The job creation potential of the US economy is legendary: new employment records year after year. From 1970 to 2000 employment in the USA increased by about 2% annually. A fantastic rate, contrasting sharply with the meagre employment growth in Europe, where in the biggest economy, Germany, employment grew by only one-tenth of one per cent per annum. Within three decades US employment rose by 75%! In Germany by comparison employment increased during this 30-year period by only 3% (adjusted for unification). Since employment growth and stagnation coincided with distinct institutional features of labour markets – a largely unregulated US labour market but highly regulated labour markets in Europe – it was natural to investigate the impact of institutions on employment. American unions almost disappeared, workers in the USA can be fired for good reason or for no reason at all, unemployed workers need to find a new job quickly since unemployment benefits are meagre and eligibility periods are short, and inequality in the USA was high and rising. In Europe, on the contrary, union membership is high although declining, dismissals require advance notice and a reason, unemployed workers receive benefits compensating their former wage or salary income and eligibility periods last 3 years and sometimes even longer, and inequality remained largely unchanged.

Guided by the advice of many economists, politicians put two and two together: European labour markets were identified as being sclerotic, firms do not hire because they fear high dismissal costs and workers are not under pressure to accept new jobs because overly generous welfare state measures cushion unemployment. In consequence, economic growth did not reach the labour market, a situation which has been coined “eurosclerosis”.1 Most economists in Europe pushed for a deregulation of labour markets, supported by the OECD jobs study, IMF publications, and the ECB (European Central Bank, the successor to the national central banks, designed according to the Bundesbank model). In the end, even governments elected with a social-democratic programme, such as the Schroeder government in Germany, changed their policies by 180 degrees, withdrawing their own earlier legislation, and are now pushing for deregulationist reforms, discouraging their own parties and electorate. Conservative opposition parties do not know what to oppose anymore. It is like Lady Thatcher's late triumph over “old Europe”.

What made even the sceptical European politician a believer in the job-creating power of unfettered labour markets? It was the mixture of undeniable trends and the continuously repeated statement that the root of European unemployment is labour market regulation. In the period from 1970 to 1996 the US economy, as measured by GDP, grew on average at 3% annually, which is equivalent to a doubling of all produced goods and services every 23 years!2 The employment threshold, the rate of GDP growth at which employ-

---


2 Since the US population was also growing, income per capita grew much less in the USA. Cf. R. Schettkat: Demand Patterns and Employment Structures: an Aggregate Analysis, paper prepared for the DEMPATEM conference October 2003, Seville, Spain.
ment remains constant, was only 1.1% in the USA. Every percentage point of economic growth above this level created additional jobs. With 3% GDP growth, employment was growing on average by 1.9% annually, i.e. in the 26-year period from 1970 to 1996 employment in the USA grew by 60%! A number too high even for the dreams of European politicians. In Germany, on the contrary, the employment threshold was twice as high. Additional jobs were created only with economic growth exceeding 2.2%. Since the German economy grew only at 2.4% annually, the number of jobs remained roughly unchanged. The other side of the coin, of course, was low productivity growth in the USA but high productivity gains in Europe. Employment elasticity, the percentage change of employment in response to a percentage increase in GDP, was only half as high in Germany (0.3) as in the USA (0.6) from 1970 to 1995. In other words, one per cent additional GDP growth raised employment by 0.3% in Germany but by 0.6% in the USA.

From 1996 on, since the USA returned to the economic growth path of the 1960s and productivity gains rose to above 2% annually, the American employment threshold rose consequently. Now the USA had to achieve economic growth of 2% or more just to stabilise employment. This was no problem in the euphoric period of the “new economy”, the “roaring nineties” with its investment boom until 2000 in which the US economy grew at 4% per year. But since the beginning of the recession – which already started in the first quarter of 2001 and not as a reaction to the terrorists’ attacks of September 11 – employment declined by about 2%, although GDP rose overall by 4%. Currently the US economy is growing at about 3% and in the 3rd quarter of 2003 GDP growth even reached more than 8% on an annualised basis. But even with such an exceptionally high increase in GDP employment figures show a slight decline, although small variations in the data are within error margins. The same phenomenon, economic growth with stagnating employment, i.e. a high employment threshold or high productivity growth, was coined “eurosclerosis” in Europe. The situation on the two sides of the Atlantic has been reversed: the USA now has a higher employment threshold than European countries, where the employment threshold fell to about 1.4% (see Figure 2).

Although the relationship between employment, economic growth and productivity is an identity, “eurosclerosis” proponents regarded productivity growth as artificially high in Europe, because – so the argument – labour market institutions in Europe push up productivity by squeezing out economic activities with lower productivity. With American-type institutions, so the argument, Europe would have seen less productivity growth, a lower employment threshold and the same rates of economic growth would have resulted in higher employment. Why did the level of the em-

---

1 Measured in hours worked rather than persons employed the USA-Europe contrast is even stronger. Cf. R. Schettkat, op. cit.
2 In the USA the population of working age (15-64 years) is growing constantly, requiring continuous employment growth to stabilise the employment population rate.
Employment threshold on both sides of the Atlantic then reverse? There are obviously two possibilities:

- the USA changed its institutions to European-style welfare state ones while Europe deregulated
- labour market institutions are not the driving force of productivity trends.

Neither the fall of the employment threshold in Germany nor the rise of the employment threshold in the USA can plausibly be ascribed to labour market reforms. The USA did not adopt European-type welfare state institutions and in Germany the deregulation of labour markets has only just been decided on in parliament and could hardly have affected development before 2003.

**Differences in Macroeconomic Policy and Employment**

What about US-European differences in macro-economic policy? Despite reminders by such outstanding economists as Robert Solow that Europeans may be focusing too much on labour market institutions and forgetting about macroeconomic policy as a source of high European unemployment, macroeconomic policy played almost no role in the European economic policy debate. In general, productivity growth leads to a rise in production capacity. With the same input a larger output can be produced, and the same output requires less input respectively. To hold employment constant requires the expansion of demand. Figure 3 illustrates the relation between supply (on the horizontal axis) and demand (on the vertical axis) and employment (the hyperbolic curve). Improvements in labour productivity (the inverse of “labour demand per unit of output”) lead to a move towards the origin, i.e. less labour is needed to produce a constant output. With unchanged demand and/or constant working hours the economy moves to a lower employment-population ratio.

Just to hold employment constant and to remain at the same employment-population ratio, demand per head of the population must rise proportionally to productivity and/or working hours must decline. The level of final demand in the economy must keep pace with the supply improvements (productivity growth) to keep employment constant. In theoretical models it is often assumed, by reference to Say’s law, that demand automatically equals supply, but the two sides of the market actually follow different influences. As the Nobel Prize-winning Dutch economist, Jan Tinbergen, put it: economic development is a continuous race between productivity improvements and demand expansion.

In 1970 the European countries and the USA had different productivity levels but they were all roughly on the same “employment curve”. Income per capita and overall demand in the USA was higher because the US economy produced at a higher productivity level with a similar labour input per head of the population as the European economies. By the 1990s the USA and the European economies were on distinctively different “employment curves”. In the USA productivity increased less than in the European countries, leaving some European countries (France, West Germany, the Netherlands) at roughly the same productivity level as the USA. At the same time, however, demand in the US economy grew substantially more than productivity, pushing the USA to a position above the original “employment curve”. Expressed in demand-supply space: the move of the USA in a vertical direction (demand) was bigger than the inward move along the hor-
izontal axis (supply, productivity). The reverse trends occurred in Europe, where productivity growth was higher than the expansion of demand, which left these countries below the original “employment curve”.8

Rising employment requires an expansion of the economy by more than productivity growth, which may create price pressure in product markets because additional workers may not be available or they may require a higher than the current wage to take up employment. If it is believed that the unemployed are unwilling to work and/or that their productivity is much lower than that of the current workforce, the employment elasticity of rising demand will be expected to be low but the “inflation elasticity” (price changes) to be high. That is the position of neo-classical macroeconomics, which argues that in a given institutional framework rising demand cannot improve employment but can only cause inflation. This is the theoretical backbone of proposals for labour market deregulation and of the Maastricht stability pact. It is a theoretical world in which very low inflation is costless but expansionary policies are very costly or even ineffective. It is a comfortable theory for central banks because higher employment requires labour market reforms and supply-side policies instead of adequate monetary or fiscal policies to stimulate demand.

Do supply improvements necessarily result in higher output? Does a rise in potential output translate easily into actual output growth? In a theoretical model without frictions, supply increases can result in immediate demand increases. Potential for economic growth will automatically become actual economic growth. In a dynamic perspective, however, real world frictions may leave potential for economic growth unused. An increase in potential production (i.e. productivity growth) may not automatically result in higher demand if employers are pessimistic and do not expect future increases in demand. In this case workers may be dismissed rather than production expanded and consequently investment may slow, creating a vicious circle. Automatic stabilisers, such as unemployment benefits, may prevent sharp falls in demand but they are not sufficient to stimulate demand.

This is the situation of the large European economies. Public expenditures are constrained by the Maastricht treaty and the “a small state is beautiful” ideology, the result of a strong belief in neo-classical macroeconomics based on sturdy market-clearing assumptions, which the Bundesbank followed earlier and now the ECB seems to be following.9 The ECB

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment (million)</th>
<th>Employment rate (employment/population 15-64)</th>
<th>Demand per capita (PPP US $, 1999 OECD benchmark)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>78.7</td>
<td>0.62</td>
<td>18,254</td>
</tr>
<tr>
<td>2000</td>
<td>136.2</td>
<td>0.75</td>
<td>35,280</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>26.6</td>
<td>0.69</td>
<td>16,202</td>
</tr>
<tr>
<td>2000</td>
<td>36.3</td>
<td>0.65</td>
<td>25,381</td>
</tr>
</tbody>
</table>

Source: Computation based on the OECD economic outlook database.

requires the European governments to deregulate labour markets before even thinking about a more expansionary policy, because they argue in accordance with neo-classical macroeconomics that an expansionary monetary policy will result in inflation but not in higher growth or more employment. The fear of inflation and the fear that national governments may use the protection of the euro to relax budgetary discipline dominated in Europe and led to the Maastricht criteria, which limit the annual net debt of the general government to 3% of GDP. Since the “3% rule” was made a fixed rule, independent of the economic situation, it prevents the major European economies – France and Germany – from following a more expansive fiscal policy. Both countries, however, did not meet the “3% standard” and claimed exemption from retaliation measures because, so the argument of the German Minister of Finance, Hans Eichel, the government is already applying a restrictive policy. But governments can run into deficits because they spend too much in periods of economic growth or because they spend too little in periods of economic stagnation. The latter seems to hold for Germany.

In the early 1990s – when the Maastricht treaty was concluded – neo-classical macroeconomics dominated economic policy in Europe and demand-stimulating policies were declared not only ineffective but even harmful. Indeed, if neo-classical macroeconomists had been right, there would indeed have been no role for fiscal or monetary policy to stimulate the economy. All that expansionary policies could achieve in that model is to push the economy out of equilibrium into inflation but not into higher growth. It was shown at least as early as 197310 that the assertion of neo-classical macroeconomics that an expansionary fiscal or monetary policy does more harm than good to the

---

8 Taking hours worked instead of persons employed, these trends would even be more pronounced. Cf. R. Schettkat, op. cit.
economy rests totally on the assumption of perfect markets and only holds in this highly abstract model. However, it is the constraint on expansionary fiscal policy from the Maastricht criteria together with the ECB – which solely emphasises price stability, defined by the ECB board as euro-zone average inflation of 2% or less – that tightens the macroeconomic perspectives of the European economies.

In the USA, economic policy is much more pragmatic than in Europe. The Fed was prepared to balance the deficit reductions of the Clinton administration by a supportive, expansionary monetary policy and in the last recession the Fed lowered interest rates quickly. The Bush administration provided tax reductions, which turned the Clinton budget surpluses into deficits, but which turned out to be support for an economy sliding into a recession. It seems that these expansionary policies work. GDP rose by the highest rate since the mid-1980s in the 3rd quarter of 2003 (recently revised to 8.2% from the 7.2% estimated earlier). To have a lasting impact on employment, however, the US economy must grow at substantial rates for a considerable time. The US macroeconomic institutions seem to be less bound by ideology and more able to support an expansionary growth path. For example, the Fed tolerated inflation of 1.7% in the period 1996 to 2002 whereas inflation in Germany was only 0.9% according to OECD figures. Whether that is sufficient to restore high rates of employment growth in the US economy remains to be seen.

**Conclusion**

Will the USA follow the European economies and enter a period of stagnating employment? Will America experience US-sclerosis?

This paper has argued that not labour market institutions but rather the misalignment of macroeconomic policy is the root of the European employment problem. US macroeconomic policy seems to be more prepared to support an expansionary growth path. However, is it likely that economic growth rates sufficient to raise employment by 2% – past employment growth in the USA – will be achieved if productivity growth remains at 2 or 2.5% over longer periods? The “roaring nineties” experienced economic growth high enough, although the rate of employment growth declined at the end of the decade. But the nineties are labelled the “world’s most prosperous decade” indicating the exceptionally high growth in that period. It also experienced an overshooting of investment, the seed for the 2001 recession. By historical standards, growth rates of 4 or 5% annually over longer periods are rare (in the USA at the end of 1930 and in the early 1940s and early 1960s, in Europe in the mid-1950s to mid-1960s). In other periods economic growth was much more modest.

Therefore, with higher rates of productivity growth US employment will most likely not grow at rates of 2% or more as in the past. In addition, US employment growth was concentrated in some service industries, like retail trade and health, which are traditionally classified as technologically stagnant and therefore as suffering from Baumol’s cost disease. The virtues of the information economy seem to show its benefits in the form of higher productivity gains in these industries. Although productivity growth can lower unit costs and prices and in this way stimulate demand, this is unlikely to happen in retail services because these are not demanded for their own sake but in connection with the consumption of goods. Productivity gains can be used to increase the output of the goods and services produced or for reduced working hours, but the adjustments may be very costly. The latter seems to be a viable option for the USA, where working hours are substantially longer and vacations shorter than in other advanced economies.

As necessary as an increase in European employment seems to be, the drop in productivity growth behind that of the past in Europe and behind those of the USA should be a reason for worry rather than for joy, because the decline in productivity gains seems to be related to a technology gap, which makes Europe relatively poorer. However, productivity gains do not automatically result in higher demand; to reap their benefits it requires an expansionary macroeconomic policy. In this respect the USA can be more optimistic than Europe because of the more favourable macroeconomic policy institutions. Europe needs to overcome sclerosis in macroeconomic policy-making.

11 Blinder argues that “new classical macroeconomics” remained “academic” in the USA and was never influential in the Fed or in the White House. Nevertheless, the USA also saw attempts by Congress to institutionalise a “zero deficit” rule in the 1990s. Cf. A. Blinder: Central banking in theory and practice, Cambridge, Mass. 1998, MIT Press.
12 US Bureau of Economic Analysis, webpages.
14 J. Stiglitz, op. cit.
15 Ibid.
16 Cf. US Bureau of Economic Analysis, webpages.