutions in "Natural Rate Spirit"

"Natural rate theory" was dominating politics when important steps to a closer European Union were made in the early 1990s. In 1992, the so-called Maastricht treaty was signed, establishing convergence criteria to achieve economic and monetary union (EMU) in Europe. Fearing loose economic policy, i.e. policies which do not give price stability absolute priority, the German government and the Bundesbank insisted on strict criteria<sup>4</sup>: 1) The inflation rate needed to be no more than 1.5 percentage points above the country with the lowest inflation rate in the EU; 2) The government deficit should be 3% of GDP at maximum and public debt should not exceed 60% of GDP (or steps to achieve this mark should be taken); and 3) Applicant countries should be members of the exchange-rate mechanism, allowing a limited deviation (initially 2.25% but later 15%) from a fixed exchange rate.

After fixing the exchange rates among the currencies of the participating countries, the Euro was introduced on January 1, 1999, sharing a common currency among major European countries (actual Euro coins and bills were introduced in January 2002). Related to the establishment of the Euro, and with it the ECB (European Central Bank), the Maastricht convergence criteria were engraved into stone in the Stability and Growth Pact (SGP), or Amsterdam treaty (1997). With the ECB, fiscal policy should have gained importance if it were not restricted by the "Maastricht criteria" (Allsopp/Vines 2005). As a consequence, the design of major European institutions created a tight corset for macroeconomic policy. Euroland attained the most independent central bank in the world, choosing a self-defined inflation target of 2%, and a stability and growth pact (SGP), which allows the European commission to start a "deficit procedure" if the public deficit reaches 3% of GDP. The Commission supported a policy of declining tax rates in the belief that a smaller public sector will leave more room for private sector activity declared – but not proven – to be more efficient.

The influence of "natural rate theory" can be very clearly seen in the presidency conclusion of the special Luxembourg summit (November 1997): "With regard to the macro-economic context, it is essential for the Union to pursue a policy of growth geared to stability, sound public finances, pay restraint and structural reform" (Luxembourg council 1997: #10). In such, "stability" meant price stability, "sound public

<sup>&</sup>lt;sup>4</sup> However, Germany was the first country not to fulfil the 3% criteria.

finances" meant low public budgets, "pay restraint" meant low wage growth, and "structural reforms" meant a withdrawal of welfare state institutions. Fully consistent with "natural rate theory" and Issing's view (Issing 2000, see above) that the best monetary policy is one which emphasizes price stability and actually a tight, price stability orientation has been seen as the final seal: "...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" (Luxembourg council 1997: #11). Further, it emphasizes the 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" (Luxembourg council 1997: #12).

However, the Amsterdam treaty also included an employment chapter resulting in the European Employment Strategy and specific employment targets were formulated in the so-called Lisbon agenda (2000). For the 15 to 65 years-old populations, an overall employment rate of 70%, and for the female population, an employment rate of 60% should have been reached by 2010. These goals were obviously overly ambitious and in 2003, the first Kok report (Jobs, Jobs, Jobs, Kok 2003) warned that the EU will miss the "moon landing"; shortly after, the targets were somewhat lowered in the so-called re-launch of the Lisbon agenda in 2005. Now 67% for the overall employment rate and 57% for the female employment rate were envisaged.<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 government could not agree on binding to achieve these goals creating a new label: namely, the open method of coordination, meaning that every country proceeds at it discretion.

This is arguably the dilemma of the EU that strictly binding procedures were established to keep track on price stability and curbing public deficits, but that "open methods" need to be applied whenever positive action was required. Although the Commission puts the achievements of the Lisbon strategy in a shiny light ("missing the target does not mean that the Lisbon strategy failed") it is pretty clear that the major ingredients of a "dynamic knowledge-based economy," namely educational investments, have been missed in many of the EU countries. The OECD statistics

<sup>5</sup> In addition, the employment rate of older workers (55-65 years) should rise to 50% by 2010.

(OECD 2008, Education at a Glance) show that with the exception of Sweden, Norway, Denmark, and Austria, all EU-countries spend less per student than the OECD-average. It was hardly the right move to achieve the Lisbon goals, least of all the outcome of national decisions, where public spending became under pressure, because the EU supported the tendency to lower taxes.

The SGP criteria allowed punishing a country that already has a deficit higher than 3% of its GDP and forcing the country to apply austerity measures. However, when Germany and France missed the 3% limit, no sanctions were taken. Yet now, for the first time, the Greek government is under severe EU control, since the current Greek budget deficit passed 12% of GDP and rating agencies lowered the ranking of Greek bonds which raised the risk premium Greece has to offer. 12% is four times the SGP deficit limit, but it is surely not unique: The UK and the US are in the same range and the huge public deficits occurring everywhere are not in the least caused by injections into the financial system and by the enormous decline in economic activity following the financial crisis. The core problem of Euroland seems to be that there is a central bank but no Euroland-government and no Euroland economic policy; instead, there are national governments declaring that they first have to act in the interest of their own countries. Especially, Germany is insisting on "natural rate" policies, recently introducing a "balanced budget constraint" in the German constitution (Grundgesetz) limiting public deficits to 0.35% of GDP.

Within Euroland, Germany's deflationary policy led German net export surpluses – within but also outside Euroland – to be the major force behind the German recovery of the mid 2000s. Germany, the largest economy in Euroland, followed the Dutch deflationary strategy when the Nederlandse Bank (the Central bank of the Netherlands) pegged the Guilder to the German Mark following Bundesbank policy immediately, and thus, held the nominal exchange rate of the Guilder to the DM constant. Since wages and prices grew at a lower rate in the Netherlands than in Germany, the real exchange rate was declining and Dutch products gained price competitiveness (Schettkat 2005) clearly visible in the Dutch net export surplus. If a small economy like the Netherlands boosts its net exports through improved price competitiveness achieved by deflationary policies, it affects Euroland only marginally, but it has a huge effect on the Domestic economy because foreign trade is an important part in a small economy (for a model developing the theory: Carlin/ Soskice 2008). If the biggest 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.

#### 5. New Directions

"Markets are efficient", "markets know best", "especially financial markets are efficient", was the message of the counterrevolution in economics, which discarded Keynesian economic theory. The coexistence of rising inflation and unemployment pushed "natural rate theories" from academia to 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 set wrongly. This trend in macro was the result of models which were based on so-called microeconomic foundation, i.e. super rationality, maximizing behavior, representative agents i.e. uniformity. Economic policy -be it fiscal or monetary policy- was declared to be disturbing rather than a smoothing economic development and consequently labor market reforms became the key to improve employment. "Theoretical rigor", "microfoundations" were claimed by "natural rate theorists", but actually the evidence in favor of "natural rate theory" was shaky, at best. Yet, less regulated labor markets together with an enormous employment growth in the US were, through the lens of "natural rate theory", regarded as sufficient evidence that deregulation of European welfare state institutions can ignite a "great job machine" in Europe.

Without doubt, labor market institutions differ between Europe and the US –as within Europe- but this is not the only difference, monetary and fiscal policy do have different frameworks as well. Yet, these differences affecting macro-economic policies were declared irrelevant in "natural rate theory". Just when the break-down of the Bretton Woods fixed exchange rate system gave leeway for monetary policy "natural rate theory" reestablished the classical position that money is neutral to the real economy. If it were true, a policy of very high price stability is the most desirable since it does not harm employment, it would be costless. Again, the evidence in favor of the neutrality thesis is shaky, and serious statements of central bankers reviewing the theoretical and empirical evidence for the neutrality thesis, usually conclude with "nevertheless" sticking to their theoretical priors (see Papademos 2004). Meanwhile even the chief-economist of the IMF questions whether too low inflation rates are not overly constraining the options of monetary policy given the zero interest bound (Blanchard et al. 2010).

European macroeconomic institutions, 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 from the European Commission and from

national governments, which are deprived from lending from the ECB but instead have to finance and refinance at capital markets. The ECB is the most independent central bank, not only free to choose the instruments to achieve certain goals but it can define the goals itself. The bank, seeing itself as the successor of the Bundesbank, decided for an ambitious price stability goal, 2% inflation.

European welfare states got under financial pressure because high persistent unemployment raised spending and reduced revenues. But financial stress may have been the consequence 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 %points not only occur in European countries but also in the US and among other Anglo Saxon countries. However, all countries suffer from the current crisis, from declining economic activity, declining income and subsequently declining tax revenues. Rising public debt is mainly the result of the current recession not of excessive spending on education, public infrastructure and the like but rather because of the enormous financial infusion to the almost-collapsing financial system and deficit spending necessary to substitute for diminishing private expenditures. The current public deficits are unsustainable and need to be reduced, but they can only be reduced through higher economic activity and rising revenues. Fears of accelerating inflation may lead to too early consolidation of public budgets, which will slow the necessary expansions of economic activity and may leave long scars in labor markets.

This was the case in the past, when fear of inflation reduced the growth in upswings not allowing unemployment to return to pre-recession levels. Long lasting unemployment turned into long-term unemployment and got more and more concentrated among the low skilled. Yet, 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 high unemployment has persisted for a certain period. This process, however, is not an argument against a more expansionary policy, but it is in favor of it, because inactivity will cause high, long-lasting costs (Stiglitz 1997). A policy less constraining to economic growth in recoveries could have brought European unemployment rates back to pre-recession levels and prevented the structuring of unemployment.

At the meeting of the Heads of State and Government on February 11, 2010 the European Commission President, José Manuel Baroso (2010), illustrated for "Europe 2020" three after-recession scenarios, that have severe long-term effects: "The lost decade" will leave after-recession Europe on a lower growth path with permanently

lower growth rates, "the sluggish recovery" will allow to return to pre-recession growth rates but not compensating for the losses of the recession, and "the strong recovery" will accelerate growth, it will bring Europe on 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 else than "markets will know" best but the development of the potential is not an equilibrium, it is a dynamic task and it is not cost efficiency alone, it is about new products and new production processes as Schumpeter described it. Furthermore, growth of the potential is not sufficient it needs policies, which ensure that the potential is used, that ensure that we live up to our standards and not below our abilities.

To sustain the progress in European integration the currency union need to be complemented by political union. The European level needs to become a serious economic policy player to prevent the permanent danger of deflation. European policies were supply-side oriented, which is necessary to improve the potential but it another issue to make use of the potential. The ambitious goals of the Lisbon agenda, which basically return in "Europe 2020" to become the most dynamic, knowledge based economy point in the right direction. Also the "three priorities for sustainable growth and jobs" Baroso (2010) emphasized at the recent informal council meeting seem to be agreeable in principle. Better education, more university graduates require more rather than less public spending which conflicts with ever lower tax rates. "Green growth" is without alternatives but it cannot be left to the market. The market does not know where to go, it needs strong directions, environmental standards and targets, which reduce the uncertainty for investors. However, it is questionable whether these complex supply-side policies are congruent with the smallest public sector. A knowledge-based economy, for sure requires a well-educated population, which in turn requires high investments in human resources. It is pretty clear that a dynamic knowledge based economy cannot be achieved with below the average expenditures on education. A policy of improving the supply-side is not identical with low taxes and the smallest public sector. It is about the development of markets not about the allocation of given resources which "natural rate theory" emphasizes.

When the Spanish Prime Minister, Rodrigues Zapatero –currently the "Ratspräsidentschaft" of the European Union, suggested to balance the SGP's stability procedures with a "growth rule", he faced fierce opposition from the German economics minister who wants to limit the EU to the common market and competition enhancing measures. Zapatero proposed that the EU commission should be able to insist on

compliance with growth initiatives – like the Lisbon agenda or the new "Europe 2020" inititiative- and to be able to sanction non-compliance. A European budget, funds that the EU can use to support growth initiatives would, of course, be an alternative to sanctions, But in any case, to compensate for the bias of European institutions towards low growth requires to overcome the division between fiscal, monetary, and wage policies. These are not independent, but highly interdependent and have strong macroeconomic impacts. They need to be integrated in an European coordination process. Political union is required to make the remarkable progress of European integration sustainable. Just a currency union with a strong central bank facing governments representing national interests seems not suitable and not sustainable.

Net-export surpluses may help to reduce foreign debt but continuous surpluses distort the balance and leave the surplus country to live below its potential because domestic demand is slowed. Raising domestic demand - private and public - in surplus countries would raise domestic living standards, would bring imports and exports in balance, and it would allow for balanced growth in the European union. Especially in a currency union where nominal exchange rates cannot compensate for imbalances, it is dangerous when the major player, the biggest country, follows a deflationary, netexport surplus policy and in additions excludes the use private savings as the "Schuldenbremse" (balanced budget constraint) in Germany does. If wages rise less than productivity, a deficiency demand and deflationary pressure is likely to occur and societies are living their potential. This may be a necessary policy 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, before the Euro, adjustments of the exchange rates were sufficient for a realignment but within the Euro-zone the response can only be a deflationary policy; a vicious circle, slowing growth in Euroland. The export-surplus country may look like the champion, but actually the surpluses depend as much on the deficits as it is the other way round.

The greatest danger for Europe's employment future stems from consolidation of public budgets too early. If governments and central banks fear inflationary pressure and raise interest rates or consolidate public budgets too early, the recovery will slow and unemployment will remain at high levels. Christina Romer - chairwoman of President Obama's council of economic advisors and an expert on the policies during the Great Depression - emphasizes exactly this danger for the current recession. In the Great Depression US President Franklin D. Roosevelt consolidated public budgets too early and procrastinated the recovery of the American economy.

We do not need to dick holes, public infrastructure need repair and modernization, educational systems need to be improved, environmental friendly products need to be developed etc. The last decades of relatively shrinking public budgets left so many potholes to be filled: educational expenditures in Europe are — with the exception of a few, mainly Scandinavian countries- below OECD average, public infrastructure need to modernized and repaired, All this would help to achieve the goal —at least a bit- of the Lisbon agenda culminating in the target to become the "most dynamic knowledge based economic area in the world". Governments and Central Banks learned a lot from policy mistakes made in the Great Depression and saved us from making a similar experience. Hopefully they also understand that it needs substantial economic growth for a long period - a New Deal for Europe - to return to pre-recession employment levels. Tightening monetary policy and consolidating public budgets too early will be extremely costly for Europe and may end in a "lost decade".

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