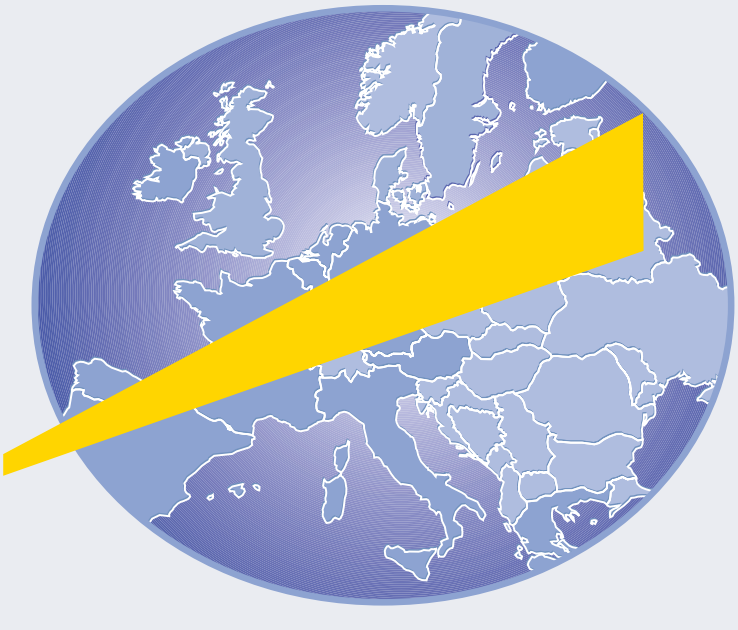
Oesterreichische Nationalbank

31. Volkswirtschaftliche Tagung 2003

31st Economics Conference 2003

# Die Förderung des Wirtschaftswachstums in Europa

# Fostering Economic Growth in Europe



# Inhalt
# Contents

# Inhalt
# Contents

Klaus Liebscher

Klaus Liebscher
Governor
Oesterreichische Nationalbank

# Opening Statement

It is a pleasure to welcome you here in Vienna to the 31st Economics Conference of the Oesterreichische Nationalbank (OeNB). Our topic this year is "Fostering Economic Growth in Europe." Identifying the sources of economic growth is a research field which has attracted a lot of attention recently. But it is also a highly political issue. I am very pleased that our Economics Conference has attracted great interest. We have received some 300 registrations from top representatives in the fields of politics, science, academia, central and commercial banking and the media.

Of course, this conference could not be held without an array of extraordinarily distinguished speakers.

To begin with, I have to inform you that the Chancellor of the Republic of Austria, Mr. Wolfgang Schüssel, who wanted to give us the honor of presenting the opening address for this conference, had to cancel his attendance this morning due to a plenary session in Parliament. But I am very glad to say he will be with us at 2 p.m., starting the afternoon session.

It is a privilege to announce the Director-General of DG-ECFIN of the European Commission, Mr. Klaus Regling, as our first keynote speaker. Mr. Regling will sketch possible scenarios for the future institutional arrangements in the EU. Mr. Regling, a very warm welcome to Vienna, and to our conference.

I am also very happy to have my dear and esteemed colleague, Mr. Lucas Papademos, Vice President of the European Central Bank (ECB), as our second keynote speaker to discuss how monetary policy can contribute to economic growth. Also a very warm welcome to you, Lucas, here in Vienna.

And last but not least it is a great pleasure to announce Michael Mussa from the Institute for International Economics as our third keynote speaker. Professor Mussa will talk

about "How to Strengthen Growth in Europe?" – a topic that goes straight to the heart of this conference. A cordial welcome to you, Michael.

I am very pleased to welcome Mrs. Gertrude Tumpel-Gugerell, former Vice Governor of the OeNB and since June this year Executive Board Member of the ECB. Following yesterday's farewell reception for you at the OeNB, we appreciate it very much that you will join us this morning here, as many of the preparations of this conference still have your as we say in German "Handschrift." So, thank you very much and a very warm welcome. We wish you all the best in your new function in Frankfurt.

Especially in Europe, interest in the topic we have chosen for our Economics Conference is understandably high, since in recent years, European real per capita GDP stopped converging to the levels observed in fast-growing economies like the U.S. economy. This tendency is particularly pronounced in the larger European economies. According to the OECD[1]), the average annual growth rate of U.S. real per capita GDP was 3.2% during the 1990s. In the European Union, per capita GDP growth was on average only 2%.

It can of course be argued that different growth rates are not necessarily a bad thing and that welfare implications depend strongly on the sources of the growth differentials. It is certainly possible that the low growth rates in Europe are due to a high preference for leisure or high risk aversion. In this case, slow growth in Europe would not necessarily imply that welfare – defined in some broad sense, including the overall quality of life – is low in Europe compared to faster-growing economies. However, slow growth might also be the consequence of a suboptimal economic and institutional framework. In this case, it would be involuntary, not the result of different preferences. Indeed, many economists argue that structural rigidities are a major reason behind the observed growth differentials, and that structural policies are needed to create an environment of higher productivity growth. Finding more clear-cut answers to the sources behind the growth divide is key and will have important implications for European economic policy.

Over the last 50 years, Europe has grown into an integrated market of around 300 million people. The creation of the Single Market in 1992 has increased trade in goods and services among the EU Member States. The euro has lowered transaction costs, sharply reduced risk premia,

1 *The Sources of Economic Growth, OECD 2003.*

and increased price transparency. These developments have certainly increased competition and should enhance productivity growth. The European financial markets are now well integrated and stable, and the payment systems work smoothly, ensuring a smooth flow of funds from savings to investment. On the macroeconomic side, the stability-oriented monetary policy of the Eurosystem ensures that the price signaling mechanism can operate fully.

Despite temporary setbacks, also quite recently, the Stability and Growth Pact has successfully prompted a reversal from the previously persisting high government deficits and rising debt ratios to a general awareness of the need for sound fiscal positions.

When we look at these overall favorable developments over the last decade or so, it appears puzzling that the European economies – with a few exceptions – have not seen an increase in real incomes similar to that in the U.S.A., for instance. Why did more intense competition after the creation of the Single Market and the euro not prompt a rise in potential growth rates like that the United States experienced? And, are those economists who predict that this growth differential is likely to persist right?

Diagnosing the problem is, of course the first step in finding a solution. Identifying the *sources of the lagging European growth performance* is therefore an important task and will be dealt with extensively in the keynote and luncheon speeches this morning as well as in session 1 this afternoon.

Session 2 later this afternoon will be devoted to the *role of labor markets for economic growth*. Needless to say, this topic is especially relevant for Europe. There appears to be a consensus among the economics profession that the low labor force participation rates and the high unemployment rates typical of many European countries are major factors in explaining the mediocre growth performance of many European countries.

There is widespread consensus that structural reforms are necessary to increase the flexibility of the European labor markets in order to create new jobs. Tax and benefit systems have to be reshaped such that incentives are created for an increased supply of labor

by households and also for increased demand by businesses. Marginal tax rates have already been cut in some countries and these reforms have started to show some effect.

Another issue is the flexibility of the European labor force. Various studies show that labor force mobility in the U.S.A. is more than twice as high as in Europe. Besides increasing labor force mobility, it might also be increasingly necessary to take advantage of flexible forms of employment. New technologies require flexible responses to allow a swift reallocation of resources.

The last session this afternoon addresses the important nexus between *investment and economic growth*. As standard growth theory teaches us, it is the capital stock that to a large extent determines the long-run growth potential of an economy.

Allow me to briefly stress the role of Eurosystem's monetary policy in this context. A market economy can only achieve an efficient allocation of

resources if interest rates and the price system coordinate investment and consumption decisions by firms and households. This is best possible in an environment of price stability.

Thus, maintaining price stability is in fact the best contribution that monetary policy can make to enhancing the long-run growth prospects of the euro area.

Another *fundamental precondition for sustained economic growth is a sound fiscal policy* – an issue session 4 will address tomorrow morning. Beyond a certain

level, public deficits and debt will put upward pressure on market interest rates, since governments compete with the private sector for funds on financial markets. In this way, large public deficits and debt can crowd out private investment. The resulting lower productivity growth and employment will dampen potential output growth. In the extreme, unsustainable fiscal policies might even lead to a situation where government borrowing becomes the major determinant of market interest rates. This would make it harder for the ECB to implement its monetary policy and might even conflict with the goal of price stability.

At this juncture, it may be particularly warranted to stress that monetary policy cannot by itself generate lasting and sustainable growth and employment in the euro area. This can only be achieved by appropriate structural measures that address fundamental weaknesses and tackle urgent adjustment requirements.

In this respect, fiscal policies have a great potential for fostering confidence and thereby supporting activity, even in the short run. Establishing a well designed medium-term consolidation strategy would make a major contribution in this direction. This would imply comprehensive and growth-friendly measures including, in particular, a courageous reform of the structure and the level of public expenditure. Curbing spending growth would eventually also create further room for manoeuvre to address future pressure arising from pension systems and scope for future tax cuts. Procedurally, it is crucial to underpin the fiscal policy framework with a decisive and consistent implementation of the rules of the Treaty and of the Stability and Growth Pact, and rigorous monitoring and peer pressure amongst Member States.

A final topic that will be dealt with in session 5 tomorrow is the relationship between *financial markets and economic growth*. The primary purpose of financial markets is to ensure that savings are efficiently channeled to investment projects with the highest risk-adjusted return. Moreover, well-functioning financial markets can increase the savings rate of an economy. Needless to say, this is likely to lead to higher investment and will put the economy on a higher growth path. An important question is how financial market structures should be designed to provide optimal conditions for sustained growth in Europe.

Over the last decades the foundations were laid to transform Europe into a highly integrated and dynamic economy. The Single Market and the euro have created many opportunities. Enlargement of the EU offers yet another wave of opportunities.

Despite these impressive achievements, Europe has so far not managed

to close the gap between European and U.S. per capita incomes. This conference will, I am confident, shed further light on this crucial issue. If we succeed in inspiring vivid exchanges of views, then we have achieved our goal of contributing a little to the understanding of why growth experiences are so heterogeneous across countries.

I wish you all and of course us a successful and fruitful conference. Once again I would like to thank all speakers and panelists for their valuable contributions – and I also would like to thank all of those from the OeNB being responsible for their scientific and organisational preparation for this conference.

I am also very pleased to see among us the President of the OeNB, Mr. Wala, and my predecessor Mrs. Schaumayer, former President of the OeNB. We are very happy to have you here. And now I would like to hand over to Mr. Regling, our first keynote speaker. ❧

Klaus P. Regling

Klaus P. Regling
Director-General for Economic and Financial Affairs
European Commission

# Institutional Arrangements in the EU: Scenarios for the Future

We are here to analyse, discuss and reflect together how to foster economic growth in Europe. I was invited to make a contribution on "Institutional Arrangements in the EU: Scenarios for the Future".

You might wonder why the Commission's Chief economist is talking about "institutions" at a conference that focuses on "Fostering Economic Growth in Europe".

There are two good reasons for this.

- First, one cannot have a conference on European issues these days without talking about the European Convention.
- Second, the importance of institutions for economic growth is more and more recognised. A proper functioning of the EU after enlargement requires a reform of its institutions and its decision-making procedures.

The Convention has discussed ways to reform the European Union for more than a year. A first complete draft Treaty establishing a Constitution for Europe was presented at May 31, 2003, by the Convention's Presidium, a revised version at June 7, 2003. The Convention is

in its last session today and tomorrow, to adopt a final text.

Therefore, our discussion of this topic today is timely and risky.

Timely – for obvious reasons. Risky – because nobody can be sure of the precise outcome tomorrow. In any case, the result of the work of the Convention will be presented to the European Council in Thessaloniki at June 19/20, 2003.

It is important that the Convention agrees on a reasonable compromise tomorrow because, without reforms that make the institutional framework more efficient, the Single Market and the Economic and Monetary Union (EMU) will not function as well as they could, and economic growth in Europe would suffer.

Subsequent speeches this morning will probably focus more on traditional economic policy instruments that support growth.

But in my intervention, I will focus

- first, on legal and institutional reforms in the EU;
- second, the need to strengthen economic governance; and
- third, whether the new, enlarged European Union, requires more flexibility – perhaps a "multi-speed Europe" – if the European integration process is to continue.

## 1 Institutional Reforms at the EU Level Are Both Necessary and Urgent

### 1.1 Introduction

Let me begin by talking about the need for legal and institutional reforms and what we can and should expect from the European Convention. European integration has brought 50 years of peace, prosperity and stability in the EU. The EU today is a Union of States sharing a common set of democratic values. Integration has increased step by step; progress has often been slow and cumbersome, and there have been setbacks from time to time.

But, looking back, the cumulative change has been overwhelming and has gone beyond what could have been imagined half a century ago. From the initial European Coal and Steal Community, over a customs union to the creation of a Single European Market, EMU and the euro.

Today, EU activities are based on four Treaties, where the working methods differ according to the area of activity. Some of them were drafted in the 1950s for a Community consisting of only six Member States. Looking ahead to a Union of 25 Member States in 2004, and a Union with probably more than 30 countries in the future – the current legal and institutional set-up is clearly inadequate. The Convention was established to address the future of the Union, and how it can be made to work more effectively.

With 10 new Member States, the EU's population will increase by 20%, the number of Member States by 65% and the number of official languages by 80%. This would be a challenge for any administration. Consequently, the accession has to be prepared.

Far-reaching reforms of our institutions and our working methods that were already urgent anyway, can no longer be postponed. Otherwise, there could be gridlock. The institutions could loose their ability to take necessary decisions. That would hamper an efficient functioning of the Single Market and therefore economic growth

in Europe. For instance, it took 14 years in the current system to reach a political agreement on the taxation of savings directive – with "only" 15 Member States. The take-over directive is still being discussed in the Council, after more than 10 years. These are just two examples that underline what Commission President Mr. Prodi meant when he said recently: *"status quo equals paralysis for all of us"*.

**1.2 The European Convention**

A first attempt to prepare the Community for enlargement was made in Amsterdam in 1997, and thereafter in Nice in 2000. But progress was rather disappointing as the traditional method to prepare Treaty changes, through inter-governmental conferences (IGCs), reached its limit.

The European Council in Laeken (in December 2001) therefore entrusted the Convention with the task of preparing the future of the Union. The Convention started its work in early 2002 under the chairmanship of former French President Valéry Giscard d'Estaing. Its way of working is an innovation compared to the IGCs, where national governments were the only actors. The Convention includes representatives of the Member States, old and new ones, of the national parliaments and governments, of the European Parliament and of the Commission. Discussions are public. The Convention's final proposal (or sets of options) will be presented at the European Council in Thessaloniki at June 19/20, 2003. As the Convention cannot modify the Treaty itself, it will be followed by an IGC later this year.

As indicated earlier, the Convention's main task is to prepare the Union's future. The Laeken Declaration listed four sets of issues that the Convention should focus on:

1. a better division and definition of competences in the European Union
2. simplification of the Union's instruments
3. more democracy, transparency and efficiency in the European Union
4. creating a Constitution for European citizens

The Convention has made good progress in a number of these areas. I will focus mainly on the areas that are of particular relevance for our con-

ference theme: "Fostering Economic Growth in Europe". In that context, the main points are the following:

– First, the draft Constitution implies *a marked simplification* with a clear structure compared to the existing Treaties. It will also rationalise legislative and non-legislative norms within the Union. The current Treaties contain hundreds of provisions of various importance and scale. A ranking of the various Treaty provisions will make it possible to draw a distinction between the "fundamental provisions" (which could be fundamental rights, organisation of powers, principles of the common policies), and the "application" provisions. The draft Constitution sees a marked reduction in the overall number of provisions.
– Second, the draft Constitution goes a long way to make the European project more transparent and understandable to ordinary citi-

zens. The Union's fundamental values and objectives are enshrined in the first part of the *Constitution and in the Charter for Fundamental Rights* which is part two of the draft Constitution. All Europeans will continue to have access to "European citizenship" with a set of rights attached to it. Public opinion surveys are clear: An overwhelming majority of the EU citizens wants to expand the Union's action into a number of new areas. The Convention has thus addressed the public's desire for Europe to be more active in, for example, foreign policy, in justice and security, and in social affairs. They will all be part of the Union's policy in the future.

– Third, a number of proposals have been agreed in the Presidium as regards the institutional set-up and decision making in the European Union. Of course, these proposals could again be changed by the Convention today and tomorrow but the proposal from the Presidium has found much support during the last few days.

Before I go into the details of the institutional reform proposals, I would like to briefly recall the current structure: The European Union is a Union of both peoples and states. It is built on an institutional system, which is *unique* in the world. Based on the rule of law and democracy, Member States have delegated some of their sovereignty to the EU institutions.

At present, the EU is run by *five institutions*, of which each plays a specific role. The power to carry out the Union's legislative and executive tasks is shared by the Council, the European Parliament and the Commission. This is the very essence of the so-called *"Community method"*, which has directly contributed to the building of Europe. It is based on the following principles: the Commission's monopoly of the right of initiative (working in the interest of the Union and as the guardian of the Treaty); the widespread use of qualified majority voting in the Council (even if unanimity apply in some cases); an active role for the European Parliament; and a uniform interpretation of Community law by the Court of Justice. The fifth EU institution is the Court of Auditors.

Everybody agrees that it is essential that the Council, the European Parliament and the Commission, will continue to share the legislative and executive powers. However the *role and the responsibilities of the main European institutions* need to be redesigned to make them more effective. Let me briefly go through the main proposals of the Presidium of the Convention as I understand them today:

– A fulltime *EU President will chair the European Council* of national leaders. He (or she) will be elected for two and a half years (renewable once) by qualified majority. The aim is to improve the continuity and visibility of the Union's work. There were some fears that the creation of a permanent President of the European Council would lead to an institutional duplication and the creation of a new bureaucracy. Therefore, in the Convention's revised proposal, the President's power has been limited, no deputies are foreseen, the original idea of creating a "bureau" for the President has been deleted and he will rely on the Council Secretariat.
– A new *Foreign Minister* of the EU will be appointed by the European Council and with the agreement of the Commission's President. He will also be Vice President of the Commission. This will allow

Europe to speak with one single voice on foreign policy issues.

– The draft Convention proposes to keep the current system of *rotating the Presidency of all other Council formations*, but prolongs the Presidency to at least a year.
– *The Parliament* gains in importance. It will, for example, get a greater role in decision making as the scope of co-decisions is extended to 34 new policy areas. It will also elect the President of the Commission.
– *The Commission* will continue to comprise one Commissioner from each Member State until 2009. This has been seen as important, particularly by the small Member States, in order to fully reflect the diversity of national concerns, and especially in a situation where a substantial number of new Member States will join the Union. However, according to the Presidium's proposal, the Commission would be streamlined from 2009. In the future, the Commission would consist of 15 full members, and "Associate Commissioners" (or non-voting members) from all other Member States. The voting members will be selected on the basis of equal rotation between the Member States.

All this means the Convention has been able to make progress on simplifying our legal framework and on developing the institutional set-up and decision-making procedures. However, it has proven markedly more difficult to find a consensus on a number of other important issues. In particular, the debate is now on:

1. changing the complex voting system in the Council, and
2. reducing the Member States' veto powers.

First, as regards the *system of weighting votes* in the Council, the draft Constitution proposes a new dual and more straight-forward definition for qualified majority: a proposal is adopted if it is supported by a simple majority of Member States, representing at least three fifths of the population of the Union. This is seen as a very useful proposal by the Commission. But, this proposal has provoked a strong reaction from some countries, especially medium-sized and small Member

States. They would see a marked cut in their voting weights agreed in Nice that give them a disproportionate power compared to their population. As a possible compromise, the Presidium has therefore proposed to keep the existing rules until 2009.

Second, *where should Member States keep their veto power? In principle, qualified majority voting* appears to me to be the only logical rule for decision making in the Council in the future – with a few exceptions in defence policy. That implies that the requirement for unanimity should be very strictly limited. Otherwise, I see a clear risk that the Union might become unmanageable. There could often be one Member State with a "vital interest", blocking and possibly blackmailing the others. We have seen this often enough. Recently, for example, when an old milk quota problem in one country was used to block the agreement on the taxation of savings directive. The draft Constitution proposes to extend the use of qualified

majority voting to trade policy and, to a certain extent, also to justice and home affairs issues. This is very positive. However, the national veto would be retained in foreign affairs and tax policy. From an economic perspective, it is unfortunate that tax policies have been excluded from qualified majority voting, even tax issues that are related to the functioning of the Single Market. More effective decision-making in all major policy areas will be crucial if Europe is to use its full economic potential.

It appears difficult to find a compromise on these remaining major issues. Difficult, but not impossible. And as everything is linked, it is likely that there will be an agreement on the whole institutional package – or nothing at all.

Summing up this first part of my intervention, I have talked about the need to reform the European institutions in order to allow them to function properly in a Union with 25 Member States or more. This is an important element when we think about achieving more growth in Europe. The Convention has made good progress in many respects, concerning e.g. a simplification of the Treaty, an enhanced role for the Parliament in decision making, and the creation of an EU Foreign Minister. However, some issues are still controversial, such as the complex voting system in the Council, or wider use of qualified majority voting. More progress in these areas would be welcome.

## 2 Strengthened Economic Governance Will Contribute to Improving the Euro Area's Growth Potential

In the EU, economic policies are mainly a national responsibility. At the same time, and as stipulated by the draft Constitution, the proper functioning of the Single Market requires Member States to coordinate their economic policies within the Union. The creation of EMU and the introduction of the euro have further reinforced the need for economic policy coordination.

The key motivation for coordination is to ensure an adequate provision of common goods and to take into account externalities (or cross-border spillovers) of national policies. For instance, national budgetary policy in one euro area Member State can have an impact on the single monetary policy and on the exchange rate.

Structural policies can also influence the euro exchange rate, but the impact is likely to be more indirect, with a longer delay and less visibility. Coordination of budgetary and, to a lesser degree, structural policies are therefore important for a well-functioning EMU. Because of the importance for the single monetary policy, national budgetary policies are guided by the rules of the Stability and Growth Pact.

Besides the Stability and Growth Pact, overall coordination of economic policies takes place through the formulation and adoption of the Broad Economic Policy Guidelines (BEPGs). These play a central overarching role, giving strategic direction on key economic policy issues in the medium term. They concentrate on the contribution that economic policies can make to meet the EU's strategic Lisbon goal to raise the EU's potential growth rate with more and better jobs and greater social cohesion. To complement the BEPGs, more specialised procedures, such as the Luxembourg process dealing with employment issues, and the Cardiff process dealing with goods, services and capital markets, go into greater detail in their respective areas.

This overall framework for economic policy coordination that we have had for some time appears broadly appropriate. Some have argued that EMU cannot work without a political union. There was a particularly strong debate in this direction in my own country, Germany, as we prepared for monetary union in the mid-1990s. One of the outcomes of this debate was the proposal for the Stability and Growth Pact. In my view, the Pact is the *core element* of a political union that indeed has to be in place for monetary union to function well. But, the Pact needs to be applied! Otherwise, the framework for policy coordination would have a big gap.

For the Convention, the Commission has proposed to strengthen the framework for policy coordination in three areas:

1. through a stronger Community aspect in economic policy coordination;
2. through the institutionalisation of the Eurogroup; and
3. through improved external representation.

How has the Convention reacted to the Commission proposals?

*First*, as regards *strengthening the Community aspect of policy coordination procedures,* the Convention proposes two important modifications:

(a) It proposes that the Commission is given the possibility to *directly issue a warning* to a Member State whose economic policy is incompatible with either the BEPGs or the proper functioning of the EMU. This is a useful strengthening of the Commission's role in its surveillance function, because the Council has not always followed the Commission's recommendation.

(b) The Convention proposes *to exclude from the vote the Member State* to which the Council addresses an early warning under the Stability and Growth Pact – to avoid a situation in which a Member State would be both judge and defendant.

Together, these measures should help to ensure that the Community interest is better protected in the economic policy coordination area. However, it is unfortunate in my view that the Council will continue to adopt the Broad Economic Policy Guidelines on the basis of a *Commission recommendation* rather than a proposal. This implies that

the Council only needs a qualified majority and not unanimity to push through amendments to them. This might make it more difficult to ensure the respect of our rules, and to preserve the Community character and the overall coherence of economic policies.

*Second,* with a view to strengthening policy coordination in the euro area, the draft Constitution foresees the *institutionalisation of the Eurogroup* by annexing a protocol on the informal gathering of euro area Finance Ministers, the Commission and the ECB. This would be a step towards institutionalisation, because so far the Eurogroup has only been mentioned in the European Council conclusions (of December 1997). In addition, a more permanent President of the Eurogroup would be elected for two years at a time, according to the Presidium's proposal.

The imminent enlargement of the Union makes a formalisation of the Eurogroup all the more important, since initially only 12 of the 25 Member

States will participate in the euro area. In addition, the Convention proposes to extend the list of issues where the voting rights within the Ecofin Council are restricted to euro area Ministers only. It will now include issues such as the adoption of the BEPGs for the euro area, decisions on the excessive deficit procedure, and the related multilateral surveillance.

But unfortunately, the Convention stops short of establishing an "Ecofin Council for the Euro Area" as proposed

by the Commission. Such a euro area Council would really strengthen coordination in the euro area by allowing discussion and decision making in a small group comprising only those countries that have adopted the Euro.

*Third* and regrettably, the Convention has so far not included the idea of a *"European minister of finance and economic affairs"* that would *represent the euro area in international fora*. Similar to the arrangements foreseen for the EU Foreign Minister, such a European Minister of Finance would be Vice President of the Commission and, at the same time, Chairman of the Eurogroup. At present, the euro area is represented by the Ecofin Chairman (as long as this is a euro area member). Non-Europeans are often surprised by the frequent change of euro area representatives – there is no continuity. Economic governance of the euro area and its representation on the international financial scene (in the G7, IMF, or OECD) would be clearly strengthened by the creation of an EU Finance Minister.

Summing up the part on economic governance, some of the recent proposals from the Convention go in the right direction. The Community aspect will be strengthened in economic policy making by giving the Commission a greater say, and decision making on certain issues related to the euro area will be facilitated. But it is not enough in my view: qualified majority voting also on tax issues would be important for the proper functioning of the Single Market and EMU. A stronger role for the Commission in the Council's discussion of the BEPGs would enhance policy consistency. And, finally, there is a clear need to strengthen the external representation of the euro area.

## 3 Will the New, Enlarged Union Lead to a Multi-Speed Europe?

Let me come to the last part of my statement. I have earlier talked about the impact of enlargement on EU's institutions. The question is if the new, enlarged Union is becoming too large and too diverse to allow a continued integration? With a more heterogeneous Union, in an economic and political sense, the need for a *"differentiated integration"* might increase. This would certainly be the case if the Convention fails to make sufficient progress.

Several concepts have been put forward with respect to differentiated integration: Over the years we have heard about concentric circles, variable geometry, Europe à la Carte, two-speed or multi-speed Europe, enhanced cooperation etc. Although it may sound surprising, most of these concepts are actually used in practice!

*Concentric circles,* for example, describe the concept that distinguishes the European Union from the European

Economic Area that comprises Liechtenstein, Norway and Iceland, plus the EU. The four freedoms of goods, services, capital and workers apply to the entire European Economic Area – an outer circle – all the other Community policies only to the EU.

Inside the Union, both the Schengen agreement and EMU are successful examples of a deepened integration that started with a subset of Member States, but remain open to all the other EU Member States if they meet certain criteria. It has evolved to prevent the EU from being forced to move at the pace of its most reluctant member. However, some fear that a differentiated integration might create a "first class" and "second class" Europe. Or a "Europe à la Carte".

It is not unrealistic to assume that the new enlargement will indeed increase the need for a differentiated integration. History has shown that the unanimity requirement has prevented or slowed down further integration on occasions. Even today, there is no agreement among Member States about the speed and the scope of European integration. In addition, the consensus requirement allows one country to blackmail the others. "Differentiated integration" would be a way out. It can take many forms, but it is important to design it in a way that is compatible with the "Community method".

One way of doing it could be to further develop the idea of a *"multi-speed Europe"*. The expression often refers to a situation where the whole Union agrees (or at least accepts) common aims and objectives, but where not all countries are ready to participate in the enhanced form of integration from the start. EMU is such an example (if we leave aside the two opt-out clauses agreed with Denmark and the UK). All the new Member States are expected to participate in EMU eventually, allowing time for further convergence. But this might take some time for some of them.

EMU is a form of multi-speed Europe at Treaty level. In practice, it is also often used in Community legislation in the form of country-specific transition periods. Similarly, the concept of country-specific transition periods has been applied in the accession negotiations, for instance with respect to environmental standards, the acquisition of agricultural land or secondary residences, cabotage restrictions in transport or the adjustment of minimum excise levels such as for cigarette excises. Very often, the length of transition periods was inspired by that granted to Member States in the original legislation.

Less "communautaire" is the use of *opt-out clauses,* which has been a way to bypass the veto by one Member State that is not expected to participate in the enhanced integration for some time or at all. It has so far been used for Denmark (on EMU, justice and home affairs, acquisition of secondary residences, and defence arrangements) and the UK (on EMU and previously also on the social chapter). This form of integration would appear to be inconsistent with the "Community method" and the Commission, in principle, is against the use of opt-outs. Exceptions seem acceptable only if the effects are confined to the Member State that opts out. Therefore, it has only been accepted in a very limited number of cases in the accession negotiations with the group of new Member States, for instance secondary residences on Malta or the treatment of shale oil in Estonia.

As you can see, the concept of *differentiated integration* is not new to the Union. However, it was only in the *Amsterdam Treaty* that the EU formalised

the possibility of a "closer cooperation" for a group of Member States that wish to act together, but under relatively strict conditions. The Nice Treaty facilitated an "enhanced cooperation" by limiting the possibility of Member States to veto. It requires a minimum of eight Member States for establishing an enhanced cooperation, ensures that it occurs within the framework of the European Union, and provides that Member States that do not participate immediately could join when they wish,

if they meet the agreed criteria. Until now the concept of enhanced cooperation has not been applied, although at some stage we came close to it in the negotiations on energy taxation. Indeed, notably in the taxation area the free-rider problem poses a problem for enhanced cooperation. With the wider introduction of qualified majority voting, the need for enhanced cooperation may diminish. But it could allow more integration in the fields of foreign and defence policies.

The draft Constitution includes an *"enabling" clause* (similar to Article 308 of the EC Treaty) that allows the Union – or a group of Union members – to expand into areas that are not yet covered by the new Treaty (as the Treaty must normally provide an appropriate legal base for every Union activity). The use of this provision is limited as the Convention proposes that such measures should only be adopted if it brings together at least one third of the Member States, and if it has been established that the objectives cannot be achieved within a reasonable period by the Union as a whole. Once enhanced cooperation is agreed, only representatives from participating Member States shall take part in the voting within the Council, even if all Member States will be allowed to participate in the deliberations.

It seems to me that we will see more examples of enhanced cooperation or multi-speed integration as the Union grows. It may sometimes be the only way to make progress in European integration.

## 4 Conclusion

I have talked about the need to reform the European institutions to allow for a smooth functioning of the Union after enlargement. In particular, it is important to ensure that the Single Market and EMU can continue to function effectively in the new, enlarged Union.

The Convention has spent the last year discussing how this could be done. Many proposals go in the right direction, and I am confident that a common proposal will be adopted tomorrow. That proposal will be discussed by the European Heads of State and Government in Thessaloniki at June 19/20, 2003, and will become the starting point for the work of the Intergovernmental Conference (IGC) that will begin in autumn 2003.

The new Constitution will simplify the existing legal framework. The transparent way in which the Convention worked itself has already contributed to make the Union's task easier to understand. But there is a need to further clarify the roles and responsibilities of the European institutions. If there is agreement on a permanent European Council President, it will be important not to create confusion between the competences of that

President and those of the President of the Commission, and not to create a new bureaucracy.

We must also move away from the unanimity requirement as much as possible in order to make the Single Market manageable in the future. As for economic governance there are again a number of positive proposals in the Convention's draft Constitution, strengthening the Community method. But some issues have been treated half-heartedly: such as the effective working of the Eurogroup and the euro area's external representation. The Commission will continue to push for more progress in these areas, next week at the European Council in Thessaloniki, and later in the year at the IGC.

I also raised the question if there is a need for greater flexibility in Europe's future integration as the number of Member States increases and the homogeneity between them decreases. I believe that this is necessary, if we want to continue with European integration, particularly in areas where we do not have much integration so far. ❧

Lucas Papademos

Lucas Papademos
Vice-President
European Central Bank

# The Contribution of Monetary Policy to Economic Growth

## 1 Introduction

I am delighted at the opportunity to speak at this year's Economics Conference organised by the Oesterreichische Nationalbank. This series of conferences has established a long tradition – more than 30 years old – of focusing on issues which are both important and topical. The theme of this year's conference is no exception. "Fostering Economic Growth in Europe" is the key economic policy priority considering the moderate average growth of the European economy over the past 20 years, its recent weak economic performance, and the expected modest economic recovery.

To foster economic growth in Europe requires both an accurate diagnosis of the factors determining or constraining its growth performance and an appropriate policy prescription regarding the macroeconomic policies and structural reforms needed to achieve higher and sustainable growth. Today, I will discuss the contribution of monetary policy to economic growth, an issue which has long been the subject

*The author would like to thank Julian Morgan for his valuable research contribution.*

of theoretical and policy debates among economists. At the present juncture, with weak growth and even talk of deflation risks, and given actual or perceived constraints on economic policies, this topic is attracting increasing interest, the debate has occasionally become rather heated, and there have been numerous calls from politicians and academics for monetary policy to pay more attention to growth. Against this background, I welcome this chance to add my own views to the

ongoing discussion. I will do so by examining a number of fundamental issues concerning the role of monetary policy in fostering economic growth.

There are five questions that I will endeavour to answer: Firstly, can monetary policy contribute directly to the attainment of a high but sustainable rate of growth? Secondly, can monetary policy promote economic growth indirectly by maintaining an environment of price stability? Thirdly, can monetary policy effectively influence the pace of growth over the short and medium term, and thus help stabilise output fluctuations consistently with its overriding objective of price stability? Fourthly, how and to what extent has the growth performance of the euro area been influenced by the single monetary policy which has been implemented since the launch of the euro? Finally, what is the role of the other policies in fostering sustainable economic growth in Europe over the coming years?

## 2 Monetary Policy and Long-Term Economic Growth

In examining the effects of monetary policy on economic activity and growth, it is useful, both for conceptual and for policy reasons, to distinguish between long-term and short-term effects or, alternatively, between permanent and transitory effects. I will begin by considering whether and how monetary policy may influence economic growth in the long run, reviewing first the theoretical arguments on the links between monetary expansion, inflation and economic growth, and then assessing the available empirical evidence.

### 2.1 Theoretical Propositions

A key issue in monetary theory is whether changes in the stock of money or in the rate of growth of money can have lasting effects on real economic variables. In particular, the question concerning the so-called superneutrality of money – whether a permanent change in money growth has no long-term effects on the real interest rate, capital accumulation and output growth – has been the subject of extensive theoretical analysis since the early 1960s.

In a seminal contribution, James Tobin (1965) showed that in a simple model with agents saving for future consumption only out of current income, by either holding money balances or investing in real capital assets, an increase in monetary expansion can lead to higher growth. Thus, Tobin's analysis refuted the superneutrality of money by relying on a fairly straightforward mechanism related to the role of money as an asset and a store of wealth. An increase in money growth leads to a higher rate of inflation that reduces the own rate of return on

money and induces a portfolio shift in favour of real capital. This generates an increase in the capital stock and a higher level of output per person in the long run.[1]) In an earlier contribution, Robert Mundell (1963) had also emphasised a link between anticipated inflation and the real interest rate. His analysis, however, examined the short-term positive effect of a permanent increase in inflation on real saving and the demand for capital and not the long-term effects of inflation on the real rate of interest and economic growth.[2])

Over the last forty years, the theories advanced regarding the relationship between money, inflation and growth have refined and extended Tobin's analysis in several ways. They have also challenged his finding that monetary expansion has a positive and lasting effect on growth. Theories on money and growth have become more sophisticated by deriving results from the optimisation of utility by economic agents who are treated either as "infinitely lived" or as belonging to "overlapping generations". Theories have become more complete by incorporating the other functions of money in the real economy. These generalisations, however, have not led to unambiguous and robust conclusions. For example, in models where economic agents are "infinitely lived" and under certain additional assumptions, monetary expansion cannot affect the real rate of interest and economic growth (the superneutrality of money is valid).[3]) On the other hand, the alternative approach using "overlapping generations" models can provide a formal justification for the Tobin effect in an explicitly optimising framework.[4]) The effects, however, of monetary expansion on economic growth under either of these two types of theoretical models, also depend on other underlying assumptions.

A key factor influencing the conclusions of the theoretical studies is the role of money in the real economy and how that role is incorporated in the models. If real money balances and capital perform complementary functions, and are not seen as substitutes as in the Tobin model, higher monetary growth and inflation reduce capital accumulation and the long-term rate of growth. Thus, in models in which agents employ their own money balances to finance consumption and investment, and therefore there is a "cash-in-advance" constraint on spending,[5]) or in models in which money is treated as a factor of production in its own right,[6]) or when the services provided by money holdings affect the resource constraint facing economic agents[7]) (rather than affecting directly the utility or production functions), higher inflation usually leads to lower output per person and output growth in the

1 *The mechanism through which the Tobin effect arises, with inflation impacting on the real rate of interest and thereby on the accumulation of capital, can be traced back to Metzler (1951), albeit in a more limited form.*

2 *An unexpected but permanent increase in the inflation rate causes a decline in real private wealth leading to an increase in real saving and the capital stock, and a consequent decline in the real interest rate.*

3 *Sidrauski (1967) showed that money is "superneutral" in a utility maximising framework of infinitely lived consumers.*

4 *Even if inflation does not affect the level of output it could affect its composition. According to Feenstra (1986) an increase in inflation which leads people to economise on money balances could result in a change in the composition of output from consumption goods to financial services.*

5 *See Stockman (1981), Greenwood and Huffman (1987) and Cooley and Hansen (1989).*

6 *See Danthine (1985).*

7 *See, for example, Zhang (2000).*

long run. Hence, different hypotheses about the functions of money imply conflicting conclusions about the size and sign of the permanent effect of monetary expansion on growth. Moreover, the results derived from alternative theories in some cases are not robust with respect to small variations in other underlying hypotheses concerning the preferences of economic agents.

Thus far, I have focused on the relationships between money, inflation and growth derived from traditional growth models in which the rate of technological progress is the fundamental determinant of long-term growth. The more recent "endogenous growth" theories allow for the determination of the long-term growth rate endogenously, for instance by human capital or investment in R&D. A few attempts have been made to include and analyse the effects of money within such a more realistic framework. It has been found that because higher inflation lowers the return on work, it leads to a temporary decline in the supply of labour. Since human capital is thought to benefit from a "learning by doing" effect, this decline in labour supply reduces human capital and thereby lowers the growth rate of the economy (Gomme, 1993). In contrast, it has been shown by others (e.g. Ho, 1996) that higher inflation can increase the capital stock (via a Tobin effect), thereby raising the long-term growth rate.

One strand of this endogenous growth literature has examined the effects of inflation on investment in the presence of nominal rigidities in the tax system (e.g. Jones and Manuelli, 1995). In particular, with nominally specified depreciation allowances, a permanent change in money growth can alter the effective real marginal tax rate on investment income, thereby changing the after tax real rate of return. In such a set-up, a permanently faster monetary expansion causing higher inflation leads to lower capital accumulation and output growth. If, however, the government's budget constraint is taken into account, the additional revenues resulting from higher inflation (including extra seignorage revenue) imply that "ordinary" taxes can be reduced, thereby increasing the net return on human capital and speeding up investment and growth. Thus, the overall impact of monetary expansion on growth depends on the relative magnitude of each of these effects.[1])

What conclusions can we draw from the theoretical literature on money, inflation and growth? In 1970, Jerome Stein surveyed the literature available at that time and noted that "*my main conclusion is that equally plausible models yield fundamentally different results*". Two decades later, Orphanides and Solow (1990) noted that "*all we have is more reasons for reaching the same conclusion*". A more recent survey (Haslag, 1997) also tends to come to the same conclusion. Although these views about the inconclusive nature of money and growth theories may be warranted when one reviews the whole spectrum of models in a neutral way (that is, without assessing the realism of underlying assumptions), my own reading and interpretation of the theoretical findings is less agnostic. The theoretical analyses which employ more general and realistic assumptions regarding (i) the role of money in the economy, (ii) the endogenous determination of factors shaping long-term

1 *See Palokangas (1996).*

growth, and (iii) the existence of nominal institutional rigidities in the economy, imply on the whole the existence of a negative association between monetary expansion and inflation, on the one hand, and economic growth, on the other. It should also be pointed out that the existence of a positive association between inflation and long-term growth derived from the models of Tobin and others must be confined to relatively low rates of inflation, otherwise we would reach the absurd conclusion that hyperinflation would drastically improve the real economy's performance.

The view that higher monetary expansion and inflation should adversely affect long-term growth is further supported by other theoretical analyses regarding the welfare costs of inflation (e.g. Fischer and Modigliani, 1978; Issing, 2001) and the negative effects on output growth of the increased economic uncertainty induced by inflation (Lucas, 1973 and 2003). The costs of inflation, including costs resulting from features of the economy's institutional structure, clearly imply a negative impact of inflation on growth. Moreover, the increased uncertainty due to high and variable inflation impairs the efficiency of the price mechanism and can be expected to reduce both the level of and the rate of increase in productivity and thus economic growth. Therefore, on the whole, theory implies that an expansionary monetary policy leading to permanently higher inflation will have, or is very likely to have, a negative effect on long-term growth, even for moderate rates of inflation. Moreover, this effect can be expected to increase nonlinearly as inflation rises. Nevertheless, the magnitude of the expected negative relation between inflation and growth cannot be determined a priori and has to be assessed on the basis of the available empirical evidence.

### 2.2 Empirical Evidence

What can the available evidence tell us about the link between monetary expansion and economic growth? A clear majority of studies find that inflation and long-term growth are systematically and negatively related. In other words, higher inflation tends to reduce growth in the long run.[1]) The result is not unanimous, as some papers find no correlation between long-term growth and inflation.[2]) There are very few empirical analyses that have identified a positive and stable long-term relationship between inflation and growth, but this relationship holds only for low rates of inflation.

Nevertheless, it should be recognised that research in this area has been hampered by data problems and difficulties in establishing reliable causal links between inflation and growth. The results of studies using data from just one country may be distorted by a few exceptional periods – such as the marked movements in energy prices during the 1970s. To overcome such possible distortions, researchers have often sought to utilise cross-country data, so that a variety of inflation and growth paths can be compared.

1 *The list of papers which establish such a negative relationship includes Kormendi and Meguire (1985), Grier and Tullock (1989), Cozier and Selody (1992), Fischer (1993) and Barro (1997).*

2 *For instance, McCandless and Weber (1995), Bullard and Keating (1995).*

These cross-sectional analyses, however, face other difficulties, for example how to adequately account for individual characteristics in different countries.

Another problem is the robustness of the empirical results. It is often found that slight variations in the specification of these regressions lead to substantially different results. Some studies find that, once other determinants of growth are included, a previously observed negative relationship between inflation and long-term growth disappears.[1]) A key issue is how to estimate the trend growth of output. It is important to be able to identify changes in trend growth, yet it is equally important for the estimate of the trend not to be polluted by cyclical fluctuations.

As previously noted, the relationship between inflation and growth can be expected to depend on whether inflation is initially high or low. It is sometimes argued that the estimated negative correlation between inflation and growth is due to the inclusion of high inflation countries and that it is much harder to find such a negative relationship among countries with relatively low inflation.[2]) Recent research, however, by Andrés and Hernando (1999), focusing on OECD countries, finds that even in low or moderate inflation countries, there is evidence of a robust negative relationship between inflation and output in the long run.

A number of studies have considered whether there are any non-linearities in the relationship between inflation and growth by examining the possibility that there are "threshold levels" in the relationship.[3]) It has been found that the effect of an increase in inflation on growth may depend on whether inflation is above or below some threshold level: while higher inflation above this level is associated with lower growth, this does not appear o be the case for inflation rates below the threshold.[4]) Indeed, some studies (e.g. Ghosh and Phillips, 1998) suggest that for very low inflation rates, and within a very narrow range, inflation and growth may be positively correlated.

This last finding lends support to the view, which can be traced back to Vickrey (1955) and Tobin (1972), that "small doses" of inflation may be helpful for growth and employment, or that a little inflation is necessary to "grease the wheels of the economy". It has been argued that, because of downward rigidity in nominal wages, a certain amount of inflation is required in order to enable real wages to adjust to changing economic conditions. This argument does not rest on money illusion, but on the idea that workers will resist relative wage cuts and that, as a consequence, inflation provides a means of synchronising real wage reductions across the economy.

These propositions have been further developed by Akerlof et al. (1996

1 *See Levine and Renelt (1992).*

2 *See, for example, Bruno and Easterly (1996).*

3 *See Sarel (1996), Judson and Orphanides (1996), Ghosh and Phillips (1998) and Khan and Senhadji (2001).*

4 *The estimated value of the threshold varies considerably between studies. Using annual data for 87 countries over the period 1970–1990, Sarel (1996) estimates that there is a structural break in the relationship between inflation and growth at inflation rates of around 8%. With a larger sample covering 145 countries for the period 1960–1996, Ghosh and Phillips (1998) find a much lower threshold value of around 2–3% inflation. More recently, Khan and Senhadji (2001) have split the sample into industrialised and developing countries to allow for the possibility that threshold values may differ. They obtained an estimated threshold value of between 1–3% for industrialised countries and 11–12% for developing countries.*

and 2000) who have calculated that, in the face of downward nominal wage rigidity, an attempt to reduce inflation from 3% to zero would raise US equilibrium unemployment by 2.6 percentage points. Therefore, a permanently higher rate of unemployment can emerge at a very low rate of inflation. The evidence, however, for the existence of such rigidities is mixed and it may well be the case that they are removed or mitigated under low inflation.[1]) Moreover, inflation in the presence of nominal rigidities can also "put sand in the gears" of the labour market.[2]) The existence of "menu costs" and fixed nominal contracts implies that changes in the general price level may not be evenly transmitted throughout the economy and may therefore lead to unintended and disruptive changes in relative prices.

This debate is unresolved, but such arguments and evidence have been used to provide justification for allowing central banks' definitions of price stability to encompass low positive rates of inflation rather than literally aiming for a stable price level.[3]) Nevertheless, I do not believe that the evidence about "greasing the wheels" of the economy is sufficiently convincing compared with the favourable effects of price stability. Even if some trade-offs have been found statistically to exist between inflation and output at very low rates of inflation, it is not at all clear that they are either stable – and would therefore persist during a prolonged period of price stability – or that they could successfully be exploited by policymakers.

The general conclusion that I would draw from this review of the money, inflation and growth literature is that the weight of evidence does not support the notion that monetary policymakers could sustainably raise growth by tolerating higher inflation. On the contrary, theoretical analyses (regarding the real effects and welfare costs of inflation) as well as the bulk of empirical evidence strongly suggest that price stability is conducive to long-term growth.

## 3 The Stabilising Role of Monetary Policy

In sum, monetary policy cannot be expected to directly contribute to raising long-term economic growth, though it can foster sustainable growth by maintaining an environment of price stability. It is often argued, however, that monetary policy can and should seek to stabilise output around its potential growth path in the short and medium run. As we all know, this has been one of the most widely debated issues of economics since Keynes (1936) made the case for stabilisation policies. And still today the debate regarding the stabilisation of output fluctuations remains very much active, as indicated by the Presidential Address of Robert Lucas (2003) at the recent annual meeting of the American Economic Association.

When considering this issue, it is essential to realise that the potential for stabilisation policies depends on both the size and the nature of cyclical fluctuations. We are all aware that eco-

1 *These papers are briefly surveyed in Issing (2001).*

2 *See Groshen and Schweitzer (1999).*

3 *Other reasons for tolerating a small positive rate of inflation include the potential for measurement bias in price indices, the possibility of sustained inflation differentials in a monetary union and the prospect of encountering the zero lower bound on nominal interest rates. For a discussion of these issues, see European Central Bank (2003).*

nomic cycles are caused by various factors and processes. They can be triggered and driven by shocks of various types as well as by changes in policies affecting demand and supply in product and financial markets. The magnitude and duration of economic cycles are also determined by technological processes, agents' behaviour and expectations, and institutional features of the economy. Policies influence the cycle not only by directly affecting aggregate demand and supply but also by

shaping expectations and institutions. The stabilising effects of monetary policy depend crucially on the nature of the public's expectations.

Overall, theory and evidence support the view that it is possible for monetary policy to influence aggregate economic activity in the short and the medium term.[1]) This conclusion, however, does not mean that it is necessary or desirable for monetary policy to play a stabilising role. There are several reasons for being cautious in assigning such a role to monetary policy. Indeed, because there are indications that economic cycles have diminished in industrialised countries, there may be less of a need for an active stabilisation policy. A recent paper by Blanchard and Simon (2001) has pointed to a long-term decline in US output volatility, a phenomenon which can be traced back at least to the 1950s. They report that, with the notable exception of Japan, other G7 economies, including Germany, France and Italy, have also experienced a downward trend in output volatility. A number of explanations have been put forward for the apparent moderation of the economic cycle. These include the increasing relative importance of services in aggregate output, improvements in inventory management, and the stabilising effects of monetary policy.

While it appears that output volatility has declined in recent decades in many industrialised economies, the size and frequency of several types of shocks cannot be controlled. There are also reasons to believe that structural changes may have created new sources of instability that policymakers need to monitor very closely. In particular, the role of asset prices in the economic cycle has received a lot of attention recently. Financial markets have gained markedly in importance during the last decade. One implication of the growing size of stock markets is that changes in equity prices are likely to have a more pronounced impact on the economy than in the past. While the development of financial markets should, in principle, improve the allocation of resources, economists have long been aware that financial markets can be characterised by periods when asset prices tend to deviate significantly from their equilibrium values. Such situations can have implications for economic activity and can generate or accentuate output fluctuations.

An important reason why it may not in general be desirable for monetary policy to play an active stabilisation role is that there is evidence that a large – if not the largest – part of cyclical output

1 *A review and assessment of the theory and evidence concerning the links between monetary policy and economic cycles is presented in Papademos (2003).*

variability can be attributed to real rather than nominal or demand shocks (Lucas, 2003). Such real shocks, which are driven by technology, cannot be effectively offset by monetary policy. In addition, under "normal circumstances", i. e. when the central bank is confronted with cyclical fluctuations of average magnitude, the systematic pursuit of an activist counter-cyclical policy can be ineffective and may increase rather than moderate output volatility. The risk of this happening emerges because of uncertainty about the magnitude and timing of the effects of monetary policy on output.[1]) In addition, there are uncertainties associated with identifying the types of shocks and assessing the precise cyclical position of the economy.

These considerations lead me to conclude that the conduct of an activist, fine-tuning counter-cyclical monetary policy involves more risks than potential benefits and should be avoided under normal circumstances. Nevertheless, it is possible to envisage particular circumstances, triggered by severe shocks, when monetary policy can play a role in stabilising output around its potential growth path. Such a policy would have to be implemented carefully and consistently with the central bank's commitment to its primary objective of maintaining price stability. It should also be communicated effectively so that the public's expectations and the central bank's credibility would not be adversely affected. The precise nature of the policy reaction will, of course, depend on the nature of the shock as, for instance, the response to an adverse supply shock would be very different from the response to a demand shock.

The ECB's mandate and strategy are fully consistent with the theoretical arguments and the empirical evidence regarding the role and effectiveness of monetary policy in preserving price stability and fostering economic growth. A key element of the ECB's strategy is the commitment to maintain medium-term price stability, which is defined quantitatively. The announcement of a quantitative definition of price stability aims to anchor the public's inflation expectations. Another important feature of the ECB's strategy is that it is forward-looking, with a medium-term orientation, which reflects the long time lags in the effects of monetary policy on the price level. The strategy does not justify short-term activism and policies aimed at "fine-tuning" the economy. At the same time, the medium-term orientation of the strategy allows for a gradualist policy response to shocks to the price level and provides some scope and a degree of flexibility which may be needed to address various types of severe shocks. The combination of commitment and flexibility that characterises the ECB's strategy allows for some "constrained discretion" in dealing with cyclical output fluctuations in a way consistent with the preservation of price stability.

## 4 Economic Reforms to Increase Sustainable Growth in Europe

Two general conclusions emerge about the contribution of monetary policy to economic growth: first, monetary policy cannot be expected to raise growth sustainably in the long run; second, although monetary policy can play a stabilising role over the medium term, the scope of such a role may be limited by

1 *The papers contained in Angeloni et al. (2003) present and discuss the evidence concerning the monetary policy transmission in the euro area.*

the pursuit of the primary objective of price stability, the nature of the monetary policy transmission mechanism, and by other factors, including the uncertainty facing policymakers and the stance of economic policies. These conclusions raise two relevant questions: How can we increase long-term economic growth in Europe and how can we speed up the recovery of the euro area economy towards its potential growth path?

Before addressing these questions, it is useful first to point to some facts concerning the growth performance of the euro area economy and the monetary policy stance. During the four years since the establishment of the Economic and Monetary Union (EMU), economic growth in the euro area averaged a modest 2.1%. It turns out that this is precisely the average growth recorded in the ten years, from 1989 to 1998, before the introduction of the euro. It is rather remarkable that over a longer period of almost 20 years, from 1981 to 1998, before the launch of the single currency, the growth rate in the countries that are currently members of EMU was also 2.1% on average, although during the same period average inflation was about 4.6%, i.e. substantially higher than its level after the adoption of the euro. It is thus evident that over a fairly long period of time, which was characterised by different monetary regimes and policies, the average growth performance of the 12 euro area countries was moderate and unchanged. Although we cannot reach any definite conclusions from these observations, they suggest that the average growth of the euro area countries mainly reflects the influence of non-monetary factors and policies.

The second set of facts relates to the monetary policy stance in the period after the introduction of the single currency. During this period, GDP growth in the euro area was negatively affected by several shocks and factors, some of which also had unfavourable effects on the price level. Although monetary policy had to be tightened for some time in order to respond to an unusual number of sizeable adverse shocks to price stability, the stance of monetary policy cannot be considered as the factor which constrained economic activity. Actually, it was accommodative at times. Overall, the ECB's monetary policy did attain a high degree of price stability in the euro area. The average inflation rate in the euro area between January 1999 and December 2002 was 2.1%, marginally above the upper ceiling of the ECB's quantitative definition of price stability. This was achieved because the ECB responded to shocks to price stability in a determined and systematic way, consistently with its mandate and strategy. At the same time, the pattern of inflation and interest rates during this period reflects the medium-term orientation of monetary policy and it reveals that the ECB, in formulating its policy, did take into account its likely impact on the real economy, since policy did not aim to offset fully and promptly the effects of shocks to price stability.

The foregoing observations support a general proposition, which, I believe, is by now widely recognised. Although the preservation of price stability and the implementation of sound macroeconomic policies are necessary to foster sustained growth, structural reforms are essential – the main policy instrument – for increasing long-term growth in the euro area. More specifically, there are two complementary routes through which it is possible to raise trend economic growth. The first is to remove obstacles to the efficient utilisation of resources

by improving the functioning of market mechanisms. For instance, by reforming labour market institutions, it should be possible to reduce structural unemployment. The resulting higher labour input should allow the level of output to increase, giving a temporary boost to economic growth until unemployment fell to a new, lower, sustainable level. The second route involves implementing policies that permanently raise economic growth. This requires knowledge of the factors that drive the growth process in developed economies. There is extensive literature that seeks to identify the variables influencing economic growth over the longer run.[1]) Physical and human capital accumulation, innovation, entrepreneurship, competition, the rule of law and the magnitude of government investment are important determinants. As mentioned earlier, some of the empirical studies on the link between inflation and growth can be criticised for their failure to take into account both inflation and other factors that may determine economic growth. A study by Levine and Renelt (1992) which sought to take into account such other factors, found a clear and robust association between average economic growth and the importance of investment and trade.

The policies required to increase long-term growth in the euro area will therefore fall largely within the remit of national governments. Such policies, however, are increasingly being coordinated at the European Union level. In March 2000, the Lisbon European Council recognised the importance of modernising the EU's regulatory framework and introduced an ambitious reform agenda aimed at making the European Union the "most competitive and dynamic knowledge-based economy in the world by 2010". The functioning of product markets is monitored and evaluated as part of what is known as the "Cardiff process". Similarly, labour market reform is assessed within the "Luxembourg process". Both processes rely on country examinations of reforms and provide input into the Broad Economic Policy Guidelines, which define the overarching economic policy priorities in various fields over the coming three years. Policy recommendations made to each EU Member State are based on these priorities.

In this year's Broad Economic Policy Guidelines (for the 2003–2005 period), several main priorities for policy action were identified.[2]) In addition to reforming pension and health care systems, it was agreed that priority should be given to improving the functioning of the labour market in Europe and to implementing structural reforms to increase investment in human and physical capital. In particular, it was stressed that there is a need to:

(i) facilitate investment in research and development and in infrastructure;
(ii) lift barriers to the business application of technology and foster links between the public and private sectors in order to exploit research findings;
(iii) enhance the role of small and medium-sized enterprises in research and development through their participation in integrated projects, and

1 *This literature is reviewed in Barro (1997).*
2 *Council of the European Union (2003).*

(iv) complete the internal market so as to help increase the competitiveness of industry, thereby fostering productivity and business dynamism. More specifically, it was emphasised that a fully integrated financial market would help to channel savings more efficiently into productive investment.

In order to improve the labour market situation in the European Union, a number of far-reaching structural reforms are required. The main specified priorities in this field are five:

(i) to take action, via reforms to tax and benefit systems, to make "work pay", so that people would not be discouraged from seeking work by the prospect of losing benefits and paying higher taxes;
(ii) to strike a balance between security and minimum standards for workers, so as to favour job creation and offer firms the flexibility they need to be able to respond to changing economic conditions;
(iii) to increase labour market participation, particularly among women, people who are over 50, as well as the low-skilled and the long-term unemployed;
(iv) to promote "life-long learning" and a constant upgrading of skills in order to generate higher productivity and better jobs and
(v) to encourage closer cross-border co-operation in the setting of standards, so that qualifications and experience can be widely recognised and mobility can be facilitated.

Although the list of priorities for policy action is long and ambitious, they are necessary and we should fully support them. I believe that if these priorities lead to concrete and substantial policy reforms, then we can reasonably expect to see a strengthening of Europe's growth potential and an improvement in the labour market situation.

The key issue is whether these reforms will be implemented in a timely and effective manner. Unfortunately, the implementation of previous years' Broad Economic Policy Guidelines has been somewhat patchy. For instance, following last year's Guidelines[1]), there were a number of useful initiatives in the field of labour market reform. Several countries have started, or in some cases continued, to implement measures to make work financially worthwhile or reduce employers' social security contributions. In addition, there have been efforts to improve the job search process by increasing the efficiency of services provided by employment agencies and the adoption of stricter job search requirements. However, despite these positive developments, many labour market reforms have not yet been adequately introduced, including comprehensive reforms to pension systems and early retirement schemes aimed at increasing the labour force participation of older workers, and reforms to employment protection regulations aimed at improving job mobility. It is disappointing that the pace of labour market reform slowed down in most euro area countries in 2002.

Overall, there has been some progress in recent years towards addressing the structural weaknesses of the euro area. The approach adopted until now by many countries, however, seems to have taken the form of partial steps rather than comprehensive reform efforts. As it takes time for structural reforms to yield their full

*1 European Commission (2002).*

benefits, the slow and partial approach pursued in most Member States will make it increasingly difficult to achieve the strategic objectives set in the Lisbon agenda. Furthermore, a lack of determination to implement comprehensive reforms may also be a reason for the low level of confidence in a rapid and sustainable economic recovery. This point makes greater efforts in the field of structural reform all the more important and pressing.

## 5 Conclusions

I would like to conclude by stressing a few points relating to some of the questions that I posed at the start. The first question was whether and how monetary policy can contribute to higher sustainable economic growth. The weight of the theoretical arguments and empirical evidence I reviewed is consistent with the notion that the best contribution that monetary policy can make to sustainable growth is to maintain price stability. Because inflation is fundamentally a monetary phenomenon, monetary policy is the only tool that can effectively maintain price stability in the medium and long run. Therefore, it makes sense that price stability is its primary objective. In addition, most of the available empirical evidence and analysis shows that lower inflation is associated with higher long-term growth. While there may be doubts about the robustness of some of these results, there is little empirical support for the view that monetary policy should abandon the pursuit of price stability in order to increase long-term economic growth.

The second question was whether monetary policy can affect the pace of growth in the short and medium term and, therefore, whether it can be used to stabilise output growth, while remaining true to its primary objective of price stability. I have argued that, while fine-tuning of the economy is generally to be avoided, the ECB strategy can provide sufficient scope and flexibility for dealing with unexpected sizeable economic fluctuations consistently with the maintenance of price stability. This flexibility has also been highlighted in the outcome of the recent review of the ECB's monetary policy strategy. By clarifying that it aims to maintain inflation rates below but close to 2% over the medium term, the ECB has underlined its commitment to providing a sufficient safety margin to guard against the risks of deflation.

The effectiveness, however, with which monetary policy can perform a stabilising role is limited by several factors. These include the uncertainty regarding the timing and magnitude of its effects, which partly reflects the dynamics of the cycle, the nature of expectations and the type of shocks affecting the real economy. For instance, in an environment of very low interest rates and inflation or when the implementation of the appropriate economic policies is constrained, say by political obstacles to structural reform. In such situations, the effectiveness of monetary policy would depend on the underlying causes of the economic weakness and on the stance of other policies. Monetary policy may be more effective if the problems being faced are perceived as short-lived, for example, caused by a temporary decline in consumer confidence. In such circumstances, a temporary monetary easing that does

not endanger price stability may provide a stimulus to help economic agents cope with a cyclical slowdown.

If, however, the economic problems are persistent and/or structural in nature, then monetary policy is likely to be less effective. For instance, if firms are reluctant to invest because of structural impediments implying few profitable business opportunities, a short-term monetary easing is unlikely to make much difference. In such circumstances, structural reforms aimed at raising trend growth can help restore confidence and improve the "animal spirits" of investors. In this way a change in the monetary policy stance can become more effective. Moreover, structural reforms that lead to an increase in aggregate supply and greater price flexibility can be expected to reduce upside risks to price stability and therefore give monetary policy more scope for manoeuvre.

At this juncture, in order to speed up economic recovery and achieve higher and sustainable growth in Europe, it is important for economic policies to strengthen confidence and enhance the competitiveness of the European economy. To this end, the implementation of credible fiscal consolidation strategies, based on growth-enhancing measures, can boost confidence and private spending and thus counteract the direct effects of budgetary measures on aggregate demand. More importantly, the introduction of structural reforms to improve productivity and market flexibility is essential for increasing potential growth as well as international competitiveness in a sustained way. These reforms could also help to increase confidence in the euro area's capacity to grow, with favourable effects on aggregate demand and economic activity in the short run. Monetary policy cannot help to solve the structural problems constraining the growth performance of the euro area. The implementation of fiscal consolidation strategies and structural reforms in Member States will facilitate the conduct of the ECB's monetary policy so that it can foster growth combined with the maintenance of price stability. ❧

## References

**Akerlof, G. A., W. T. Dickens and G. L. Perry. 1996.** The Macroeconomics of Low Inflation. In: Brookings Papers on Economic Activity 1. 1–59.

**Akerlof, G. A., W. T. Dickens and G. L. Perry. 2000.** Near Rational Wage and Price Setting and the Long-run Phillips Curve. In: Brookings Papers on Economic Activity 1. 1–44.

**Andrés, J. and I. Hernando. 1999.** Does Inflation Harm Economic Growth? Evidence from the OECD. In: Feldstein, M. (ed.). The Costs and Benefits of Price Stability. Chicago: University of Chicago Press.

**Angeloni, I., A. Kashyap and B. Mojon. 2003.** Monetary Policy Transmission in the Euro Area. Cambridge: Cambridge University Press (forthcoming).

**Barro, R. J. 1997.** Determinants of Economic Growth: A Cross-Country Empirical Study. Cambridge, Massachusetts: The MIT Press.

**Blanchard, O. and J. Simon. 2001.** The Long and Large Decline in US Output Volatility. In: Brookings Papers on Economic Activity 1. 135–164.

**Bruno, M. and W. Easterly. 1996.** Inflation and Growth: In Search of a Stable Relationship. In: Federal Reserve Bank of St. Louis Review 78(3). 139–146.

**Bullard, J. and J. W. Keating. 1995.** The Long-Run Relationship Between Inflation and Output in Postwar Economies. In: Journal of Monetary Economics 36(3). 477–96.

**Cooley, T. F. and G. D. Hansen. 1989.** The Inflation Tax in a Real Business Cycle Model. In: American Economic Review 79. September. 733–748.

**Council of the European Union. 2003.** Council Recommendation on the Broad Guidelines of the Economic Policies of the Member States and the Community (for the 2003–2005 Period). Official Journal of the European Union. June 26.

**Cozier, B. and J. Selody. 1992.** Inflation and Macroeconomic Performance: Some Cross-Country Evidence. Bank of Canada Working Paper 92-06.

**Danthine, J. P. 1985.** Inflation and Growth in Utility-Maximising Models. University of Lausanne Working Paper 8511.

**European Central Bank. 2003.** Overview of the Background Studies for the Reflections on the ECB's Monetary Policy Strategy. June 12: http://www.ecb.int/pub/strategy/monetarypolicystrategyreview-overview.pdf

**European Commission. 2002.** Broad Guidelines of the Economic Policies of the Member States and the Community. European Economy 4. Directorate-General for Economic and Financial Affairs.

**Feenstra, R. C. 1986.** Functional Equivalence Between Liquidity Costs and the Utility of Money. In: Journal of Monetary Economics 17. 271–291.

**Fischer, S. 1993.** The Role of Macroeconomic Factors in Growth. In: Journal of Monetary Economics 32. 485–512.

**Fischer, S. and F. Modigliani. 1978.** Towards an Understanding of the Real Effects and Costs of Inflation. In: Weltwirtschaftliches Archiv 114. 810–832.

**Ghosh, A. and S. Phillips. 1998.** Warning: Inflation May Be Harmful to Your Growth. IMF Staff Paper 45(4). 672–710.

**Gomme, P. 1993.** Money and Growth Revisited: Measuring the Costs of Inflation in an Endogenous Growth Model. In: Journal of Monetary Economics 32(1). 51–77.

**Greenwood, J. and G. W. Huffman. 1987.** A Dynamic Equilibrium Model of Inflation and Unemployment. In: Journal of Monetary Economics 19. 23–28.

**Grier, K. B. and G. Tullock. 1989.** An Empirical Analysis of Cross-National Economic Growth, 1951–1980. In: Journal of Monetary Economics 24(2). 259–276.

**Groshen, E. L. and M. E. Schweitzer. 1999.** Identifying Inflation's Sand and Grease Effects in the Labour Market. In: M. Feldstein. (ed.). The Costs and Benefits of Price Stability. Chicago: University of Chicago Press.

**Haslag, J. H. 1997.** Output, Growth, Welfare, and Inflation: A Survey. In: Federal Reserve Bank of Dallas Economic Review. Second Quarter. 11–21.

**Ho, W. M. 1996.** Imperfect Information, Money and Economic Growth. In: Journal of Money, Credit and Banking 28(4). 578–603.

**Issing, O. 2001.** Why Price Stability. In: Garcia-Herrero, A., V. Gaspar, L. Hoogduin, J. Morgan and B. Winkler (eds.). Why Price Stability? Frankfurt am Main: European Central Bank.

**Jones, L. E. and R. E. Manuelli. 1995.** Growth and the Effects of Inflation. Journal of Economic Dynamics and Control 19. 1405–1428.

**Judson, R. and A. Orphanides. 1996.** Inflation, Volatility and Growth. International Finance 2(1). 117–138.

**Keynes, J. M. 1936.** The General Theory of Employment, Interest and Money. London: Macmillan.

**Khan, M. S. and A. S. Senhadji. 2001.** Threshold Effects in the Relationship Between Inflation and Growth. IMF Staff Paper 48(1). 1–21.

**Kormendi, R. C. and P. G. Meguire. 1985.** Macroeconomic Determinants of Growth: Cross-Country Evidence. In: Journal of Monetary Economics 16(2). 141–163.

**Levine, R. and D. Renelt. 1992.** A Sensitivity Analysis of Cross-Country Growth

Regressions. In: American Economic Review 82(4). 942–963.

**Lucas, R. E. 1973.** Some International Evidence on Output-Inflation Tradeoffs. In: American Economic Review 63(3). 326–334.

**Lucas, R. E. 2003.** Macroeconomic Priorities. In: American Economic Review 93(1). 1–14.

**McCandless, G. T. and W. E. Weber. 1995.** Some Monetary Facts. Federal Reserve Bank of Minneapolis Quarterly Review 19(3). 2–11.

**Metzler, L. 1951.** Wealth, Saving, and the Rate of Interest. In: Journal of Political Economy 59. 93–116.

**Mundell, R. 1963.** Inflation and Real Interest. In: Journal of Political Economy 71. 280–283.

**Orphanides, A. and R. M. Solow. 1990.** Money, Inflation and Growth. In: Friedman, B. M. and F. H. Hahn (eds.). Handbook of Monetary Economics. Amsterdam: Elsevier Science Publishers B. V.

**Palokangas, T. 1996.** Inflation and Growth in an Open Economy. In: Economica 64. 509–518.

**Papademos, L. 2003.** Economic Cycles and Monetary Policy. Paper presented at the International Symposium of the Banque de France, Monetary Policy, Economic Cycle and Financial Dynamics. Paris. March.

**Sarel, M. 1996.** Nonlinear Effects of Inflation on Economic Growth. IMF Staff Paper 43(1). 199–215.

**Sidrauski, M. 1967.** Rational Choice and Patterns of Growth in a Monetary Economy. In: American Economic Review 57. 534–544.

**Stein, J. L. 1970.** Monetary Growth Theory in Perspective. In: American Economic Review 60. 85–106.

**Stockman, A. C. 1981.** Anticipated Inflation and the Capital Stock in a Cash-in-Advance Economy. In: Journal of Monetary Economics 8. 387–393.

**Tobin, J. 1965.** Money and Economic Growth. In: Econometrica 33. 671–684.

**Tobin, J. 1972.** Inflation and Unemployment. In: American Economic Review 62(1). 1–18.

**Vickrey, W. 1955.** Stability Through Inflation. In: Kurihara, K. (ed.). Post-Keynesian Economics. London: George Allen and Unwin Ltd.

**Zhang, J. 2000.** Inflation and Growth: Pecuniary Transactions Costs and Qualitative Equivalence. In: Journal of Money, Credit and Banking 32(1). 1–12.

Michael Mussa

Michael Mussa
Senior Fellow
Institute for International Economics

# How to Strengthen Growth in Europe?

Perhaps it was to add a suitable note of dissonance to this conference that its organizers invited an American to deliver a keynote address on "How to Strengthen Growth in Europe." In recent years, many prominent Americans have lectured Europe on its supposed deficiencies and what should be done about them – with particular emphasis recently on the failures and need for reform in "old" Europe.

For most the past decade, I have avoided this problem by asking my former deputy, Fleming Larsen, to deliver the message on needed policy reforms in Europe. Alas, Fleming no longer works for me. However, I make no further apologies; if you are offended by advice from an American blame the conference organizers.

Turning to the issue of how to strengthen European growth, I will divide my remarks into two main parts. First, I will discuss what is responsible for the recent disappointing growth performance of much of Europe and what can be done to strengthen growth in near term. I will devote considerable

attention to this subject because of its current relevance not only to Europe but also to the broader challenge of reinvigorating global growth. Second, I will take up the fundamentally more important issue of strengthening Europe's longer-term growth – extending over coming decades. On this second issue, I will draw very heavily on the work of my colleague at the Institute for International Economics, Martin Baily, who is about to publish a major study on policies for stronger growth in

Europe. This study, in turn, builds on extensive work done by many economists (European and American), especially the studies undertaken under the auspices of the OECD.

## Europe's Recent Disappointing Growth

Real economic growth in Europe in recent years has been disappointing, both relative to Europe's previous performance in the postwar era and relative to the growth recently achieved in the United States and other non-European industrial countries (excluding Japan). In particular, taking the nine years from 1994 through 2002 (which excludes the industrial country recessions of the early 1990s and includes the slowdowns or recessions of 2001–02), annual average real GDP growth was 2.3% in the European Union (EU) and 2.2% in the euro area. In comparison, annual average real GDP growth during this period was 3.2% in the United States, 3.6% in Canada, and 4% in Australia (but only 1% in Japan). Moreover, real GDP growth in the United Kingdom averaged a respectable 2.8% per year during this period, in contrast with the earlier tendency for the U.K. to grow significantly more slowly than its continental European counterparts. Thus, the disappointing growth performance of Europe in recent years is mainly a phenomenon of continental Europe.

Indeed, the major continental European countries grew particularly slowly during this nine-year period, with annual average growth of 2.2% in France, 1.9% in Italy, and only 1.5% in Germany. Several of the smaller Western European countries did considerably better, most notably Ireland with almost 8% annual average real GDP growth, as well as Spain and Finland which exceeded 3.5% annual average growth. Nevertheless, for the countries that now comprise the euro area, the period since the end of the 1992–93 recession has been one of somewhat disappointing real economic growth.

In assessing why European growth has been disappointing during this recent period, it is useful to examine three questions: Why was recovery from the recession of 1992–93 relatively sluggish? Why did European growth suddenly slow in 2000–01? And, why has recovery been so sluggish over the past year and a half?

Going back to the mid-1990s, it is clear that most the future members of the euro area inherited economic problems and imbalances that were likely to make recovery from the 1992–93 recession relatively sluggish – including the policy adjustments that were mandated by the "convergence criteria" of the Maastricht Treaty (but also necessary and desirable in their own right). In particular, inflation had been pushed up in Europe by consequences of the

policies pursued in connection with German unification. This necessitated that the Deutsche Bundesbank tighten monetary policy sharply in 1991–92 and ease only relatively gradually thereafter as actual inflation came down. Other countries with aspirations to join the euro area had to follow the Bundesbank's lead (in several cases by maintaining substantial premia in their short-term interest rates over German short-term interest rates).

It can be argued that the Bundesbank should have eased somewhat more aggressively during 1993–94 and again as the pace of recovery proved to be disappointing in 1995–97. To the considerable irritation of two successive Bundesbank Presidents, I made such suggestions at the time. Had this advice been followed, growth in Europe probably would have been modestly stronger during the mid-1990s, and inflation which was generally running below 2% would not have been a problem. However, a path for short-term official interest rates that was, on average, no more than 50 basis points below the path actually followed would hardly have produced a growth miracle.

For fiscal policy in Europe, the period from 1994 through 1999 was one of substantial fiscal consolidation, with IMF estimates of structural fiscal deficits for euro area countries falling by more than 3% of GDP. Part of this accomplishment was the illusory effect of accounting gimmicks, and part of it reflects the real fiscal benefits of downward convergence of European interest rates on government borrowing costs. But part was also due to real spending restraint and to real increases in government revenues.

Some analysts believe that real fiscal consolidation is generally expansionary because of its favorable effect on confidence. Although this may well be true during crises of confidence – such as those sometimes experienced by emerging market countries – I doubt that it is true in general or in the specific case of Europe in the late 1990s. Rather, it is far more likely that real restraint on the growth of government spending and real increases in government revenues had a depressing effect on demand growth in Europe in the second half of the 1990s. Nevertheless, there was no practical or desirable alternative to more restrictive fiscal policies – both

because of the desire of most European countries to meet the Maastricht convergence criteria and (as will be discussed later) because of the longer-term requirements for prudent fiscal policy.

In sum, a somewhat easier but still prudent monetary policy might have modestly accelerated European recovery during the second half of the 1990s. More expansionary fiscal policy, however, was not an appropriate tool to pursue this objective. Thus, most of the explanation for Europe's relatively disappointing pace of recovery during 1993–98 comes not from inappropriate macroeconomic policies but rather from underlying imbalances and problems that both retarded recovery and necessitated corrective policy actions.

During 1999, evidence began to emerge that the U.S. economy was beginning to overheat. This was not particularly apparent in U.S. measures of general price inflation, although the rates of rise of the core consumer price

index and of nominal wages began to escalate modestly during 1999. The rapidly widening U.S. current account deficit, however, was clearly symptomatic of domestic demand growth well in excess of domestic output growth; and a strengthening dollar in foreign exchange markets was clearly helping to contain (and thereby conceal) domestic inflationary pressures. Sharply rising equity prices and buoyant business investment (especially in technology, media, and telecoms) were another important symptom of unsustainable overheating.

In this environment, the U.S. Federal Reserve took a modest (25 basis points) step of monetary tightening in the spring of 1999, but did not even entirely reverse its emergency easing of the autumn of 1998 until the end of 1999. I have argued that the Fed was too slow in its monetary tightening during 1999 and that, as a consequence, the overheating of the U.S. economy and the stock market was undesirably encouraged. The eventual result of this tardiness in monetary tightening in 1999 and of the over-heating to which it contributed in the near term was later seen in the recession of 2001 and in the forces that have impeded the subsequent recovery – difficulties that would have been smaller with a somewhat earlier tightening of U.S. monetary policy.

In Europe, specifically in the euro area, there was less evidence of overheating by 1999 than in the United States, although real GDP in the euro area was probably close to potential by end 1999. Consumer price gains showed little sign of acceleration, wage gains remained modest, and unemployment rates had not fallen to exceptionally low levels. Demand growth somewhat outpaced output growth, as reflected in a deteriorating current account balance, but by only half the extent of the United States. Nevertheless, the European Central Bank (ECB) began raising official short-term interest rates in November 1999 and ultimately tightened by 50 basis points more than the Federal Reserve (from 2.5% to 4.75% for the ECB compared with from 4.75% to 6.5% for the Federal Reserve).

This relatively more aggressive tightening by the ECB is not difficult to justify. Having eased short-term official rates to 2.5% shortly after its creation at the beginning of 1999 because of sluggish euro area growth, the ECB started out with an easier policy than that of the Fed. Moreover, ECB monetary policy that is, by its primary mandate, directed toward keeping inflation low and is appropriately forward-looking should take account of what inflation is likely to be going forward, even if past inflation is not a problem. If the Fed was too slow in recognizing the dangers of an overheating U.S. economy, the ECB was right in not following this example.

## Monetary Policy During the Present Economic Slowdown

The U.S. economy began to slow in mid-2000, and growth in most of the rest of the world economy, including Europe was beginning to slow by the autumn of 2000. At year end, the growth slowdown became precipitous, particularly in the United States where the economy fell into three quarters of outright recession. The Federal Reserve reacted aggressively, cutting the federal funds rate by 250 basis points between January and June 2001 and cutting further during the summer and in the aftermath of September 11.

Along with many in Europe, the ECB apparently believed that the eco-

nomic slowdown of 2001 would have only mild manifestations in Europe, reflecting the fact that trade linkages between Europe and the United States do not provide a large channel for the transmission of macroeconomic disturbances. This was a mistake. In fact, the same economic forces that were inducing outright recession in the United States were also operating to slow European growth quite substantially – albeit less so than in the United States. These forces included the effects of the sell-off in global equity markets and the collapse of the global investment boom in technology and telecoms, the sharp run-up in world oil prices during 2000, and the significant tightenings of monetary policy in both the euro area and the United States during 1999–2000. Moreover, unlike the United States where the new Bush Administration was pushing through a substantial tax cut that would tend to countervail recessionary forces, there was no comparable fiscal stimulus planned for the euro area.

With its complacent attitude toward the effects of the global slowdown on Europe, the ECB eased official interest rates by only 25 basis points during the first half of 2001, versus 250 basis points of easing by the Federal Reserve. And, even after the tragic events of September 11, total easing by the ECB during 2001 amounted to 150 basis points, versus 425 basis points of total easing by the Federal Reserve. In hindsight – and even at the time – the ECB's easing of monetary policy during 2001 was a comparatively timid response to the increasing evidence that Europe was experiencing a pronounced economic slowdown.

Last year saw a repeat of this experience. Early in 2002, it was widely believed that growth would pick up significantly both in the United States and in the euro area; and no further monetary easing was expected on either side of the Atlantic. In the event, growth did accelerate in the U.S. during the first quarter, but then slackened in the second quarter. The Federal Reserve responded with a further 50 basis points of easing. With a re-acceleration of growth in the third quarter and a slowdown in the fourth, the U.S. economy turned in respectable growth of almost 3% on a four-quarter basis – with domestic demand growth outpacing real GDP growth by more than another full percentage point.

In contrast, growth in the euro area remained quite sluggish throughout 2002, with a four-quarter advance of only 1¼% in real GDP and a significantly smaller gain in real domestic demand.

The ECB's response to the continued miserable pace of economic recovery came only late in the year with a modest further 50 basis point cut in official short-term interest rates. And, for the euro area, the stimulative effect of this monetary easing was offset by the appreciation of the euro against the U.S. dollar that had occurred by year end.

So far, 2003 has again seen very weak growth in the euro area, with some economies actually contracting. Meanwhile, the euro has continued to appreciate. Forecasts for the euro area growth during this year are now barely ½% – well below potential growth for an economy that already

has significant margins of slack. And again, the ECB has been tardy in responding to mounting evidence of continued sluggishness.

Now, it should be recognized that during the past 30 months inflation in the euro area has run at or marginally above the 2% ceiling that the ECB has defined as the upper bound of reasonable price stability; and inflation in mid-2001 did rise briefly to almost 3%. But temporary factors, including the weakness of the euro in foreign exchange markets in 2000–01 and the effects of surges in energy prices, have clearly boosted inflation despite growing economic slack.

Moreover, the common cyclical pattern is for inflation to remain escalated, or even continue to increase somewhat, after the cyclical peak in economic growth, and then to come down gradually thereafter. From this perspective, the uncomfortable inflation of 2001 provided confirmation of the wisdom of the ECB's forward-looking monetary tightening in 1999–2000.

But, a monetary policy that is appropriately and symmetrically forward looking also takes account of the tendency for inflation to fall, usually with a modest lag, as margins of slack begin to widen. This means that in the face of a sharp slowdown in growth, it is often prudent for monetary policy to ease in advance of clear evidence of an actual slowdown of inflation – recognizing that inflation will come down (with a lag) as margins of slack increase. This was, in fact, the monetary policy vigorously pursued by the Federal Reserve, but not by the ECB.

To be clear, it is not reasonable to believe that a more rapid and vigorous ECB response to the weakening of economic growth (and the consequent easing of inflation pressures and risks) could have avoided all of the slowdown since late 2000. But, margins of slack in the euro area have widened significantly from modestly negative in late 2000 to about 3% today; and they appear to be headed higher for at least another couple of quarters. Earlier and more vigorous easing by the ECB could probably have reduced the present margin of slack by at least 1% of GDP, and reduced significantly the present risk that the margin of slack will continue to expand.

Granted that a 1% gain in euro area's GDP is not a substantial part of the solution to Europe's longer-term growth challenge; it is, nevertheless, well worth having. Moreover, unlike other, more important things that should be done to strengthen European growth in the longer term, there are no great political difficulties that need to be overcome in order to have a monetary policy that is somewhat better attuned to supporting sustainable economic growth – with reasonable price stability. This only requires a modest shift in the orientation and implementation of monetary policy which is fully under the control of the ECB.

## Fiscal Policy and Near-Term Growth

Lastly on the issue of near-term growth, what about the role of fiscal policy? As growth has slowed during the past three years, fiscal positions of European governments have generally moved toward deficit, and Portugal, Germany, France, and probably Italy now find themselves in violation of the 3% of GDP ceiling on their fiscal deficits imposed by the Stability and Growth Pact.

Clearly, the discipline imposed by the Stability and Growth Pact has restrained the use of stimulative fiscal policy to countervail the current slowdown – even for those countries that

have violated the explicit deficit ceiling. Certainly no European country has felt free to pursue an expansionary fiscal policy like the United States where the combination of substantial spending increases, large tax cuts, and the operation of the automatic stabilizers has raised the federal budget deficit by more than 5% of GDP over three years.

Is it regretable that Europe has felt constrained not to follow the U.S. lead in fiscal expansion? I do not think so. Most European countries, including those with budget deficits now in excess of 3% of GDP, face long-run fiscal challenges (notably those arising from aging populations) that make significant and persistent fiscal deficits highly undesirable. The present economic slowdown, although uncomfortable, is not so threatening that it warrants substantial discretionary fiscal stimulus that may later prove difficult to reverse – especially not while monetary policy remains available to deal with the risks of continued economic sluggishness.

Nevertheless, it is relevant to note that the Stability and Growth Pact could use some judicious revision. As presently formulated – focusing on actual rather than structural budget deficits – it fails to provide much incentive to improve fiscal positions when economies are doing well: and it tends to discourage full use of the automatic stabilizers when growth slows below potential.

It should also be noted that monetary policy has an important influence of fiscal outcomes. The "fiscal offset coefficients" in Europe generally run in the range of two-thirds or even higher. This means that when GDP growth slows 1% below potential, the government budget position tends to deteriorate by about $^{2}/_{3}$% of GDP. Accordingly, much of the deterioration of European budget positions over the past three years is attributable to the economic slowdown – rather than discretionary laxity in spending or revenue policies.

Of course, fiscal policy should make appropriate allowance for fluctuations in the rate of economic growth. But monetary policy also has some responsibility here. If the ECB had reacted earlier and more vigorously to the present economic slowdown in Europe, fiscal deficits this year would probably be smaller by between $^{1}/_{2}$% and 1% of GDP, and this fiscal benefit would be even larger for next year.

## The Need to Strengthen Longer-Term European Growth

There is broad agreement, at least among most policymakers and economic analysts, that Europe now faces a critical challenge of finding effective means to strengthen its longer-term economic growth, and there is also broad agreement about the principal means for achieving this result. As emphasized in the conclusions from the Lisbon Summit of the European Council in March 2000, "a radical transformation of the European economy" is needed in order for the European Union "to become the most dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion." An annual average growth rate of 3% was specifically endorsed as a desirable and achievable objective under a vigorous program to raise growth potential through deep-seated structural reforms in labor and product markets and related social policies and through enhanced investment in research and development and in education.

Unfortunately, while key policymakers and economic analysts may

agree on the need for "radical transformation" to meet Europe's growth challenge, the general body politic is not yet entirely persuaded – especially not when the radical transformation requires modification of social benefits and protections. We see this, for example, in recent protests against comparatively modest reforms of public pensions in France, Italy, Germany, and here in Austria. Those who object most doggedly are usually those for whom reform means some reduction

in their individual benefits. But these self-interested protestors often enjoy considerable sympathy from the general public. And, this phenomenon is by no means limited to reforms of public sector pensions. It applies quite broadly to most areas of necessary structural reform – especially in the critical area of labor markets and related social policies.

At this stage, in view of the massive research that has been done during the past two decades on the need for and prospective benefits of critical structural reforms in Europe, the key problem is *not* discovering what should and must be done to strengthen longer-term European growth. The key problem is the political problem of persuading the general public to understand, accept, and endorse key reforms that are essential to serve *their* interest.

To this end, I believe that it is especially important to emphasize why strengthening of Europe's longer-run growth is so important – especially for those who value highly Europe's social cohesion and solidarity. During the past twenty-five years, Europe's real economic growth (like that of all industrial countries) has slowed significantly from the rapid pace earlier in the postwar era. Nevertheless, the people of Europe have continued to enjoy *both* rising real living standards for employed workers and their families and increasing levels of social benefits for those more dependent on support from the state.

Looking forward, the picture is not so rosy – unless critical reforms to strengthen growth are implemented. The potential GDP growth rate for the European Union over the next several years now appears to be barely more than 2%. As the effects of population aging become more pronounced in a few years, potential growth (under present policies) will likely fall below 1½%, and will likely be slower than that in some EU countries. Moreover, with rising proportions of older citizens who are living longer, the burden of financing generous pension and expensive healthcare benefits will fall on declining proportions of economically active citizens. For example, in Germany now there are about 2 active workers to support each retiree, but this ratio will fall to about 1.3 workers per retiree by 2030; and similar trends apply for most EU countries. In comparison, for the United States, there are now more than 3 workers per retiree and there will still be about 2 workers per retiree by 2030.

Moreover, in the United States, where social benefits (per recipient) are generally lower than in Europe, government spending amounts to about one-third of GDP; and potential GDP appears to be growing at about 3%

per year or slightly better. This means that there is room to accommodate presently specified benefits to a rising share of retired workers without raising government spending and hence taxes to excessively burdensome levels. In contrast, in Europe, government spending is generally around 50% of GDP. With potential GDP growth of only about 2% and falling, there appears to be no way that Europe can sustain presently specified benefits to retired workers and other social commitments without government spending and taxes rising to levels that would crush economic incentives and provoke a social and political crisis between the wants of those who receive social benefits and those who are called upon to pay for them.

In short, without critical structural reforms that will significantly strengthen longer-term growth, Europe's present social policies are fundamentally unsustainable. Without essential reforms, Europe's highly valued social cohesion is headed for a catastrophic crisis. On the other hand, if vigorous action is undertaken that successfully accelerates European growth, the most important features of European social protections can be preserved (with comparatively modest modifications). The sooner action is taken, the greater the prospect for success.

## Labor Market Reform

Among the several key areas of critical structural reforms need to strengthen longer-term growth, probably the most important and the most politically difficult is the reform of labor market and related social policies. The unemployment rate in Europe is now about 9% versus 6% in the United States. In both cases, cyclical factors probably account for about 1% in the total unemployment rate. Thus, the main factor accounting for higher unemployment in Europe than in the United States is the wide variety of structural impediments and disincentives for workers and employers that collectively add about 3 percentage points to the European unemployment rate.

Higher structural unemployment, however, is only one of the adverse manifestations of the structural problems in European labor markets. More important is the effect on labor force participation (and correspondingly on employment). In the United States, two-thirds of the working age population is in the labor force (either employed or counted as unemployed). In most of continental Europe labor force participation is not much above 50%.

To some extent this difference in labor force participation probably reflects "cultural" factors. But this does not plausibly explain all of the difference. Thirty years ago, the labor force participation rate in the United States was only about 5% above that of most of continental Europe. Subsequently, as labor force participation has gone up in the United States, it has dropped in much of Europe; and the gap in participation rates has nearly tripled. Notably, this rising gap in labor force participation rates generally corresponded with the rising differential in structural unemployment rates between Europe and the United States. Undoubtedly the structural impediments and disincentives to the supply and demand for labor that were reflected in rising European structural unemployment were also manifest in declining labor force participation rates.

Additional useful evidence on this score comes from Switzerland (and to a somewhat lesser extent from the Netherlands). Culturally, Switzerland is

surely a European country – not an alpine outpost of American culture. Switzerland, however, does not have a number of the labor market impediments and disincentives (such as relatively generous and long-lasting unemployment compensation) present in many other European countries. Switzerland does have quite low unemployment and a labor force participation rate that is similar to that of the United States.

There should be little doubt that with the aid of vigorous structural reform, unemployment rates in Europe can be significantly reduced and labor force participation and total employment can be substantially increased. Indeed, important progress has been made in reducing unemployment in most of the smaller European countries and in the United Kingdom. The bulk of the remaining task (at least with respect to unemployment) appears to be in Germany, France, and Italy. France has made some important progress with reforms to reduce unemployment of younger workers, and Chancellor Schröder is now pushing through some long needed reforms.

If labor market reforms are pursued vigorously, it is reasonable to expect that, over time, the unemployment rate in Europe can probably be reduced by 3 percentage points – 1 percentage point from reduced cyclical unemployment and at least 2 percentage points from reduced structural unemployment. In addition, I believe that under appropriate structural reform, European labor force participation rates would probably rise by at least 5 percentage points, allowing for an equal gain in employment. Altogether, over the coming decade, structural reform could probably raise total employment in Europe by 8%, and perhaps even by as much as 10%.

Because the workers added to employment would probably be, on average, less productive than those presently employed, the gain in output would presumably be less than proportional to the gain in employment (even assuming that added workers are equipped with new capital to maintain a constant capital/output ratio). Nevertheless, even if the gain in output was only 4% or 5%, rather than 8% or 10%, it would still be well worth having. Spread out over a decade in would add about ½ percentage point to annual average GDP growth. And by moving a significant number of working age people to work from non-employment it would usefully reduce and spread the burden of paying for Europe's social benefits.

## Prospects for Stronger Productivity Growth

The most important open question about the prospects and means for strengthening longer-term European growth concerns productivity – or more precisely, total factor productivity. The United States has enjoyed a significant increase in productivity growth since the mid-1990s which has raised estimates of the potential growth rate of U.S. real GDP from about 2¼% to about 3¼%. Already this improvement in productivity growth has boosted the level of potential GDP by about 10% relative to the level that was expected a decade ago. And, if productivity growth is sustained at its recent average pace, the United States should be able to face the challenges of an aging population in an environment of generally rising real living standards for all Americans.

So far, Europe (and other industrial countries) has generally not seen the acceleration of productivity growth recently observed in the United States.

This is partly explained by differences in measurement and by the fact that much productivity growth occurs in high technology industries that are relatively more important in the U.S. economy than in Europe. But, this is not the whole story.

My colleague at the IIE, Martin Baily, has done a great deal of research on productivity growth, including participation in studies of productivity growth at the industry and firm level. One of the emerging conclusions of this ongoing research is that the recent acceleration of U.S. productivity growth reflects in part the adoption and use of high technology by relatively low technology sectors of the economy – such as retail trade. It also appears (although this is a preliminary conclusion) that the adoption and effective use of new technology in these sectors is importantly facilitated and encouraged by the flexibility of enterprises to adapt a whole range of their business practices to take advantage of new technology. For example, better communications and information processing may be of little help in achieving more efficient inventory management if rigid work rules or zoning restrictions impair rationalization of shipping and warehouse operations.

If this hypothesis is broadly correct, then it helps to explain why American enterprises – which enjoy significantly greater flexibility in adjusting many dimensions of their business operations than most European enterprises – have made greater, more rapid, and more effective use of advances in technology. It also implies that vigorous structural reform in Europe – that allows European businesses to operate more flexibly – can have important benefits beyond those usually recognized by facilitating and encouraging a wide range of business innovations that will spur productivity growth.

Over the next couple of decades, there is probably nothing that is more important for strengthening Europe's longer-term growth and thereby sustaining the basis of its most valued policies of social cohesion than facilitating the economic flexibility that will help to deliver more rapid productivity growth. For example, an increase of only ¼% in annual average productivity growth sustained over two decades will lift real output by as much as would plausibly be achieved by very vigorous labor market reform.[1]) However, boosting productivity growth is probably not something that can be achieved independent of key structural reforms in labor and product markets and in related social policies. Rather, more rapid productivity growth is more likely to be an important bonus that makes critical structural reforms even more important and beneficial. ❧

1 *Labor market reform that encourages greater employment of less productive workers will tend to reduce measured labor productivity. But, in a broader sense, productivity is enhanced by moving people from non-employment (where they produce little) to employment (where they produce more).*

Robert A. Mundell

Robert A. Mundell
Professor
Columbia University

# Economic Recovery and the Euro: What Else Is Necessary?

I am going to focus on three subjects: issue one is of course the euro itself, the second is the issue of growth and what else needs to be done in Europe and the third is the accession countries.

Having heard the last little part of the morning discussion about European reform and so on, I think I begin with the issue of structural reform or what I sometimes say is the need for a supply-side revolution in Europe. Let me preface these remarks with the heading of "Reversal of Fortune," which is the title of a movie that was made about Claus von Bülow. I mention something about another movie in a moment. The "Reversal of Fortune" refers to the past half century and the fortunes of Europe and the United States. If you think back, those of you who are old enough, to the 1950s and 1960s, you think of all the problems the United States seemed to be having at that time, coming out of the war and recovery, defense spending, the cold war, rather high unemployment, very sluggish growth, while Europe was going ahead to beat the band, with rapid growth, miracle economies in Germany, Austria, Italy and others, stable prices, fixed exchange rates, very low unemployment. In a country like Switzerland you could count it on one or two fingers. These were marvelous decades. And also it

were marvelous two decades for Japan. From 1956 to 1971 Japan had this miraculous period of 9% economic growth and in some years 12% economic growth. Japan was the supermiracle economy, it held the all-time record for growth until China superseded it. In the last 25 years the 8% to 9% growth since 1978 exceeded that of the Japanese record.

However, the focus is what was wrong with the U.S.? Why sluggish? What was so great with Europe? Why was that good? Shift ahead now, skip the awful decade of 1970s, the decade of instability, to the 1980s and the 1990s. You see the U.S. charging ahead wonderfully from 1982 to 2002, a 20-year period of 42 million increasing jobs, rather high growth record in the last five years of the 20th century, 5% economic growth, so this low employment is increasingly in the decade of low inflation. But Europe was in main respects sluggish. And Japan in the 1990s became almost a basket case in terms of its performance and economic growth.

What was the cause of that major change? I think the quick answer to it is the supply-side revolution that began in the U.S. in 1981. In 1981 the highest tax rate and the highest bracket was 70%. When Ronald Reagan left office in 1989 it was 28%: from 70% to 28%, and there is a deregulation – systematic throughout the economy. The corporate tax rate was cut from 48% to 34% and that made the U.S. economy the most efficient in the world. It is true under George Bush I the top rate went up to 33%. And then under Clinton and Gore it went up to 39.6%. But still this was a very big improvement, coupled with the fact that the U.S. government weight in the economy was low, this makes the U.S. economy the most efficient big economy in the world. Look back to the 1950s: the U.S. economy had come out of the war and during the war the top tax rate had been put up to 92.5%, that is when Ronald Reagan says it is never worth its while to make more than two movies a year (a lot of people who did not like his movies said: thank God). But in the 1950s there was no correction of that. There was still 80% tax rate through the 1950s until you got the Kennedy/Johnson tax reform of 1964, which lowered it to 70%.

Where is Europe coming out? Europe had a very low weight of government spending in the economy: 25% to 30% in the 1950s and 1960s. By the 1980s and 1990s this got up to 50%. This is like a dead weight. It is not a completely dead weight because this extra spending does some good, it does good and bad. It redistributes income in ways that people like to see but nevertheless it is a wedge that restricts production and it just means that the return to capital has to be much higher in order to achieve that. So this is the major thing and this is what caused that major change in fortune.

Now, I think that Europe needs a supply-side revolution, – I think that is not just on the tax side but also on the regulation side, freeing up of labor markets. Everybody has mentioned this. The Lisbon Summit of the European Union has focused on two important things for Europe, two important goals: to make Europe most competitive in the world using the IT revolution and, second, to crack their labor markets and ease the problem of unemployment. That is what has to be done and that is a major important step for the existing EU countries to do, particularly because of the market situation and the duplication of the

problems that Europe has if they are imitated by the accession countries, this will create even more problems.

Michael Mussa has said this, which I completely agree with, the whole system of pensions when you had 7 or 8 workers for every pensioner in the 1950s and 1960s, it seemed easy to introduce all these new programs but they are not going to be viable in the future, when the ratio of workers to pensioners goes down to 2 to 1 and even less than that. There is going to be a crisis unless gradual changes are made in the retirement age and things like that. This is all I am going to say about that.

The other thing: the euro. Well, the euro is the most important event, maybe the second most important monetary event of the 20th century. I think that it is the most important monetary event maybe since the dollar took over from the pound that is the most important currency in the 20th century. That occurred probably in 1915. Or it is the most important event since the creation of the Federal Reserve, which was a tremendously important event because when this biggest economy in the world suddenly got a central bank, the power of the dollar could spread its wings and could become the dominant currency of the 20th century. This is a very important thing.

The advantages of the euro, I do not think I need to go into. I think every country in the euro area has a better monetary policy than before, I am not excluding Germany from this list. Every person in the euro area has now a world-class currency that can be used everywhere. People can go out through Europe without having to change and pay very high transaction fees and changing costs. You get the transparency pricing and you get the social benefits. But nevertheless nothing is perfect. What happened for the phase of the euro, measuring in part by the exchange rate with the dollar? From 1999 to 2001 the euro was too weak, it went down from 1.18 USD/EUR to 0.82 USD/EUR. And then from 2001 to 2003 it came back up and it went up to 1.18 USD/EUR.

What is going on? Two big economies, the euro economy and the dollar economy: both have price stability, 1%, 2% or 3% inflation, that

is a comparable price stability. Why do you need huge changes in exchange rates of 30% to 35% in two years? Is that going to be repeated over the whole course of the next future decade? How long is it going to take for the central banks of Europe and the U.S. to wake up and realize this is not going to be a good thing for the European economy nor for the American economy. I think the Americans were sluggish in pressing for a higher euro or a lower dollar, when the U.S. recession came. They pushed for the overvalued dollar to get down earlier than this would mitigate the recession. On the other hand, when the euro was going into the tank in the year 2000, the G-7 intervened in September 2000 recognizing that the market was not giving the cracked exchange rate and so that intervention was necessary but then they gave up after a very short time, when they decided that their intervention does not do any good; they are powerless

to affect the market. Of course, that is ridiculous because if central banks were powerless to affect the market, how did 11 currencies lock exchange rates in the middle of 1998, without causing any speculative attacks. And of course, it is only if you have bad intervention, incorrect and incoherent intervention that it will not work. But if you have correct intervention, it will work. There are four or five principles you have to do for a good intervention: you have to have a clear-cut ex-

change-rate target, you have to intervene in the spot as long as in the foreign market, it should be non-serialized intervention, it should be concerted. The only thing about the intervention at the time of the IMF meetings in Prague in the year 2000 was that it was concerted but it had none of these other goals. It was just an attempt to pretend that they were doing something when they were not doing it. Well, I think the euro made a big mistake by not pushing for a coherent floor to the euro, when the euro was going down – either 0.85 USD/EUR or even 0.90 USD/EUR. I think they are making a mistake now in letting the euro warp above 1.10 USD/EUR. I think this creates a threat of deflation in Europe. I think inflation targeting not paying attention to the exchange rate is a big mistake because people forget the lags and the effects of the exchange rate on inflation, just as the past weakness of the euro stirred up inflationary pressures. So if the high euro continues for a time, it is going to do countless damage in hurling up the European economy and it is a big mistake if it is allowed to continue. I think theoretically a closed economy, of course, cannot do exchange-rate targeting. There is no exchange rate. But once the economy gets down from 100% of the world economy, which is a closed economy, to 50% or 40%, it becomes more and more important. The euro economy is less than 20% of the world economy and as a result it is a great mistake to neglect the exchange rate. The exchange rate should be almost equally as important as any kind of inflation forecasting in the decisions made with respect to industries.

Well, the last thing I wanted to say is something about the accession countries. The euro was a great experiment and despite its defects, even if mistakes are being made by the European Central Bank it is still a great thing for the European countries. The accession countries, low-income countries, have a great opportunity to not just enter the European Union but enter the Economic and Monetary Union (EMU). I think it should be understood that the Europe of the future does not want a Europe of 25 countries with fluctuating exchange rates; it makes a mockery of the common market. The efficiency is to have a single currency now and that is already on the board.

My own guess is that Britain will finally bite the bullet and enter in maybe two years. It should do that in Britain's interest; it is not an issue of harmonizing the business cycle, the cyclical convergence between the British economy and the euro economy, it is a matter of finding the point of which Britain can negotiate the exchange rate throughout the euro area that it thinks would be useful. I think it is blasted by the events

of 1992, which had been misinterpreted. I think Britain anyway will come in. I think Britain should come in.

But the accession countries should all come in as soon as possible and they should come in as soon as the preconditions for entry into a monetary union have been made. These preconditions are the same as the preconditions of entering into a currency board system. You certainly have to have a unified government that wants to do it. You have to have control of monetary policy, obviously. You have to have inflation rate close to the European level because a country could start off with an 8% or 10% inflation rate, it could decide to zero in on the euro and use that as the disinflationary device for bringing it down. Britain did that when Britain went into the ERM in 1990, when it had a 10% inflation rate and staying into the inflation rate brought it down to 4%. That was a great plus. But if you do that, you are always left with a period that is a period of overvaluation at the end of the period because the lags in prices keep on going up and it is much better to get the inflation rate down before it. Above all, there must be control of the budget. There must be a balanced budget or as close to a balanced budget as the other members would accept from the standpoint of the Stability and Growth Pact. I leave that issue there.

The last issue I did not mention I am going to talk about it but I do think that coordination between the dollar and the euro is important. It is hard to get a European consensus on this because it is hard to find out who in Europe would make the decisions. But clearly in the U.S. it would be the Secretary of the Treasury, as the most important, and then secondly it would be the Chairman of the Fed, Alain Greenspan, to meet. Maybe at the IMF meetings they meet with the head of the European Central Bank, the Commissioner for Monetary Affairs, Pedro Solbes, and with the head of the Ecofin Council (that triumvirate would be the European equivalent) to work out some kind of arrangement so you are not going to get a cycle of 30% up and 30% down, which is damaging to every country in the world outside these areas, because it destabilizes financial markets, it undermines the burden of taxation in different areas and it changes the structural value of debt. It is just not a sensible monetary system. So work to mitigate that and then in the long run move back. Now that the euro has been created, Europe has got time to re-think itself, it can think a little bit outside the box of Europe and now it can start to think about reforming and restructuring the international monetary system. We really do not need to restructure it; we need to recreate it in a sense. We need to have a global currency. Paul Walker said a global economy needs global currency; I agree with him. But I am quoting him only to say it is not just ivory tower economy as simple as this, and this is the route to go now.

I close on little vignette not so important. I talked about supply-side reform. I began the discussion with a movie – "Reversal of Fortune." Now, I sometimes ask people this question: what is the most important movie ever produced? How am I defining importance in this? I am defining it in terms of contribution to GDP. What movie produced the biggest increase in GDP? Of course, we get "Birth of the Nation," "Godfather," "Star Wars,"

all these things. Of course, this is not the correct answer. The correct answer is the movie that was so important in the U.S. in creating that reversal of fortune, in creating and in implementing the supply-side revolution. You must bear in mind that in 1981 when the first tax bills were cut, there was a Democratic Congress and yet the Democratic Congress passed the first of these bills that created this supply-side revolution. It was the Democratic Congress that passed the second of these bills that lowered tax rates to the low level they were at. So what created that? What was that magic? Well, it was this movie. It was the movie "Taxi Driver."

Now you see the connection because that movie had starring in it Jodie Foster and it was that young man named Hinckley, who saw Jodie Foster, followed her and decided to impress her by assassinating the President. Without that attempt to assassinate President Reagan in April 1981, that bill – the Economic Recovery Act – of August 1981 would not have been passed. That is the bill that started the process of the great revolution that created I think 1, 2 or more trillion USD of GDP. That is why "Taxi Driver" gets the bill as the most important movie of all time. ❧

Wolfgang Schüssel
Bundeskanzler der Republik Österreich

# Eröffnungsstatement

Lieber Gouverneur Klaus Liebscher, meine sehr verehrten Damen und Herren! Ich bin nicht zum ersten Mal bei der Volkswirtschaftlichen Tagung, aber zum ersten Mal bin ich unter ziemlichem Zeitdruck, denn im Nationalrat ist die Budgetdebatte gerade voll im Gange. Heute haben wir mit den Budgetberatungen für ein Doppelbudget 2003/2004 begonnen. Gestern und vorgestern wurden die dafür notwendigen 90 Budgetbegleitgesetze beschlossen. Damit können wir nun vollinhaltlich in die Budgetdiskussion eintreten.

Sie haben ein sehr anspruchsvolles Thema für die diesjährige Volkswirtschaftliche Tagung gewählt, eines, das zur Zeit im Nationalrat sowohl die Regierungsparteien als auch die Opposition bewegt. Ihre Fragestellung lautet: Wie können wir in der aktuellen Situation Wachstum stimulieren? Dazu muss gesagt sein: Alle Probleme, die wir haben, werden dadurch verschärft, dass wir bereits das dritte Jahr in Folge kein oder ein nur sehr geringes Wachstum haben. Für Österreich als kleine offene Volkswirtschaft, deren Volkseinkommen sich zu etwa 50% aus Dienstleistungs- oder Güterexporten zusammensetzt, ist es beinahe unmöglich, dieser wirtschaftlichen Situation, in der selbst Länder wie Deutschland, die Schweiz und Holland eine Wachstumsprozentmarke gegen null aufweisen, zu entkommen. Was der österreichischen Wirtschaft jedoch hilft, ist

einerseits das sehr frühe Nützen der historischen Chance der EU-Erweiterung und andererseits die bereits erfolgte Eroberung von Marktnischen durch österreichische Unternehmer. Sehr viele Klein- und Mittelbetriebe in Österreich haben sich in diesem Bereich einen erstklassigen Ruf und einen erstklassigen Standortvorteil geschaffen. Das hilft, die Konjunktur zu stabilisieren. Aber auch durch den Export haben wir nun sehr lange einen Vorteil für uns lukrieren können.

Österreich war im vorigen Jahr jenes Land in der Europäischen Union, das den stärksten Exportzuwachs verzeichnen konnte. Wir haben darüber hinaus im vorigen Jahr zum ersten Mal seit 1945 einen Handelsbilanzüberschuss erzielt und damit eine für uns historische Wende geschafft und eine sehr gute internationale Positionierung zustande gebracht.

Ich möchte aber nun auf die von Ihnen gestellte Frage, was man tun könne, um die Wachstumsperspektiven zu verbessern, auch noch eine persönliche, subjektive Antwort geben. Volkswirtschaften, selbst große, aber umso mehr natürlich mittlere und kleine, können hier allein nicht sehr viel ausrichten. Der Spielraum, der einer Volkswirtschaft allein zur Verfügung steht, ist naturgemäß ein limitierter. Was könnten wir aber auf europäischer Ebene tun? Das ist doch einiges mehr, als die Kompetenzen der Finanzminister, Regierungschefs und Wirtschaftspolitiker zur Zeit umfassen. Das Erste, und das ist erfreulich, sind Zinsschritte, die Gott sei Dank jetzt von der Europäischen Zentralbank gemacht worden sind. Seit November vorigen Jahres ist der Leitzinssatz immerhin um 1¼ Prozentpunkte gesenkt worden. Auch wenn man das eine oder andere vielleicht schon früher hätte machen können, um auch einen größeren psychologischen Effekt zu erzielen, glaube ich doch, dass die Tendenz die richtige ist. Hinzu kommen die Beruhigung der Ölmärkte, der Energiemärkte sowie das Ende des Irak-Kriegs. Dies alles kann natürlich eine Volkswirtschaft allein nicht beeinflussen. Aber Europa kann hier durch kluges politisches und wirtschaftliches Handeln sicher einiges bewegen.

Der zweite Punkt ist, dass wir die Potenziale des Binnenmarktes nicht genug nutzen. Es gibt durchaus weite Bereiche, in denen der Binnenmarkt sehr gut funktioniert. In anderen Bereichen ist das Binnenmarktkonzept aber noch lange nicht umgesetzt. Die Theorie hierfür existiert, aber bei der praktischen Umsetzung werden immer noch nationale Einwände laut und Stolpersteine aufgebaut. Denken Sie nur an die Urheberrichtlinie, an die Übernahmerichtlinie in Deutschland oder denken Sie an die österreichische Stromlösung. Denken Sie an die Agrarverhandlungen, die plötzlich zur Chefsache beim Gipfel in Thessaloniki gemacht werden sollten. Denken Sie daran, dass es noch sehr viele Schrebergärten gibt, die überhaupt nicht der Öffnung des Binnenmarktes, wie sie eigentlich von dessen Gründern und Schöpfern angedacht worden ist, entsprechen. Darin liegen noch viele Potenziale und Wachstumsspielräume. Wenn Europa etwas mehr Zeit darauf verwenden würde, den alljährlichen Frühjahrsgipfel wirklich den

Fragen der Beschäftigungs-, Wirtschafts- und Wettbewerbspolitik zu widmen, dann wären wir weiter, als wir es heute sind. Um ein Beispiel für dieses Defizit zu nennen: Beim letzten EU-Gipfel haben wir, glaube ich, vier Stunden mit italienischen Milchquoten im Abtausch zu sonstigen höchst komplexen Feinheiten zugebracht. Die eigentlich zentralen Themen, wie zum Beispiel die Erhöhung unserer Wettbewerbsfähigkeit gegenüber den asiatischen Ländern und den USA, sind dabei zu kurz gekommen. Denken Sie daran, wie viele Möglichkeiten, Instrumente und Geld uns innerhalb der Europäischen Union zur Verfügung stehen, die man für verschiedene Zwecke einsetzen könnte. Meiner Meinung nach verwenden wir viel zu viel Geld für Konsumzwecke, auch innerhalb der Regionalprogramme der Europäischen Union und im Rahmen der Strukturprogramme. Wir setzen viel zu viel für bewahrende Dinge ein als für offensive, für investive und für zukunftsorientierte Gedanken. Denken Sie nur daran, dass wir mit viel Ach und Weh ein Forschungsprogramm der Europäischen Union in Bewegung gesetzt haben, das zwar beachtlich ist und sehr vieles bisher bewegt hat, aber dessen Volumen, wenn man die Zahlen betrachtet, für einen Markt von rund 500 Millionen Menschen lächerlich wenig ist. Dabei könnte man sich überlegen, ob man nicht etwa 50% der nicht ausgeschöpften Strukturprogramme ganz bewusst für eine Aufstockung der Forschungs- und Entwicklungsausgaben zur Verfügung stellen könnte, anstatt diese Rückflüsse einfach an die Finanzminister zurückzuverteilen. Meiner Meinung nach könnte hier ein bedeutender europäischer Mehrwert erzielt werden. Auch glaube ich, dass wir in weiteren Bereichen überlegen müssen, ob nicht Europa, um sich einen gewissen Spielraum erarbeiten zu können, sein System zur Finanzierung der Aufgaben der Union überdenken sollte. Ich weiß, das ist in manchen Ländern ein Tabu, teilweise auch in Österreich, aber ich bin überzeugt, dass eine Union, die handlungsfähig sein will, auch Spielräume im Bereich der Eigenmittel bekommen müsste. Es ist klar, dass diese limitiert sein müssen. Es darf nicht zu weiteren Belastungen der Bürger, der einzelnen Steuerzahler kommen. Die Handlungsfähigkeit der Union sollte aber auf jeden Fall sichergestellt sein. Sinnvoll und effektiv wäre ein Policy-Mix, der auch die Wettbewerbspolitik, die Strukturpolitik, die Forschungs-, Investitions- und Infrastrukturpolitik berücksichtigt.

Ein wesentlicher Punkt zu dem heutigen Thema ist auch: Was kann man in diesem Zusammenhang national tun? Ich glaube, dass wir viel stärker als in der Vergangenheit uns dem stellen müssen, was erfolgreiche europäische Volkswirtschaften vorgezeigt haben. Die Skandinavier sind hier, nicht ohne Grund, immer in der Spitzengruppe der Rankings der Europäischen Union zu finden. Das liegt daran, dass diese Länder zum Teil wesentlich früher und zum Teil auch in wesentlich schwierigeren Situationen, als wir dies heute sind, ihre Strukturreformen so angelegt haben, dass sie gegenwärtig bereits von der dadurch geschaffenen Dividende profitieren. Und eben diese Strukturreformen sind nun für all jene anderen Länder, die das noch nicht gemacht haben oder noch mitten in der Umsetzung sind, ein Thema,

dem sie sich stellen müssen. Das muss auf die Agenda. Als Beispiel möchte ich die aktuelle Situation in Österreich nennen. Glauben Sie mir, es ist auch in Österreich nicht leicht, ganz im Gegenteil: Vielleicht ist es in Österreich in mancher Hinsicht noch schwieriger, weil wir eben ein besonders konsensorientiertes Land sind. Auch mir ist es nicht immer leicht gefallen, von diesem gewohnten Konsens abzugehen. Es ist immer angenehmer und schöner, sich in diesem

weichen, sanften Konsens ohne Kritik von anderen zu bewegen. Überhaupt dann, wenn die Wahlresultate vor einem halben Jahr recht günstig gewesen sind. Ich bin aber der Meinung, dass das nicht mehr geht und dass man heute versuchen muss, politisches Kapital ganz bewusst und investiv einzusetzen, um etwas bewegen zu können. Das ist für mich staatspolitische Verantwortung.

Was sind nun diese notwendigen Strukturreformen? Einige der wesentlichsten Themen sind die Grundprobleme aller „aging societies“: die Überalterung der Gesellschaft, die längere Lebenserwartung, das Problem, zu wenig Beitragszahler zu haben und auch zu wenig Kinder, eine ungesunde demographische Struktur und dazu Erwartungen, die mit der Realität nicht Schritt halten können. Was haben wir gemacht? Wir haben jetzt zum ersten Mal durchgesetzt, dass das gesamte Lebenseinkommen als Basis für die Pensionsbemessung herangezogen wird. Bisher galten in Österreich die 15 besten Jahre als Basis für die Pensionsbemessung, bei den Beamten sogar nur das letzte Arbeitsjahr, von dem dann 80% des Verdienstes als Pension ausbezahlt wurden. Das wird jetzt schrittweise geändert: In einem Zeitraum von 25 Jahren werden wir alle Systeme auf eine 40-jährige Durchrechnung umstellen. Das gilt für alle, gleichgültig ob Arbeiter, ob Beamter, Bauer, Selbstständiger oder Angestellter.

Das zweite Grundprinzip ist, dass 45 Versicherungsjahre und Beitragsjahre zu einer Ersatzrate von 80% auf Basis der Lebensverdienstsumme führen. Bisher hat man in Österreich dieses Ergebnis nach 40 Berufsjahren mit einem jährlichen Steigerungsbetrag von 2% erreicht. Auch lassen wir die Frühpension schrittweise bis 2017 auslaufen. Jedoch bleibt auch danach die Möglichkeit bestehen, in Frühpension gehen zu können, allerdings nur dann, wenn man krank oder erwerbsunfähig ist. Was absolut korrekt und richtig ist. Für Frühpensionen werden versicherungsmathematische Abschläge von 4,2% zum Tragen kommen. Mögliche Verluste durch die Pensionsreform sind mit maximal 10% gedeckelt, wobei dieses Geringer-Sein-Werden der Pensionen relativ ist. Nicht eingerechnet sind nämlich die Lohnsteigerungen, die es selbstverständlich auch in den nächsten Jahren geben wird, oder Pensionssteigerungen. Es werden auch in Zukunft die Pensionen in absoluten Zahlen nicht niedriger sein als heute. Jedoch werden die Steigerungen wesentlich moderater ausfallen als früher. Diese Eckpunkte sind berechtigt. Es gibt auch interessanterweise dazu keinen einzigen Gegenvorschlag. Während all der Monate der Diskussionen mit den Sozialpartnern oder auch im Parlament wurde kein einziger

Abänderungsvorschlag auf den Tisch gelegt. Das zeigt deutlich, dass die Tendenz durchaus richtig ist, richtig sein muss, sonst hätte es inhaltliche Abweichungen gegeben.

Das zweite große Thema in Österreich ist genauso wie etwa in Deutschland oder Frankreich die Frage der Gesundheitsorganisation und deren Finanzierung. Auch dieser Themenschwerpunkt ist mit dem Problem von alternden Gesellschaften verbunden, fällt doch das meiste Geld, das man für die Gesundheit oder für die Krankenvorsorge ausgibt, in den letzten Lebensjahren an. Es ist daher auch richtig, dass wir in diesem Bereich nach mehr Gerechtigkeit trachten, um nicht immer stärker die aktive Bevölkerung belasten zu müssen. Daher haben wir die Pensionistenkrankenversicherungsbeiträge erhöht. Gleichzeitig haben wir versucht, hier die Lohnnebenkosten neutral zu halten, um den Standort Österreich nicht zu schwächen. Hinzu kommt, dass die Gesundheitsorganisation in Österreich ein relativ kompliziertes System darstellt. Klar ist jedoch, dass man sich den Luxus von miteinander konkurrierenden ständischen Krankenversicherungen dauerhaft nicht leisten wird können. Wir brauchen natürlich dezentral operierende, bürgernahe Gesundheitsorganisationen. Diese sollten aber einheitlich das Gut Gesundheit bewirtschaften und im Krankheitsfall Sicherheit geben. Diesem Thema müssen wir uns stellen, ebenso wie das nun in Deutschland oder in der Schweiz passiert. Jeden Tag liest man in den europäischen Zeitungen von ähnlichen Problemen. Klar ist aber auch, dass dieses Thema ein heißes Eisen sein wird.

Der dritte Schwerpunkt ist der Arbeitsmarkt. Was diesen Bereich betrifft, ist Österreich vielleicht wirklich eine kleine Insel der Seligen. Denn, was wenige wissen, in Österreich herrscht eine hohe Arbeitsmarktflexibilität. So haben wir beispielsweise keine Kündigungsschutzbestimmungen, wie sie etwa in Italien, in Spanien, in Frankreich, in Deutschland selbstverständlich sind. Wenn in Österreich eine Kündigung notwendig ist, dann müssen natürlich Fristen eingehalten werden, doch es gibt im Kündigungsfall keinen sozialen Widerspruch, der dazu führen könnte, dass eine Kündigung eigentlich

nicht möglich wäre. Der daraus resultierende Effekt ist, dass in Österreich im Vergleich zu anderen Ländern einerseits doppelt so viele Fluktuationen auf dem Arbeitsmarkt bestehen, dass wir aber andererseits trotzdem eine halb so hohe Arbeitslosenrate haben. Hinzu kommt, dass durch die Reformen im Arbeitsmarktservice die Verweildauer in der Arbeitslosigkeit wesentlich geringer ist als in Deutschland. Das heißt, dass es sich bei dem, was jetzt in Deutschland mühsam diskutiert wird, wie die Reform der Bundesanstalt für Arbeit, die kürzere Verweildauer in der Arbeitslosigkeit, um Bereiche handelt, die in Österreich relativ gut funktionieren. Verbesserungen bei der Qualifikation, dem Recht auf Weiterbildung und bei Umschulungen werden zusätzlich von uns vorangetrieben.

Der vierte Bereich, der künftig ein ganz wichtiges Thema in allen europäischen Ländern sein wird, ist der Umbau des Staatssektors. Wir haben –

vorsichtig formuliert – in Österreich eine relativ gut ausgebaute Bürokratie. Das hängt natürlich auch mit unserer Geschichte zusammen: Die Dogmen von Josef II., wie etwa „Alles Gute kommt von oben“ oder „Alles für das Volk, nichts durch das Volk“ sind wohlbekannt. Hinzu kommen natürlich auch eine frühere Bürokratie, die für ein viel größeres Reich gedacht war, und die föderale Struktur, die Österreich einerseits natürlich etwas an Effizienz nimmt, andererseits aber Bürgernähe garantiert. Ich bin der Meinung, dass jetzt die Zeit gekommen ist, sich diesem Thema zu stellen. Daher haben wir einen Österreich-Konvent einberufen. Seine Aufgabe ist es, ein bisschen nach dem Modell der europäischen Konventsdiskussion, eine neue Verfassung zustande zu bringen mit der Fragestellung, welche Gebietskörperschaft künftig welche Zuständigkeiten haben soll. Dabei sind einige Fragen, die in früheren Jahren nicht einmal andiskutiert werden durften, zum ersten Mal auf der Tagesordnung. Beispielsweise die Zusammenfassung sämtlicher Sicherheitseinrichtungen (Polizei, Gendarmerie, Zollwache). Ein weiterer Punkt ist der völlige Umbau im Bereich des Bildungssystems. Es sollen jene Bereiche, die die Länder machen können, auch auf Landesebene erledigt werden. Der Bund soll sich auf andere Themenschwerpunkte konzentrieren können. Auch die Frage der Neuorganisation des Bundesheeres ist in einer Zeit, in der wir von NATO-Ländern und von Freunden umgeben sind, ein absolutes Gebot der Stunde. Das bedeutet nicht, dass wir weniger Geld investieren wollen, denn mit 0,8% des BIP, die wir für Landesverteidigung inklusive Luftraumüberwachung ausgeben, sind wir sowieso am untersten Limit. Sinnvoll ist jedoch, sich zu überlegen, wie man dieses Geld besser und effizienter einsetzen könnte und auf welche Themen und Aufgaben man sich künftig vor allem hinsichtlich des internationalen Gleichklangs und im Zusammenwirken mit anderen Ländern konzentrieren soll. Wichtig in diesem Themenreigen ist natürlich auch die Modernisierung. Darin stecken viele Potenziale und Wachstumschancen. Als Beispiel möchte ich hier das gesamte Finanz-Online-System anführen. In diesem Bereich, beispielsweise Steuererklärungen über Internet und alle diese Dinge mehr, liegt Österreich in der europäischen Benchmarkliste sogar sehr weit vorne. Allerdings sind wir im Gesundheitsbereich noch ziemlich weit hinten. Obwohl ich nicht ganz verstehen kann, warum es fünf Jahre dauern muss, bis man eine Chipkarte für jeden Sozialversicherten zustande bringt, die eine einfache Abrechnung und Kontrolle der jeweiligen medizinischen Leistungen ermöglichen soll. Man hat es ja auch geschafft, beispielsweise eine Bankomatkarte klaglos zu betreiben.

Meiner Meinung nach hat jedes Land seinen eigenen Schwerpunkt bei diesen Strukturreformen, gemeinsam ist ihnen jedoch, dass sie sich in der Tendenz ähneln. Die zentrale Frage dabei ist: wie viel wollen, müssen und sollen wir für die Qualität unseres Sozialstaats ausgeben? Besonders wichtig ist dabei die Frage: Wie viel soll und muss für investive Ausgaben aufgewendet werden? Wir haben in Österreich eine Sozialquote, die etwa im EU-Durchschnitt liegt. Wir haben vor allem dank der privaten Unternehmer eine Investitionsquote, die deutlich

über dem EU-Schnitt liegt. Jedoch leisten wir beispielsweise im Pensionssystem einen weit über dem EU-Schnitt liegenden Beitrag. So geben wir etwa 14,5% unseres BIP für Pensionen aus, der EU-Schnitt liegt etwa 4% darunter. Wenn man diese Ausgaben um nur 2% senken würde, könnte man wahrscheinlich das größte Forschungs- und Bildungsoffensivprogramm in Bewegung setzen, das es in der Geschichte unseres Landes je gegeben hat. Dieses Ziel muss zuerst definiert, strategisch erkämpft, mit Hilfe der öffentlichen Meinung kommuniziert und dann auch umgesetzt werden. Denn dies ist kein Leintuch, das dehnbar ist, sondern ein endliches Konzept, das letztlich in Form einer Umverteilung der Prioritäten erstellt werden muss.

All diese Probleme, die wir in Europa, nicht nur in Österreich haben, sind lösbar. Davon bin ich überzeugt. Denken Sie daran, dass wahrscheinlich 99% der Weltbevölkerung liebend gerne unsere Probleme gegen die ihren eintauschen würden. Auch im geschichtlichen Vergleich gab es Schlimmeres als in der aktuellen Situation. In diesem Sinne glaube ich, dass wir uns die Kultur des Jammerns auf höchstem Niveau, wie das Politiker, Journalisten, Meinungsbildner, Sozialpartner so gerne pflegen, abgewöhnen müssen. Ich glaube auch überhaupt nicht, dass wir in eine finstere Zeit hineingehen. Wir brauchen aber jetzt die Ehrlichkeit, die Dinge anzusprechen, und dazu brauchen wir Mut und Wegbegleiter. Denn eines ist mir in Österreich aufgefallen: Entweder ist eine Reform brutal und daher sozial unannehmbar oder schon so abgemildert, dass sie keine Reform mehr ist. Dazwischen gibt es offensichtlich nichts. Das kann es aber nicht sein. Ich bin ein Schüler des heiligen Benedikt, der stets das rechte Maß, den rechten Zeitpunkt predigte.

Das ist etwas, was wir auch auf europäischer Ebene finden müssen. Europa hat sich verglichen mit den Zeiten von einst hinreißend entwickelt. Europa sollte daher auch den Mut finden, sich von den Detailproblemen, die man durchaus den

Experten, den Fachministern überlassen sollte, zu lösen und sich zu einer Art Generalbeobachtung auf europäischer Ratsebene aufzuschwingen. Der Europäische Rat könnte und sollte das strategische Diskussions- und Entscheidungsorgan sein, in dem man die wichtigen großen Linien fixiert. Das ist es, was wir auf europäischer Ebene mehr denn je brauchen: Mehr Zeit für Diskussionen, weniger Zeit für nationale Willkür oder nationale Besonderheiten. Kein finsteres Zeitalter steht uns daher bevor. Das 21. Jahrhundert könnte vielmehr ein europäisches Zeitalter werden. Zuvor muss Europa aber erst erwachen, wie es Peter Sloterdijk einst verlangt hat. Und zum Aufwachen gehört, dass man sich rührt, dehnt, streckt, das Richtige ausspricht und es letztlich auch tut. ❧

Nicholas F. R. Crafts

Nicholas F. R. Crafts
Professor
London School of Economics

# Prospects for European Economic Growth: A Historical Perspective[1])

## 1 Introduction

Throughout the years from the early 1950s to the mid-1990s labour productivity grew more rapidly in western Europe than in the United States. In the early postwar period, the United States had a large productivity lead but this was quickly reduced by rapid European catch-up growth during the golden age which ended in the early 1970s. In the next 20 years, both the United States and western Europe experienced a productivity growth slowdown but here too Europe had the faster growth and by the mid-1990s the leading European countries had overtaken the United States in terms of (purchasing power parity adjusted) real GDP per hour worked.

Since 1995, however, the United States has experienced a productivity growth revival whilst in western Europe productivity growth has weakened markedly such that in recent years the United States has outperformed. This reversal of relative growth out-

1 *Revised version of paper prepared for the 31st Economics Conference of the Oesterreichische Nationalbank, Vienna, June 12–13, 2003. I am grateful for helpful comments from the conference participants and especially my discussant Bernhard Felderer.*

comes has coincided with the disappearance of the Solow productivity paradox in the United States and is clearly related to greater American success in exploiting the productivity potential of information and communications technology (ICT). This raises the question whether the old pattern of faster productivity growth in Europe will reassert itself or whether we have entered a new era where American productivity growth will permanently be the faster of the two.

Several different angles have emerged in the literature. Compared with the golden age, Europe has become sclerotic with incentive structures that are now less favourable to productivity growth (Crafts, 1999). A more positive interpretation for Europe can be offered based on the lags involved in obtaining the productivity payoff from ICT, as is normal with a new general purpose technology (GPT). In this view, Europe is poised for a productivity growth acceleration when the weight of ICT capital in the economy becomes a bit larger and learning and accumulation of intangible organizational capital permit the realization of its productivity potential (Temple, 2002). But, the question then arises as to whether European institutions and policies are as conducive to exploiting the possibilities of ICT as are those of the United States, especially if reorganization of working practices and labour turnover is central to this endeavour (Feldstein, 2003).

Accordingly, European growth prospects can be evaluated by addressing the following questions.

– Are European incentive structures now less favourable to catch-up growth?
  or
– Is a European productivity surge just around the corner following an ICT diffusion lag?
  or
– Does ICT fit less well than earlier technologies with European social capability?

## 2 The Golden Age and Its Aftermath

The period between 1950 and 1973 is conventionally known as the golden age of European economic growth (Crafts, 1995a). Table 1 reports growth rates of real GDP per person in excess of 4% per year for most western European countries with the fastest growth experienced by countries with the lowest initial income levels, i.e., the most scope for catch-up growth.

Technology transfer undoubtedly played an important part in the golden age as a number of factors reduced the barriers to diffusion of American methods that had prevailed prior to World War II. These included integration of European markets, changes in relative factor prices, greater codification of knowledge, and the proliferation of multinational enterprise (Nelson and Wright, 1992). Nevertheless, catch-up growth had other important components. These comprised transitory aspects of growth – including the transfer of workers out of agriculture and postwar reconstruction – which exerted a powerful effect while they lasted through the 1950s and 1960s especially (Temin, 2002). Although there was a bounce back from the disruption of the world wars and interwar depression

Table 1

**Levels and Growth Rates of Real GDP/Hour Worked**

**a) Levels** (1990 Geary-Khamis dollars)

| 1950 | | 1973 | | 1995 | | 2002 | |
|---|---|---|---|---|---|---|---|
| Switzerland | 9.09 | Netherlands | 22.36 | Norway | 32.53 | Norway | 36.95 |
| Netherlands | 8.38 | Switzerland | 19.00 | France | 32.03 | France | 35.76 |
| UK | 7.49 | Denmark | 18.27 | Netherlands | 30.72 | Belgium | 35.33 |
| Denmark | 7.24 | France | 17.75 | Belgium | 30.42 | Netherlands | 31.92 |
| Sweden | 6.79 | Sweden | 17.27 | Italy | 27.42 | Ireland | 31.71 |
| Norway | 6.12 | Germany | 16.24 | Denmark | 27.15 | Denmark | 30.40 |
| Belgium | 5.87 | Belgium | 16.04 | Germany | 25.76 | Austria | 29.34 |
| France | 5.64 | Italy | 15.92 | Austria | 24.81 | Germany | 28.91 |
| Italy | 5.03 | Norway | 15.91 | Switzerland | 24.10 | Italy | 28.77 |
| Germany | 4.36 | UK | 14.31 | Sweden | 23.84 | Finland | 28.00 |
| Finland | 4.28 | Austria | 14.27 | UK | 23.71 | Sweden | 26.88 |
| Austria | 3.81 | Finland | 13.81 | Finland | 23.42 | UK | 26.27 |
| Ireland | 3.44 | Spain | 11.64 | Spain | 22.61 | Switzerland | 26.18 |
| Spain | 2.79 | Greece | 10.15 | Ireland | 22.35 | Spain | 21.97 |
| Greece | 2.43 | Ireland | 9.09 | Greece | 14.69 | Greece | 18.25 |
| Portugal | 2.14 | Portugal | 9.06 | Portugal | 14.57 | Portugal | 16.42 |
| USA | 10.9 | USA | 21.64 | USA | 28.42 | USA | 32.34 |

**b) Rates of Growth**

| 1950–73 | | 1973–95 | | 1995–2002 | |
|---|---|---|---|---|---|
| *% per year* | | | | | |
| Switzerland | 3.3 | Netherlands | 1.5 | Norway | 1.8 |
| Netherlands | 4.4 | Switzerland | 1.1 | France | 1.6 |
| UK | 2.9 | Denmark | 1.8 | Netherlands | 1.5 |
| Denmark | 4.1 | France | 2.7 | Belgium | 2.2 |
| Sweden | 4.1 | Sweden | 1.5 | Italy | 0.7 |
| Norway | 4.2 | Germany | 2.7 | Denmark | 1.6 |
| Belgium | 4.5 | Belgium | 2.9 | Germany | 1.7 |
| France | 5.1 | Italy | 2.5 | Austria | 2.4 |
| Italy | 5.1 | Norway | 3.3 | Switzerland | 1.2 |
| Germany | 5.9 | UK | 2.3 | Sweden | 1.7 |
| Finland | 5.2 | Austria | 2.5 | UK | 1.5 |
| Austria | 5.9 | Finland | 2.4 | Finland | 2.6 |
| Ireland | 4.3 | Spain | 3.1 | Spain | −0.4 |
| Spain | 6.4 | Greece | 1.7 | Ireland | 5.1 |
| Greece | 6.4 | Ireland | 4.2 | Greece | 3.2 |
| Portugal | 6.5 | Portugal | 2.2 | Portugal | 1.7 |
| USA | 3 | USA | 1.2 | USA | 1.9 |

*Source: Groningen Growth and Development Centre. Levels in 1950, 1973 and growth rates for 1950–73 and 1973–95 refer to West Germany. West German level in 1995 = 29.32.*

and protectionism, in general, European countries did far better than merely get back on a pre-existing growth trend (Mills and Crafts, 2000). Even so, at the end of the golden age there was still a substantial total-factor-productivity (TFP) gap between western Europe and the United States, especially in manufacturing. Despite the strength of catch-up growth, the postwar experience has not been one of convergence either in manufacturing or in GDP (Bernard and Durlauf, 1995; Bernard and Jones, 1996).

Catch-up in early postwar Europe was by no means automatic. It was based on having social capability (Abramovitz, 1986), that is, incentive structures that encouraged innovation and investment. A key feature of the period was that in many countries postwar settlements developed social contracts that facilitated wage moderation in return for high investment in a corporatist setting accompanied by trade liberalization (Eichengreen, 1996). The quid pro quo for greater exposure to the risks of international economy was enhanced social insurance (Rodrik, 1997).

Given the importance of institutions in growth outcomes it is not surprising that some countries did

better than others in catch-up growth during the golden age. An obvious contrast, suggested by table 1, is between the UK and West Germany where the former underperformed and the latter outperformed the growth achieved by countries with similar initial productivity levels. There were important differences between these two countries in terms of capital markets, where German firms were more likely to be characterized by dominant external shareholders who could internalize the benefits of monitoring management, of industrial relations where British firms were much more likely to be confronted by multiple trade unions whose opportunism inhibited sunk cost investments, and of vocational training systems where strong employers' associations in Germany addressed poaching problems and maintained strict qualification standards (Crafts, 2002). All these represented advan-

Table 2

**Catch-Up Growth Bonus Relative to USA**

| | 1950–1973 | 1973–1995 | 1995–2002 |
|---|---|---|---|
| | *% per year* | | |
| Austria | 2.25 | 1.18 | 0.44 |
| Belgium | 1.59 | 0.89 | −0.25 |
| Denmark | 1.16 | 0.54 | 0.15 |
| Finland | 2.10 | 1.25 | 0.61 |
| France | 1.67 | 0.62 | −0.44 |
| Germany | 2.07 | 0.86 | 0.32 |
| Greece | 2.69 | 1.84 | 1.67 |
| Ireland | 2.37 | 2.01 | 0.74 |
| Italy | 1.86 | 0.91 | 0.12 |
| Netherlands | 0.80 | −0.12 | −0.28 |
| Norway | 1.52 | 0.91 | −0.50 |
| Portugal | 2.78 | 2.01 | 1.68 |
| Spain | 2.57 | 1.60 | 0.70 |
| Sweden | 1.30 | 0.70 | 0.55 |
| Switzerland | 0.67 | 0.42 | 0.52 |
| UK | 1.10 | 0.57 | 0.57 |

*Source: Derived from coefficient on $Y_0$ in growth regression in Crafts and Kaiser (2003, table 5, equation 2) applied to initial relative labour productivity differences.*

Table 3

**Distortionary Tax Revenues**

| | 1955 | 1980 | 2000 |
|---|---|---|---|
| | *% of GDP* | | |
| Australia | 14.9 | 21.5 | 22.8 |
| Austria | 19.5 | 28.9 | 31.3 |
| Belgium | 15.3 | 33.0 | 34.0 |
| Canada | 13.5 | 24.9 | 27.1 |
| Denmark | 15.0 | 29.0 | 32.9 |
| Finland | 15.2 | 20.5 | 33.2 |
| France | . . | . . | 33.6 |
| Germany | 20.2 | 27.6 | 27.3 |
| Greece | . . | . . | 24.2 |
| Ireland | 11.8 | 21.3 | 19.5 |
| Italy | 17.1 | 22.0 | 30.1 |
| Japan | 11.4 | 22.3 | 22.0 |
| Netherlands | 17.9 | 35.6 | 29.4 |
| New Zealand | 20.2 | 25.0 | 23.0 |
| Norway | 15.8 | 30.9 | 26.4 |
| Portugal | 9.30 | 18.0 | 20.7 |
| Spain | . . | . . | 24.7 |
| Sweden | 18.2 | 38.5 | 43.0 |
| Switzerland | 12.9 | 24.9 | 28.7 |
| UK | 19.6 | 26.2 | 25.3 |
| USA | 19.1 | 26.3 | 24.9 |

*Source: OECD (1981 and 2002); distortionary taxes are defined as in Kneller et al. (1999).*

Table 4

**Employment Protection Index**

| | 1960–1964 | 1973–1979 | 1988–1995 |
|---|---|---|---|
| | *Scale from 0 to 2* | | |
| Australia | 0.50 | 0.50 | 0.50 |
| Austria | 0.65 | 0.84 | 1.30 |
| Belgium | 0.72 | 1.55 | 1.35 |
| Canada | 0.30 | 0.30 | 0.30 |
| Denmark | 0.90 | 1.10 | 0.90 |
| Finland | 1.20 | 1.20 | 1.13 |
| France | 0.37 | 1.21 | 1.41 |
| Germany | 0.45 | 1.65 | 1.52 |
| Ireland | 0.02 | 0.45 | 0.52 |
| Italy | 1.92 | 2.00 | 1.89 |
| Japan | 1.40 | 1.40 | 1.40 |
| Netherlands | 1.35 | 1.35 | 1.28 |
| Norway | 1.55 | 1.55 | 1.46 |
| New Zealand | 0.80 | 0.80 | 0.80 |
| Portugal | 10.00 | 1.59 | 1.93 |
| Spain | 2.00 | 1.99 | 1.74 |
| Sweden | 10.00 | 1.46 | 1.53 |
| Switzerland | 0.55 | 0.55 | 0.55 |
| UK | 0.16 | 0.33 | 0.35 |
| USA | 0.10 | 0.10 | 0.10 |

*Source: Nickell et al. (2002).*

tages for West Germany over the UK in the early postwar decades and this is confirmed by a regression of growth across European regions during the golden age (Crafts, 1995b).

After the early 1970s, European growth slowed down quite markedly. The end of the golden age had a number of root causes including the weakening of the positive transitory factors, diminishing returns to investment as the postwar boom went on and a significant reduction in American productivity growth which reduced the scope for catch-up growth. In fact for most countries this last factor may have been the most important, as a comparison of tables 1 and 2 suggests. As growth slowed down the postwar settlements came under severe pressure and became less capable of delivering wage moderation while capital found new exit options in a more globalized world. Nevertheless, the legacy of the European postwar settlements as they encountered the turbulent 1970s was a substantial increase in public spending (and taxation) relative to GDP and strengthened regulation of labour markets, as tables 3 and 4 report.

These developments were surely not favourable for European growth. The econometric estimates in Kneller et al. (1999) indicate that the rise in distortionary taxation in Sweden for example was sufficient to reduce the growth rate by about 2 percentage points per year – no doubt, partly by pushing economic activity into the shadow economy (Schneider and Enste, 2000). That said, it should be recognised that the rise in distortionary taxation in most European countries was much less than this and indeed left them with tax takes not much different from the United States which relies heavily on direct taxes and has no value-added tax.

Moreover, other developments pushed in the opposite direction. In particular, exposure to international competition continued to intensify for the tradables sector and by the 1980s the degree of market power in manufacturing in European countries was fairly similar to that in the United States, as table 5 reports. And European coun-

Table 5

**Price-Cost Margins, 1980–1992**

| | Manufacturing | Market services |
|---|---|---|
| Australia | 1.20 | |
| Belgium | 1.17 | 1.80 |
| Canada | 1.20 | 1.28 |
| Denmark | 1.15 | 1.64 |
| Finland | 1.24 | 1.24 |
| France | 1.16 | 1.48 |
| Germany | 1.21 | 1.34 |
| Italy | 1.18 | 1.96 |
| Japan | 1.26 | |
| Netherlands | 1.21 | 1.45 |
| Norway | 1.18 | |
| Sweden | 1.16 | 1.16 |
| UK | 1.15 | 1.37 |
| USA | 1.15 | 1.25 |

*Source: Oliveira-Martins et al. (1996). Market services refers to wholesale and retail trade, restaurants and hotels.*

tries also moved in the direction of deregulation of product markets, as is shown in table 6, albeit noticeably more slowly than the United States. Given the existence of agency problems in firms, deregulation and greater competition can be expected to speed up the adoption of new technologies (Aghion et al., 1997). Econometric evidence does indeed suggest that had European countries deregulated more energetically this would have been positive for TFP growth (Nicoletti and Scarpetta, 2003).

Deregulation of labour markets is, however, notoriously difficult as is made clear by the analysis in Alogoskoufis et al. (1995). Such reforms create gainers, losers and people who fear that they may be losers. It is quite likely that the last two groups form a majority and that it is not possible credibly to promise to compensate them. In such cases the majority will rationally oppose beneficial reforms and policy will exhibit a status quo bias (Fernandez and Rodrik, 1991).

Whatever may have been the difficulties as the golden age came to an end, it is important to bear in mind that from 1973 to 1995, western European countries (with the exception of Switzerland) achieved faster labour productivity growth than did the United States and catch-up continued, although more slowly than before. In most cases, the outperformance of the United States by European countries reported in table 1 was at least as great as predicted by growth regressions on the basis of the initial productivity gap.

Table 6

**Product Market Regulatory Reform**

| | 1978 | 1988 | 1993 | 1998 |
|---|---|---|---|---|
| | *Scale from 0 to 6* | | | |
| Australia | 4.5 | 4.2 | 3.3 | 1.6 |
| Austria | 5.2 | 4.5 | 3.9 | 3.2 |
| Belgium | 5.5 | 5.0 | 4.3 | 3.1 |
| Canada | 4.2 | 2.8 | 2.6 | 2.4 |
| Denmark | 5.6 | 5.5 | 4.0 | 2.9 |
| Finland | 5.6 | 4.8 | 4.0 | 2.6 |
| France | 6.0 | 5.7 | 4.7 | 3.9 |
| Germany | 5.2 | 4.7 | 3.8 | 2.4 |
| Greece | 5.7 | 5.7 | 5.5 | 5.1 |
| Ireland | 5.7 | 5.1 | 4.8 | 4.0 |
| Italy | 5.8 | 5.8 | 5.3 | 4.3 |
| Japan | 5.2 | 3.9 | 3.2 | 2.9 |
| Netherlands | 5.3 | 5.5 | 4.1 | 3.0 |
| New Zealand | 5.1 | 3.6 | 2.2 | 1.4 |
| Norway | 5.0 | 4.3 | 3.2 | 2.5 |
| Portugal | 5.9 | 5.4 | 4.9 | 4.1 |
| Spain | 4.7 | 4.6 | 4.2 | 3.2 |
| Sweden | 4.5 | 4.2 | 3.5 | 2.2 |
| Switzerland | 4.5 | 4.5 | 4.4 | 3.9 |
| UK | 4.3 | 3.5 | 1.9 | 1.0 |
| USA | 4.0 | 2.5 | 2.0 | 1.4 |

*Source: Nicoletti et al. (2001).*

Table 7

**TFP Levels in the European Union and the United States**

| | 1979 | 1989 | 1995 | 1999 |
|---|---|---|---|---|
| | *Index: EU = 100* | | | |
| USA | 120 | 113 | 110 | 112 |
| EU | 100 | 100 | 100 | 100 |
| Austria | 85 | 80 | 83 | 87 |
| Belgium | 103 | 111 | 111 | 111 |
| Denmark | 105 | 99 | 101 | 99 |
| Finland | 72 | 80 | 85 | 93 |
| France | 112 | 111 | 104 | 104 |
| Germany | 96 | 94 | 99 | 101 |
| Greece | 96 | 90 | 85 | 86 |
| Ireland | 76 | 87 | 97 | 105 |
| Italy | 114 | 112 | 112 | 109 |
| Luxembourg | 136 | 144 | 142 | 153 |
| Netherlands | 118 | 113 | 111 | 113 |
| Portugal | 81 | 91 | 89 | 90 |
| Spain | 84 | 91 | 86 | 85 |
| Sweden | 101 | 97 | 96 | 97 |
| UK | 100 | 99 | 100 | 99 |

*Source: O'Mahony (2002).*

Moreover, the EU countries generally continued to catch-up in terms of TFP until the mid-1990s, as table 7 reports. TFP growth was faster than in the United States in thirteen out of fifteen EU countries in 1979–89 and twelve out of fifteen EU countries in 1989–95. Whereas the TFP gap between the EU and the United States was 20% in 1979 by 1995 this had halved to 10%.

## 3 ICT and the Post-1995 US Productivity Growth Acceleration

The acceleration in American productivity growth has been much discussed and it is generally accepted that it owed a good deal to ICT. The episode has been analyzed by several authors using variants of growth accounting techniques. They show a distinct change of pace in the mid-1990s and attribute this mainly to the impact of ICT. The estimates in tables 8 and 9 are drawn from a study that focused especially on comparison between the EU countries and the United States and therefore has considerable advantages from the point of view of this paper but it will also be convenient to refer to other studies framed in slightly different ways to fill out the picture.

Growth accounting potentially captures the contribution of ICT to labour productivity growth through three channels, namely, the growth of ICT capital in use (ICT capital deepening), TFP growth in ICT production, and TFP spillovers, i.e., externalities that raise productivity additional to the remunerated payoff to investment in ICT capital. These spillovers are hard to measure but are sometimes thought to be reflected in accelerations in TFP growth in ICT-intensive sectors. A practical problem in the use of growth accounting to examine relatively short periods is that the results may be influenced by business cycle impacts on utilization of factors of production and be sensitive to the precise period chosen for analysis.

Table 8 shows that the United States has devoted a substantial proportion of its investment to ICT in the past 20 years and that the share of profits accruing to ICT capital has risen steadily over time with the result that ICT capital stock growth has received a higher weight over time in growth accounting exercises. Table 9 reports estimates

Table 8

**ICT Shares in Investment and Capital Income**

| | 1985 | 1990 | 1995 | 2000 |
|---|---|---|---|---|
| | % | | | |
| **Investment** | | | | |
| USA | 21.3 | 22.8 | 25.6 | 29.6 |
| EU | 11.6 | 12.2 | 14.1 | 17.1 |
| Austria | 9.6 | 10.0 | 10.4 | 12.8 |
| Denmark | 9.0 | 11.1 | 16.1 | 19.1 |
| Finland | 5.5 | 7.0 | 14.2 | 17.5 |
| France | 9.5 | 8.5 | 9.9 | 13.1 |
| Germany | 13.9 | 13.9 | 13.9 | 19.2 |
| Ireland | 12.3 | 8.3 | 16.0 | 14.6 |
| Italy | 12.5 | 14.2 | 14.8 | 16.7 |
| Netherlands | 14.6 | 15.5 | 16.4 | 20.9 |
| Portugal | 11.9 | 10.6 | 11.5 | 11.4 |
| Spain | 9.4 | 11.9 | 9.3 | 10.1 |
| Sweden | 8.7 | 9.7 | 15.8 | 21.6 |
| UK | 11.0 | 13.8 | 20.9 | 22.0 |
| **Capital Income** | | | | |
| USA | 14.9 | 16.9 | 18.4 | 19.3 |
| EU | 7.0 | 8.9 | 9.4 | 10.0 |
| Austria | 6.7 | 7.7 | 8.7 | 8.3 |
| Denmark | 4.0 | 6.3 | 7.1 | 9.5 |
| Finland | 3.8 | 5.8 | 6.1 | 7.6 |
| France | 6.2 | 6.8 | 6.4 | 7.2 |
| Germany | 8.3 | 10.0 | 10.4 | 10.0 |
| Ireland | 7.6 | 7.1 | 6.7 | 8.1 |
| Italy | 8.0 | 10.3 | 9.5 | 9.8 |
| Netherlands | 8.5 | 9.8 | 10.1 | 11.5 |
| Portugal | 6.3 | 7.3 | 10.8 | 10.0 |
| Spain | 7.4 | 10.8 | 9.9 | 8.3 |
| Sweden | 4.7 | 8.1 | 9.3 | 14.6 |
| UK | 5.8 | 9.6 | 11.8 | 13.6 |

*Source: van Ark et al. (2003, tables A1D and A4D).*

that ICT capital deepening contributed 0.4 percentage point to growth in 1990–5 but almost double that at 0.75 percentage point in 1995–2000. Estimates relating to the private non-farm sector find a rather larger acceleration in the contribution of ICT capital-deepening, perhaps as large as 0.6 percentage point per year (Oliner and Sichel, 2002).

During the 1990s there was spectacular technological progress in ICT production, which encouraged ICT capital-deepening as ICT equipment became much cheaper, but also contributed directly to growth as Moore's law continued to apply and ICT production became larger relative to GDP in the United States. Table 9 records an increase in this growth contribution from 0.25 percentage point per year in 1990–5 to 0.43 percentage point per year in 2000 – again estimates for the non-farm business sector are higher with an increase from 0.29 to 0.58 percentage point between 1990–5 and 1995–2000 according to Basu et al. (2003).

The estimates in table 9 show an increase in the contribution of other TFP growth from 0.36 to 0.78 percentage point between 1990–5 and 1995–2000 and again the estimate for the non-farm business sector is higher showing an increase from 0.58 to 1.46 percentage point (Basu et al., 2003). Here there is some scope to argue what might be involved. It seems likely that this acceleration owes at least something to cyclical influences because extending the period forward to include 2001 eliminates much of the apparent increase (Oliner and Sichel, 2002). On the other hand, sec-

Table 9

**Contributions to Labour Productivity Growth**

| | ICT | | | Other | | | Growth of GDP/HW |
|---|---|---|---|---|---|---|---|
| | Capital | TFP | Total | Capital | TFP | Total | |
| | *Percentage points per year* | | | | | | |
| **1990–1995** | | | | | | | |
| USA | 0.40 | 0.25 | 0.65 | 0.19 | 0.36 | 0.55 | 1.20 |
| EU | 0.28 | 0.14 | 0.42 | 1.05 | 0.98 | 2.03 | 2.45 |
| Austria | 0.21 | 0.08 | 0.29 | 1.03 | 0.36 | 1.39 | 1.68 |
| Denmark | 0.25 | 0.05 | 0.30 | 0.70 | 1.56 | 2.26 | 2.56 |
| Finland | 0.23 | 0.16 | 0.39 | 0.84 | 1.07 | 1.91 | 2.30 |
| France | 0.21 | 0.17 | 0.38 | 1.11 | −0.11 | 1.00 | 1.38 |
| Germany | 0.33 | 0.14 | 0.47 | 1.18 | 1.22 | 2.40 | 2.87 |
| Ireland | 0.21 | 1.17 | 1.38 | 0.43 | 1.79 | 2.22 | 3.60 |
| Italy | 0.29 | 0.13 | 0.42 | 1.09 | 1.49 | 2.58 | 3.00 |
| Netherlands | 0.30 | 0.07 | 0.37 | 0.30 | 0.36 | 0.66 | 1.03 |
| Portugal | 0.28 | 0.02 | 0.30 | 1.88 | 1.34 | 3.22 | 3.52 |
| Spain | 0.20 | 0.09 | 0.29 | 1.11 | 0.89 | 2.00 | 2.29 |
| Sweden | 0.25 | 0.14 | 0.39 | 0.61 | 0.86 | 1.47 | 1.86 |
| UK | 0.36 | 0.21 | 0.57 | 0.88 | 1.20 | 2.08 | 2.65 |
| **1995–2000** | | | | | | | |
| USA | 0.75 | 0.43 | 1.18 | 0.25 | 0.78 | 1.03 | 2.21 |
| EU | 0.40 | 0.20 | 0.60 | 0.4 | 0.43 | 0.83 | 1.43 |
| Austria | 0.37 | 0.10 | 0.47 | 1.06 | 1.53 | 2.59 | 3.06 |
| Denmark | 0.41 | 0.06 | 0.47 | 0.71 | 0.66 | 1.37 | 1.84 |
| Finland | 0.33 | 0.17 | 0.50 | −0.22 | 3.01 | 2.79 | 3.29 |
| France | 0.32 | 0.22 | 0.54 | 0.33 | 0.48 | 0.81 | 1.35 |
| Germany | 0.37 | 0.16 | 0.53 | 0.48 | 0.75 | 1.23 | 1.76 |
| Ireland | 0.68 | 3.02 | 3.70 | 0.93 | 1.25 | 2.18 | 5.88 |
| Italy | 0.38 | 0.15 | 0.53 | 0.49 | 0.10 | 0.59 | 1.12 |
| Netherlands | 0.55 | 0.10 | 0.65 | −0.35 | 0.11 | −0.24 | 0.41 |
| Portugal | 0.30 | 0.03 | 0.33 | 1.27 | 0.89 | 2.16 | 2.49 |
| Spain | 0.17 | 0.12 | 0.29 | 0.19 | −0.26 | −0.07 | 0.22 |
| Sweden | 0.50 | 0.09 | 0.59 | 0.50 | 0.87 | 1.37 | 1.96 |
| UK | 0.65 | 0.32 | 0.97 | 0.62 | 0.17 | 0.79 | 1.76 |

*Source: van Ark et al. (2003, tables 19, 20 and A7). ICT capital refers to contribution of ICT capital-deepening; ICT TFP refers to TFP growth in ICT production.*

tors intensive in the use of ICT account for a disproportionate share of labour productivity growth during the period suggesting that TFP spillovers were also part of the story (Stiroh, 2002).

Both macro- and micro-level analysis suggest that there are substantial lags in obtaining the productivity payoffs from investments in ICT. The much higher long-term returns reported by Brynjolfsson and Hitt (2000) reflect the time that it takes to follow up investment in ICT with changes in organizational structures and to learn about the capabilities of ICT in specific business settings. Moving to new work practices such as operating with fewer layers of management, introducing flexible job responsibilities, decentralization of work structures and greater use of teamwork has been fundamental to high productivity outcomes (OECD, 2001).

Overall, there can be no doubt that the United States has experienced a strong improvement in its productivity growth from the advent of ICT notwithstanding the misdirected investments and excessive optimism of the bubble years.

## 4 Will Europe Experience an ICT Catch-Up?

Tables 8 and 9 show that the EU has lagged some way behind the United States in ICT investment and in the contribution made by ICT to labour productivity growth. For all EU countries except Ireland, ICT production accounts for a much smaller proportion of GDP than in the United States and this is reflected in a lower TFP contri-

bution. This may reflect comparative advantage and, as such, represents a consequence of different specialization in a globalized economy. However, a more important part of the difference in ICT growth contributions between the EU and the United States comes from capital-deepening and reflects consistently higher investment in ICT by the United States. In 2000 total ICT investment as a share of EU GDP was only 2.9% ( similar to the share achieved by the United States as early as 1980 (van Ark et al., 2003, table 5). Understanding why this shortfall in ICT investment has occurred is central to assessing the prospects for the EU to experience an ICT-driven productivity revival.

Clearly, incentive structures in the EU are in some ways less favourable to catch-up growth and rapid technology transfer than in the golden age. In particular, tables 3 and 4 showed evidence of higher direct taxes and stronger employment protection. These policies were already in place by 1980, however, and did not constitute an obstacle to continued catch-up of the United States by the EU through the mid-1990s. And, some of the distortions in European labour markets, which raise labour costs and have promoted capital intensive modes of operation specially in market services, might be expected to have encouraged the rapid substitution of ICT capital for labour by EU countries.

An obstacle to the rapid diffusion of computer technology in the world as a whole is an inadequate supply of human capital, a complementary factor of production (Caselli and Coleman, 2001). This does not generally apply in the EU countries and, as table 10, shows in some cases, notably among the Scandinavian countries, the supply of high quality labour for work in the knowledge economy, considerably exceeds that in the United States.

Table 10

**Share of Labour Force at Level 4/5 of Quantitative Literacy**

| | % |
|---|---|
| Australia | 19.1 |
| Belgium | 22.6 |
| Canada | 22.2 |
| Denmark | 28.4 |
| Finland | 19.7 |
| Germany | 23.5 |
| Ireland | 16.2 |
| Netherlands | 19.9 |
| New Zealand | 17.2 |
| Norway | 27.4 |
| Portugal | 5.2 |
| Sweden | 35.8 |
| Switzerland | 18.8 |
| UK | 18.6 |
| USA | 22.5 |

*Source: OECD (2000, table 2.2). "Levels 4/5 describe respondents who demonstrate command of higher-order information processing skills" (OECD, 2000, p. xi).*

On the other hand, as recently as the mid-1990s ICT equipment was much more expensive in EU countries than in the United States. Even in the UK where the differential was least prices were about 30% higher than in the United States, in Germany the gap was 45% whilst in Portugal it was as high as 75% (OECD, 1995). These price differentials reflect barriers to trade, taxes and weak competition and suggest that European slowness to follow the American lead in regulatory reform may have been unfortunate. The demand for computers has been shown to be quite price-sensitive (Tevlin and Whelan, 2000) and the implication of high ICT equipment prices was a delay in accumulating the knowledge and intangible organizational capital necessary for exploiting the potential of (and enhancing the returns to) ICT.

After a slow start ICT investment in the EU increased quite appreciably from 2.2% of GDP in 1995 to 2.9% in 2000 whereas in the first half of the 1990s there was no increase in

this ratio. International cross-sectional evidence suggests that economy-wide TFP growth is positively related to ICT expenditure but with a substantial lag. The results obtained by Haacker and Morsink (2002) suggest the increase in investment after 1995 should lead to an increase in EU TFP growth of about 0.5 percentage point by 2005.

In fact, the relationship between ICT investment and economywide TFP growth may be more complicated than this. If success in exploiting the potential of ICT involves the diversion of effort into (unmeasured) investment in accumulating intangible organizational capital then while there will be a positive relationship between lagged TFP growth and ICT investment but a negative correlation between contemporary TFP growth and ICT investment. This is the pattern revealed by sectoral experience in the United States where strong TFP growth after 1995 is positively related to ICT investment in the 1980s but negatively related to ICT investment in the 1990s (Basu et al. 2003, table 12). On this interpretation the surge in ICT investment in the EU in the late 1990s may not only imply a future acceleration in TFP growth but be partly responsible for the reduction in TFP growth observed after 1995.

The relative weakness of investment in ICT in Europe seems also to be related to regulation. Table 11 reports regression results from Gust and Marquez (2002) which show that ICT investment but not investment in general is negatively related to employment protection legislation. This result is shown to be robust to a number of alternative specifications and estimation methods. The rationale is that employment protection legislation, which raises firing costs, is an obstacle to the upgrading the labour force and the reorganizing of work practices which

Table 11

**Cross-Section Estimates of IT Expenditure and Aggregate Investment Equations**

| | Investment | IT Expenditures |
|---|---|---|
| Constant | 27.65 | −4.30 |
| | (6.40) | (1.55) |
| Years of schooling | 0.54 | 0.26 |
| | (0.30) | (0.04) |
| % Employment in services | − 0.22 | 0.09 |
| | (0.10) | (0.02) |
| Employment protection legislation | 0.82 | −0.18 |
| | (0.53) | (0.10) |
| Regulatory burdens | − 0.31 | −0.18 |
| | (0.62) | (0.12) |
| Adjusted R-squared | 0.15 | 0.81 |

*Source: Gust and Marquez (2002). Heteroscedasticity-corrected standard errors in parentheses. Dependent variables are measured as percentage of GDP.*
*Note: The Employment Protection Legislation Index is on a scale of 0 to 6 rather than the 0 to 2 in table 5.*

are central to obtaining the payoff from ICT. The regression may also help to explain why the UK has a relatively strong ICT capital deepening growth contribution in table 9.

Thus, there is some reason to think that ICT is less compatible with European incentive structures than investment in other types of capital. Nevertheless, it is important not to exaggerate the importance of this result. The estimated coefficient on employment protection suggests that if the EU were as laissez-faire in this regard as the United States rather less than half of the gap in the ICT investment/GDP ratio would be eliminated. And the regression in table 11 suggests that high investment in human capital can compensate for strict employment protection which may explain why Sweden has had much better than average ICT capital-deepening.

## 5 Conclusions

European growth prospects would be much better if an American-style success in ICT seemed to be imminent. The historical record suggests that convergence with the United States

is not automatic and may even be somewhat unlikely. On the other hand, prior to the mid-1990s Europe had a strong record of catch-up and faster productivity growth than the United States. Of itself, this implies that simplistic arguments about European sclerosis are inadequate. The taxation and regulation that was imposed in the 1960s and 1970s was not so out of line with the United States as to preclude catch-up, although there probably was a cost in lower growth.

More nuanced hypotheses concerning regulation do, however, have some validity. In particular, it appears that employment protection regulation and the high price of ICT capital goods held back investment in ICT capital deepening in the 1980s. ICT investment seems to have been unusually sensitive to these factors and thus European policies exacted a price in the context of a new technological era that would not have been paid previously. Given the long lags that appear to characterize the realization of productivity gains from this new general purpose technology the adverse implications were probably felt more in the 1990s than the 1980s.

Although Europe has moved in the direction of deregulation and some countries have a strong advantage over the United States in human capital, the continued strength of employment protection which is prone to status quo bias has continued to act as a drag on ICT capital-deepening. Nevertheless, ICT investment strengthened during the 1990s and this is likely to boost TFP growth appreciably in the near future. ❧

## References


**Abramovitz, M. 1986.** Catching Up, Forging Ahead, and Falling Behind. In: Journal of Economic History 36. 385–406.

**Aghion, P., M. Dewatripont and P. Rey. 1997.** Corporate Governance, Competition Policy and Industrial Policy. In: European Economic Review 41. 797–805.

**Alogoskoufis, G., C. Bean, G. Bertola, D. Cohen, J. Dolado and G. Saint-Paul. 1995.** Unemployment: Choices for Europe. London: CEPR.

**van Ark, B., J. Melka, N. Mulder, M. Timmer and G. Ypma. 2003.** ICT Investments and Growth Accounts for the European Union. Groningen Growth and Development Centre Research Memorandum GD-56. Groningen: University of Groningen.

**Basu, S., J. G. Fernald, N. Oulton and S. Srinivasan. 2003.** The Case of the Missing Productivity Growth. NBER Macroeconomics Annual. Cambridge, Mass.: The MIT Press (forthcoming).

**Bernard, A. B. and S. N. Durlauf. 1995.** Convergence in International Output. In: Journal of Applied Econometrics 10. 97–108.

**Bernard, A. B. and C. I. Jones. 1996.** Comparing Apples to Oranges: Productivity Convergence and Measurement Across Industries and Countries. In: American Economic Review 86. 1216–1238.

**Brynjolfsson, E. and L. M. Hitt. 2000.** Beyond Computation: Information Technology, Organizational Transformation and Business Performance. In: Journal of Economic Perspectives 14(4). 23–48.

**Caselli, F. and W. J. Coleman. 2001.** Cross-Country Technology Diffusion: The Case of Computers. NBER Working Paper 8130.

**Crafts, N. F. R. 1995a.** The Golden Age of Economic Growth in Western Europe, 1950–1973. In: Economic History Review 48. 429–447.

**Crafts, N. F. R. 1995b.** The Golden Age of Economic Growth in Postwar Europe: Why Did Northern Ireland Miss Out? In: Irish Economic and Social History 22. 5–25.

**Crafts, N. F. R. 1999.** Economic Growth in the Twentieth Century. In: Oxford Review of Economic Policy 15(4). 18–34.

**Crafts, N. F. R. 2002.** Britain's Relative Economic Performance, 1870–1999. London: Institute of Economic Affairs.

**Crafts, N. and K. Kaiser. 2003.** Long-Term Growth Prospects in Transition Economies: A Reappraisal. In: Structural Change and Economic Dynamics (forthcoming).

**Eichengreen, B. 1996.** Institutions and Economic Growth: Europe After World War II. In: Crafts, N. F. R. and G. Toniolo (eds.). Economic Growth in Europe Since 1945. Cambridge: Cambridge University Press. 38–72.

**Feldstein, M. 2003.** Why is Productivity Growing Faster? NBER Working Paper 9530.

**Fernandez, R. and D. Rodrik. 1991.** Resistance to Reform: Status Quo Bias in the Presence of Individual-Specific Uncertainty. In: American Economic Review 81. 1146–1155.

**Gust, C. and J. Marquez. 2002.** International Comparisons of Productivity Growth: The Role of Information Technology and Regulatory Practices. Board of Governors of the Federal Reserve System International Finance Discussion Paper 727.

**Haacker, M. and Morsink, J. 2002.** You Say You Want a Revolution: Information Technology and Growth. IMF Working Paper 02/70.

**Kneller, R., M. F. Bleaney and N. Gemmell. 1999.** Fiscal Policy and Growth: Evidence from OECD Countries. In: Journal of Public Economics 74. 171–190.

**Mills, T. C. and N. F. R. Crafts. 2000.** After the Golden Age: A Long Run Perspective on Growth Rates that Speeded Up, Slowed Down and Still Differ. The Manchester School 68. 68–91.

**Nelson, R. R. and G. Wright. 1992.** The Rise and Fall of American Technological Leadership. In: Journal of Economic Literature 30. 1931–1964.

**Nickell, S., Nunziata, L., Ochel, W. and Quintini, G. 2002.** Why Do Jobless Rates Differ? CESifo Forum 1. 50–59.

**Nicoletti, G., A. Bassanini, E. Ernst, S. Jean, P. Santiago and P. Swaim. 2001.** Product and Labour Market Interactions in OECD Countries. OECD Economics Department Working Paper 312.

**Nicoletti, G. and S. Scarpetta. 2003.** Regulation, Productivity and Growth: OECD Evidence. OECD Economics Department Working Paper 347.

**Organisation for Economic Co-operation and Development – OECD. 1981.** Long Term Trends in Tax Revenues of OECD Member Countries. Paris: OECD.

**OECD. 1995.** Purchasing Power Parities and Real Expenditures. Paris: OECD.

**OECD. 2000.** Literacy in the Information Age. Paris: OECD.

**OECD. 2001.** Knowledge, Work Organization and Economic Growth. Paris: OECD.

**OECD. 2002.** Revenue Statistics 1965–2001. Paris: OECD.

**Oliner, S. D. and D. E. Sichel. 2002.** Information Technology and Productivity: Where Are We Now and Where Are We Going? Federal Reserve Board. Mimeo.

**Oliveira-Martins, J., S. Scarpetta and D. Pilat. 1996.** Mark-Up Pricing, Market Structure and the Business Cycle. In: OECD Economic Studies 27 (2). 71–105.

**O'Mahony, M. 2002.** Productivity in the EU, 1979–1999. London: HM Treasury.

**Rodrik, D. 1997.** Has Globalization Gone Too Far? Washington, DC: Institute for International Economics.

**Schneider, F. and D. H. Enste. 2000.** Shadow Economies: Size, Causes and Consequences. In: Journal of Economic Literature 38. 77–114.

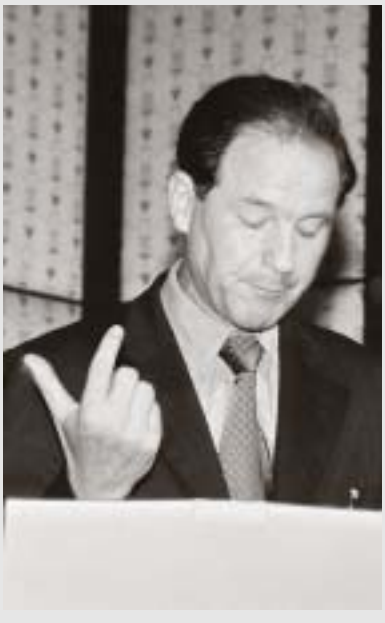
**Stiroh, K. J. 2002.** Information Technology and the US Productivity Revival: What Do the Industry Data Say? In: American Economic Review 92. 1559–1576.

**Temin, P. 2002.** The Golden Age of European Growth Reconsidered. In: European Review of Economic History 6. 3–22.

**Temple, J. 2002.** An Assessment of the New Economy. CEPR Discussion Paper 3597.

**Tevlin, S. and K. Whelan. 2000.** Explaining the Investment Boom of the 1990s. Board of Governors of the Federal Reserve System. Finance and Economics Discussion Paper 2000-11.

Norbert Zimmermann



Norbert Zimmermann
CEO
Berndorf AG

# Why Is Growth in Europe Lagging Behind?

## 1 Which Part of Europe Is the Laggard?

According to the latest *forecasts,* EU-wide annual GDP growth will average 1.1% in 2003, against 2.2% in the U.S.A. and 0.7% in Japan.

*The spread in the EU is wide*. On the lower end of the range are Germany with an annual GDP growth of 0.4% and the Netherlands with 0.5%. On the high end we find Spain with a growth rate of 2.1%, the U.K. with 1.8% and Sweden with 1.5%.

The European laggards are Germany, the Netherlands, Austria, Italy and France.

This disastrous performance has to be benchmarked with the Presidency conclusions of the Lisbon European Council March 2000 saying "the *Union* has today set itself a new strategic goal for the next decade: to become *the most competitive and dynamic* knowledge-based economy in the world capable of *sustainable economic growth with more and better jobs* and greater social cohesion."

*UNICE,* the European umbrella organization of industrial and employers' federations of 27 countries, represents more than 16 million companies; it evaluates the 2003 status of implementation of the Lisbon strategy as follows:

"The Lisbon strategy enters its third year and the European economy is failing to break out of its lethargic state.

*Growth rates are not taking off*. Consumers lack confidence. Entrepreneurs are postponing investments, watching the uncertain economic climate mistrustfully. Rigidities in key markets persist. And excessive labor costs are adding to the *gloomy employment situation*. Lower costs and taxes for business, simplicity and less red tape are necessary.

Several large countries in the Euro zone are failing to abide by the rules of the Stability and Growth Pact and thus

undermining political credibility of the whole zone.

This does not have to be so! Although the world economy has slowed down overall, our main competitor the United States, is still experiencing higher growth rates!"

## 2 How Can the Lisbon Strategic Goals Be Achieved?

– *Doing business in Europe must be much easier.*
Deregulation in major business areas and simplier labor rules should create a better entrepreneurial climate.
Due to overregulation, administrative and bureaucratic burdens are still high.
Tax incentives should be given as rewards for entrepreneurial risk taking. Entrepreneurs have to get access to financing and a qualified workforce. To this end, businesses require better functioning capital markets; also, the mobility of qualified employees has to be supported.
– *The quantity and the quality of R&D spending have to be increased to enhance the potential for innovation*.
Governments should use public financing more effectively and align national research policies with EU policies. The EU must increase R&D expenditures and use the funds more efficiently. An affordable Community patent has to be established immediately.
– *Public communication must be improved in order to restore confidence in technology and research*.
– *The infrastructure essential for an information society has to be implemented*.
The big mistake of charging huge tax loads on communication technologies should be remedied. The prices of licenses almost killed a dynamic development of European communication technologies.
– *The implementation of the packages of measures to improve the European transport networks should be completed*.
– *As regards employment and education strategies*, job creation should be promoted through encouraging entrepreneurship. More than 90% of German companies are small and medium-sized enterprises (SMEs), provide 70% of all jobs in the country. Flexible forms of work should be encouraged and mobility enhanced.
Further crucial measures include the promotion of active ageing, education programs for older employees as well as the reduction of the regulatory burden on labor and indirect labor cost, particularly for older employees. Moreover, unemployed people should be encouraged to attend training programs before returning to the labor market. It is vital to build bridges

between education world and work and to promote apprenticeship.
– *The pension systems require modernization*.

Economic stability for future generations should be the main goal of reforms.

## 3 The Danger of Inflation

*The ECB* has to quickly change the strategy of relatively high interest rates and restrictive monetary policy.

The interest rates in the euro area are currently 2.5%, whereas they are as low as 1.25% in the U.S.A.

The EU laggards – *particularly Germany – are heading into deflation*.

The way to measure inflation has to be redesigned because the new EU Member States will need to increase income and raise costs; thus, the Member States of an enlarged EU will pursue different goals.

The British magazine "Economist" wrote on May 17, 2003, that "inflation in the developed world is at its lowest in almost half a century. Prices have been falling in Japan since 1995; in America and Germany the risk of deflation is greater than at any time since the 1930s; the ECB has the lowest inflation target of any central bank in the world."

This and the consequence of the *sharply increased euro / dollar exchange rate* could dramatically damage European export business and destroy any chance for growth.

*Lower interest rates and better liquidity* in the financial markets would *support the growth of innovative companies*.

Besides, Basel II poses an additional challenge to innovative SMEs.

## 4 The Challenge of an Ageing Europe

About 40% of the euro area's population today is older than 45 years. In many companies the majority of employees are over 45. At the same time, only 5% of training budgets is reserved for people over 40.

Only one third of the over-55 generation is not chronically sick.

This calls for action on the part of political decision makers and company managers.

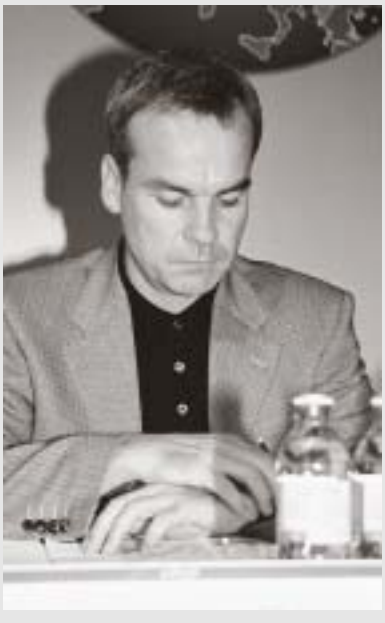
## 5 The Good News: There are Companies that Perform Better than the Economy

Some companies in Europe are doing better than the economy, even though in many euro area countries labor laws have been traditionally rigid and labor costs high.

Nevertheless, some companies have flourished, because they followed a few key rules:

– excellent management
– solid finances and tight cost control
– excellence in their core business
– global thinking: If countries are deflating, companies have to go abroad and access demand elsewhere. Production moves to new markets, thus Germany has lost approximately 3 million jobs since the early 1990s.
– first-rate logistics and information technology
– focus less on producing things than on selling them, change organization from a focus on function to a focus on customers

Berndorf AG has created more than 1,000 jobs over the last 10 years, 70% of them outside the euro area. *The euro area should make a much greater effort to be attractive for investors*.



Josef Zweimüller
Professor at the University of Zurich, Cepr, CESifo and IZA[1])
Reto Foellmi
University of Zurich[1])

# Inequality and Economic Growth: European Versus U.S. Experiences

## 1 Introduction

The goal of this paper is to discuss differences and similarities of European countries and the United States with respect to income distribution and the macroeconomic growth performance. Our aim is twofold. First, we discuss recent insights from the macroeconomic literature on the impact of inequality on the macroeconomic growth performance. Second, an attempt is made to use these insights to shed light on recent European and U.S. experiences.

Our focus differs from the recent literature in two important respects. First, the recent literature has extensively studied the sources of changes in inequality. Instead, our paper turns this question upside down. Rather than looking at the explanations of high and rising inequalities, we are posing the question: Are there any feedback effects from high and increasing inequalities on the long-run growth process?

In contrast, our paper is concerned with the consequences rather than the causes of inequality, so we will look at mechanisms by which income and wealth inequality is transmitted to growth outcomes. While, in principle,

1 *We thank Josef Falkinger and Manuel Oechslin for helpful comments.*

there may be many such channels, two of them seem particularly relevant in the context of recent European and U.S. macroeconomic experiences: (i) the effects of inequality on human capital accumulation and (ii) the impact of inequality on innovation incentives and price-setting behavior.

Imperfections on the capital market are a fundamental problem inherently associated with educational choices. By the very nature of educational investments no collateral can be offered

and the investment returns typically accrue to children who are not legally bound to honor the debts of their parents. Clearly, how many individuals will be constrained in their educational choices will depend on the income distribution. Many recent theories suggest that human capital investments are an important determinant of long-run growth rates.

Effects of income distribution transmitted via imperfections in the product market are important to understand the incentives to innovate. The income distribution is relevant in this respect because the demand for innovators' products crucially depends on the income distribution when the poor do not consume the same goods as the rich. More generally, the fact that market demand functions are affected by inequality is most obvious in Engel's law according to which the budget share for food decreases in income. According to this empirical observation, income distribution must play a central role both for the market size and price-setting behavior of monopolistic firms.[1]) Hence income distribution also affects the prices and the profits of innovative firms. As innovations are a crucial determinant of productivity growth, we can ask how inequality affects growth-outcomes.

Recent empirical evidence suggests, perhaps unsurprisingly, that inequality is higher in the U.S. than in almost all European countries. While inequality has been increasing strongly in some European countries (in particular, in the U.K.), recent empirical evidence suggests that the increase might have been strongest in the U.S., in particular if one takes a closer look at the top incomes.

If inequality in Europe is smaller and has been increasing less strongly than in the U.S., what are possible implications for relative macroeconomic outcomes? The experience in the very recent past suggests the U.S. has done (relatively) better than most European countries. Hence, we might be lead to conclude that inequality is a (perhaps) unpleasant but necessary precondition for favorable macroeconomic performances. In fact, the existence of such a trade-off between equity and efficiency was a dominant proposition that has been held by the majority of the economics profession.

The more recent macroeconomic literature, however, has challenged this view both on theoretical and on empirical grounds. First, the trade-off has been questioned as a matter of fact. There is very little empirical evidence suggesting that higher inequality is

*1 Technically speaking, income distribution plays a role for market demand curves if consumers have non-homothetic preferences.*

favorable for the long-run growth experience of an economy. Cross-country data suggest that economies with low initial inequality have grown much faster in subsequent decades than high-inequality countries. The second challenge for the equity-efficiency trade-off view comes from the theoretical side. While neoclassical macroeconomics has focused on perfect markets, market imperfections are central in more recent theories. When market imperfections are accounted for, income inequality becomes an important determinant of macroeconomic outcomes. In fact, in such an imperfect world, it may well be that low-inequality countries have an advantage in the long run, as the inefficiencies that result from market imperfections will be less severe when incomes are more evenly distributed.

The paper is organized as follows. We will start with a review of some empirical facts. In section 2 we discuss differences in income inequality between Europe and the U.S. and look at recent trends. We will see that the available evidence supports the view that in the U.S. incomes are less evenly distributed than in European countries, and perhaps less unevenly than in Europe as a whole. Moreover, this recent evidence suggests that U.S. top incomes have been increasing dramatically which may be due to the decline in progressive taxation. It is likely that this may foster further the trend towards more inequality in the future.

In section 3 we contrast these inequality trends to the differences in macroeconomic outcomes on the two sides of the Atlantic. We start by reviewing the recent and more long-term EU and U.S. growth experiences. Perhaps interestingly, and certainly at odds with much of the recent public debate, European countries have clearly outperformed the U.S. over the long run in terms of productivity growth.

Section 4 briefly reviews the recent macroeconomic literature on long-run growth and income distribution and discusses some theoretical approaches that have put forth to explain the evidence. The following sections deal in more detail with potential effects of income inequality on human capital accumulation under capital market imperfections (section 5) and with the impact of income inequality on innovation incentives and price-setting behavior when there is imperfect competition on product markets (section 6).

Section 7 summarizes.

## 2 Differences and Trends in Income Inequality: U.S. Versus Europe

In this section we take a look at the empirical evidence on income distribution in the U.S. and in Europe. Table 1 shows a recent cross-country comparison among the OECD countries based on data from the Luxembourg income studies, the most reliable and informative database for cross-country comparisons. Table 1 shows various interesting indicators. One such indicator is the Gini coefficient. Comparing this measure across countries confirms expectations: income inequality in the U.S. is much higher than in any other country listed in table 1. For instance, the Gini coefficient is 0.37 for the U.S., 0.30 for Germany, and only around 0.23 for a typical Nordic country.

A further interesting inequality indicator is the 90/10 percentile ratio, which is a rough measure of the range between the poorest and the richest in a society. For instance, this ratio is 6.4 in the U.S., about 3.8 in Germany, and

Table 1

**Empirical Evidence on Income Inequality in Industrialized Countries**

| | 10 percentile | Length of bars represents the gap between high and low income individuals | 90 percentile | 90/10 percentile ratio | Gini coefficient |
|---|---|---|---|---|---|
| Finland 1991 | 57 | | 157 | 2.75 | 0.223 |
| Sweden 1992 | 57 | | 159 | 2.78 | 0.229 |
| Belgium 1992 | 58 | | 163 | 2.79 | 0.230 |
| Norway 1995 | 55 | | 157 | 2.85 | 0.242 |
| Denmark 1992 | 54 | | 155 | 2.86 | 0.239 |
| Luxembourg 1994 | 59 | | 173 | 2.93 | 0.235 |
| The Netherlands 1991 | 57 | | 173 | 3.05 | 0.249 |
| Italy 1991 | 56 | | 176 | 3.14 | 0.255 |
| Taiwan 1995 | 56 | | 189 | 3.38 | 0.277 |
| Switzerland 1982 | 54 | | 185 | 3.43 | 0.311 |
| New Zealand 1987/1988 | 54 | | 187 | 3.46 | NA |
| Germany 1994 | 46 | | 177 | 3.84 | 0.300 |
| Canada 1994 | 47 | | 185 | 3.93 | 0.287 |
| Spain 1990 | 49 | | 198 | 4.04 | 0.306 |
| France 1989 | 45 | | 185 | 4.11 | 0.324 |
| Israel 1992 | 50 | | 205 | 4.12 | 0.305 |
| Japan 1992 | 46 | | 192 | 4.17 | 0.315 |
| Ireland 1987 | 50 | | 209 | 4.18 | 0.328 |
| Australia 1989 | 45 | | 193 | 4.30 | 0.308 |
| United Kingdom 1995 | 46 | | 210 | 4.56 | 0.346 |
| United States 1994 | 34 | | 219 | 6.44 | 0.368 |
| | | 0 50 100 150 200 250 | | | |
| Average | 52 | | 181 | 3.53 | 0.279 |

*Source: Gottschalk and Smeeding (2000).*

Table 2

**Europe-Wide and U.S. Distributions: Shares ot Total Income**

| Share of decile group | Western Germany | Italy | United States | Europe |
|---|---|---|---|---|
| 10 | 4.0 | 3.1 | 1.9 | 2.9 |
| 20 | 9.8 | 8.0 | 5.7 | 7.9 |
| 30 | 16.6 | 13.9 | 11.2 | 14.1 |
| 40 | 24.2 | 20.7 | 18.0 | 21.3 |
| 50 | 32.9 | 28.7 | 26.2 | 29.5 |
| 60 | 42.5 | 38.0 | 35.7 | 39.0 |
| 70 | 53.2 | 48.7 | 46.9 | 49.8 |
| 80 | 65.3 | 61.2 | 60.2 | 62.3 |
| 90 | 79.4 | 76.2 | 76.3 | 77.2 |

*Source: Atkinson (1995).*

around 2.8 in a typical Nordic country. The bars in the middle of table 1 show this range graphically. The bars show that, relative to the median within each country, in the U.S., the poor are poorer and the rich are richer than in any other country listed in table 1.

Note that table 1 may give a biased picture about differences in income inequality between Europe and the U.S. The U.S. encompasses different states with rather different per capita income levels that are lumped together. Europe also consists of different countries, but these are treated as separate entities in table 1. In particular, inequality within Europe as a whole may be higher once we account for cross-country differences in per capita incomes. Atkinson (1995) made an attempt to estimate the level of inequality of the Europe-wide distribution of income. Table 2 reports the numbers.

The set of countries that is included to make these calculations is somewhat selective and driven by data availability. But it includes poor countries such as Portugal as well as rich countries

Chart 1

**Trends in Disposal Income Inequality Gini Coefficients Percentage Change per Year and Absolute Change per Year: 1979–1995**


*Source: Gottschalk and Smeeding (2000).*

such as Switzerland and Luxembourg, hence the numbers should come close to the measure we are interested in. Table 2 shows that taking account of cross-country income differences within Europe does not change the general picture. The U.S. still has the more unequal distribution of income. Two points are worth mentioning here. First, the numbers are from the mid- and late 1980s and probably underestimate the actual differences. This is mainly because there has been convergence across countries within Europe, whereas the distribution of per capita income across U.S. states has been more stable. Second, the picture may be different once we consider also Eastern Europe as these countries consist of large populations with low per capita incomes.

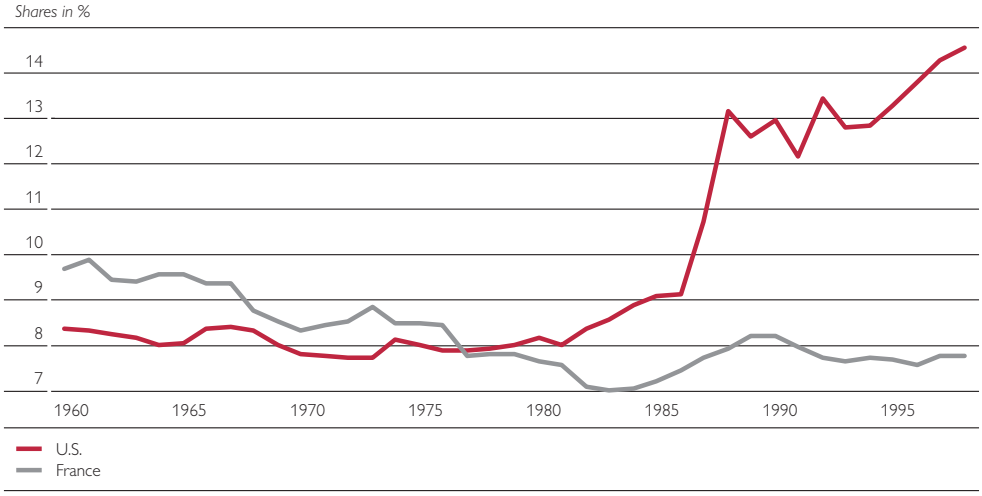
What are the trends in the distribution of income and what are the differences and similarities between Europe and the U.S. along this dimension? Is the general perception of a widening in the distribution of income actually visible in the data? Again, the cross-country data lag behind and the numbers we present refer to changes in inequality between the late 1970s and the mid-1990s (chart 1).

Chart 1 shows that rising income inequality is a rather common phenomenon. Interestingly, a first look at the data suggests that the countries that experienced the highest increase in income inequality are European countries. In the U.K., for instance, the Gini coefficient has grown by 8 points from 0.27 in 1979 to 0.34 in 1995 (an increase in measured inequality of almost one third!). Inequality has also been strongly increasing in the Netherlands and in Sweden, albeit both countries (in particular Sweden) started out from a rather low level of inequality. The remaining European countries listed in chart 1, Switzerland, Germany, Norway, experienced a modest increase, whereas in Finland, Ireland, and Italy there was even a reduction in inequality.

Evidently, there are pronounced differences in distributional outcomes across European countries. In particular, there is not a very clear trend towards increased inequality. In contrast, the U.S. clearly experienced an

Chart 2

**Top 1 % Income Shares (Exkluding Capital Gains), 1960–1998, France and U.S.**




*Source: Piketty (2003).*

increase in inequality. This increase is modest if compared to the one that took place in the U.K. but is of about equal size as the one of the Netherlands. In particular, the increase in U.S. inequality is higher than in Germany, France, and of course, Italy (which experienced a decline in inequality).

Note, however, that there are good reasons to believe that the increase in inequality in the U.S. may be strongly underestimated. Recent evidence by Piketty and Saez (2003) suggests that top incomes in the U.S. have increased substantially during the last 25 years, whereas such a development did not take place in Europe. Survey data like the Luxembourg income studies do not adequately sample the very high incomes (which make up a large fraction of total income). Hence when the income share of the top incomes changes, such survey measures will understate the real changes in inequality.

In fact, the increase in top incomes in the U.S. has been dramatic. In the late 1970s, the richest 1% in the U.S. earned about 8% of the national income – a number that compared well to the situation in France (Piketty, 2003). By the end of the 1990s, as much as 14.6% of total U.S. incomes were concentrated in the hands of the top 1%. In contrast, in France the share remained between 7% and 8% throughout the 1980s and 1990s. Piketty and Saez (2003) show also numbers for the U.K. that underline that the U.S. experience was extraordinary: In the U.K. top incomes increased slightly but still remained at levels that are close to the French numbers. The U.S. picture is even more dramatic if we look at top 0.1% and the top 0.01% incomes. The share of the former was 6% (3 times as high as in the 1970s) in 1998 and the share of the latter group was 2.6% of total U.S. income (5 times as high as in the 1970s). Piketty and Saez (2003) suggest that this is primarily caused by strong increases in top wage incomes. In addition, the decline in progressive taxation since the early 1980s may have contributed to the increase.

To get a sense of these numbers, let us make a simple calculation. The U.S. as a whole produces about 22% of the

world production (measured in purchasing power parities (PPP); World Bank, 2003). This means that the U.S. top 1% earn about 3.1% of total world income. Compare this to the aggregate income earned by the total population on the African continent (northern plus sub-Saharan Africa). Measured in PPP terms, the total African production amounts to about 3.6% of world production. In other words, the richest 1% in the U.S. can purchase almost as many good as the total African population and about 30% more than the sub-Saharan population. Clearly, the increase in the U.S. top income share is dramatic and sizeable even when viewed from a global perspective.

In sum, our look at the data suggests that:

(i) Inequality in most European countries is considerably smaller than in the U.S.
(ii) Inequality in (western) Europe as a whole is probably smaller than in the U.S.
(iii) Inequality has increased more strongly in the U.S. than in Europe over the last two decades.
(iv) There has been a dramatic increase in U.S. top incomes. No such increase took place in Europe.

Observations (i) to (iii) are based on survey data, which underestimate distributional changes resulting from a higher concentration among the top incomes. Taking this into account the differences stated in (i) to (iii) above should be more pronounced than suggested by the survey data.

## 3 Macroeconomic Performance: Stagnating Europe and Dynamic U.S.?

In the last section we have seen that Europe and the U.S. are quite different in terms of inequality. How about their relative growth performance?

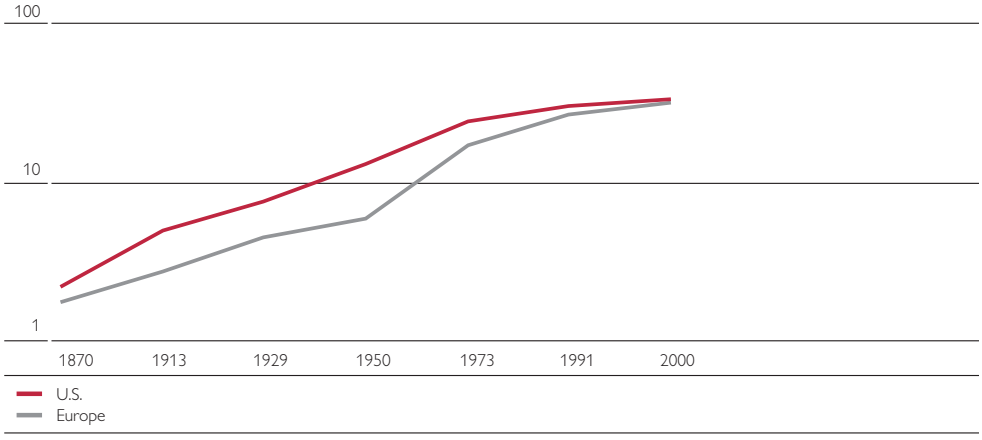
Much of the recent economic policy debate is about why Europe is lagging behind the U.S. in terms of economic growth. In fact, a first look at the data suggests that recently the U.S. did much better than the European countries. The growth rate of real GDP between 1992 and 2000 was 3.7% in the U.S. but only 2.1% in the EU-15 (Blanchard, 2003). The picture seems to be confirmed when we look at long-term growth rates. The average growth of real GDP between 1960 and 2000 was 3.5% in the U.S. and only 3.1% in the EU-15. Can we conclude that both the recent and as well as the long-term growth performance of the U.S. economy dominated the one of Europe?

Clearly, to answer this question, it does not suffice to look at growth rates of aggregate income, but we have to consider growth rates of per capita incomes (if we are interested in the standard of living of the average individual) or at growth rates of output per hours worked (if we are interested in the productivity of the average worker). In a recent and widely recognized paper, Gordon (2002) shows how these variables evolved over the very long term. To compare the growth performance of Europe and the U.S. the productivity growth is the variable of primary interest, so we will focus on the long-term changes in output per hours worked. Chart 3 shows the increase in this variable for both Europe and the U.S. over the past 150 years. Gordon's numbers suggest that the U.S. were leading Europe already in the second half of the 19$^{th}$ century, and that this gap continuously widened until World War II (WWII). Since then, however, GDP per hours worked has grown much faster in Europe. Between 1950 and 1973, the annual productivity growth rate in Europe was 1.8% higher

Chart 3

**Real GDP per Hour Worked, Europe and U.S., 1870–2000**

*Constant 1990 Geary-Khamis dollars per hour (adjusted), logarithmized*




*Source: Gordon (2002).*

the one in the U.S. And even in the more recent past, between 1973 and 2000, productivity growth rates in Europe were by more than 1% larger than the ones in the U.S. As a result, labor productivity in Europe has reached U.S. levels by the mid-1990s.[1])

This evidence seems to be in stark contrast to the perceptions by the public. This is also noted in a recent comment in the Economist (2003):

*"America's much trumpeted productivity miracle in the late 1990s created the misleading impression that Europe significantly lags America in the productivity league. It is true that, since 1995, American GDP per hours worked has risen by an annual average of 1.9%, compared with only 1.3% in the European Union. However, over any longer period, up to half a century, Europe's productivity growth has outpaced America's."*

While US-European differences in productivity per working hour have disappeared by the end of the 20th century, significant differences in incomes per capita remain. According to Gordon (2002), U.S. per capita incomes diverged already from 1820 on and the highest difference was reached after the WWII. Since then there is convergence, but still the European incomes per capita have reached only 77% of U.S. levels today.

Given identical hourly productivities, any differences in per capita incomes are, by definition, due to differences in per capita hours worked. These differences can be explained by the following observations: (i) labor force participation is much lower in Europe than in the U.S. (which partly reflects the demographic structure of the population); the average European worker (ii) has a shorter working week; (iii) takes more vacation; and (iv) enjoys more work-free holidays. Parts of these different outcomes are due to workers' voluntary choices. Once we attach a monetary value to these kinds of lei-

1 *In fact, numbers presented in Gordon (2002, p. 39) suggest that productivity levels in the year 2000, compared to the U.S. were 6% higher in Belgium, 4% higher in France, and 2% higher in the Netherlands. The German productivity level is at roughly the same level as the one of the U.S..*

sure, a substantial part of the difference in per capita income between Europe and the U.S. will disappear.

## 4 Inequality and Growth: Evidence and some Explanations

The long-term record in terms of income inequality and long-term productivity growth of Europe and the U.S. is very clear: Europe had lower income inequality and a better long-term productivity growth record than the U.S. In other words, lower income inequality seems to go hand in hand with larger productivity progress. Can we argue, more generally, that inequality is beneficial for (productivity) growth? What does the recent macroeconomic literature have to say about the relationship between these two variables?

Recent theories as well as cross country evidence suggested that a more even income distribution may be an important determinant of long-term growth rates.[1]) Persson and Tabellini (1994) and Alesina and Rodrik (1994) presented empirical evidence that, both in a cross-section of countries and in long time series, high levels of initial inequality are associated with low subsequent long-run growth rates. Recent evidence by Engermann and Sokoloff (2002) compares inequality in North and South America and impressively demonstrates the strong and long-lasting effects of inequality on long-run economic development of North and South American economies. The empirical literature based on cross-country regressions clearly suggests that initial income and wealth inequality has a significantly negative impact on long-run growth rates. The view of the World Bank (stated on the webpage of the World Bank "Network of Inequality, Poverty and Socio-economic Performance") is

*"…while initial income inequality may not directly affect an economy's aggregate growth potential, other things being equal, it does proxy for more fundamental inequalities of wealth. Once measures for those are included, there seems to be a significant negative relationship between asset inequality and growth."*

What do recent economic theories tell us about the relationship between income inequality and the macroeconomic growth performance of economies? Persson and Tabellini (1994) suggest the following explanation. High inequality in pre-tax incomes leads the majority of people to support redistribution by means of a progressive tax system. Inequality is bad for growth, because such taxation is detrimental to investment incentives.

The available empirical evidence, however, does not support the above model. First, in cross-country data there is no statistically significant impact of inequality on taxes and transfers. Secondly, there is very little evidence that redistribution has a detrimental impact on investment and growth. Whether or not higher taxes have an impact on growth and investment depends on how the tax revenues are spent: The transfer/GDP ratio and the fraction of public expenditures on education frequently have a positive and statistically significant impact on growth.

There are further plausible reasons for a negative inequality-growth relationship that are more consistent with the evidence. One such explanation is that inequality, if not mitigated by public redistribution measures, leads to political instability, which has a negative impact on the economy's growth rate.

1 *See Falkinger (1997) for a stimulating discussion of many arguments that were put forth in the literature.*

The more recent literature goes a step further and asks how social capital, trust and the degree of acceptance of social norms can promote economic growth. It is evident that in explaining the determinants of these factors, the distribution of income and wealth has an important role to play.

## 5 Inequality and the Accumulation of Human Capital

However, the dominant explanation put forth in the recent literature is neither based on politico-economic nor on sociological explanations. This approach is based on the argument that imperfect capital markets may lead to severe efficiency losses when there is excessive inequality. For evident reasons, the accumulation of human capital plays a central role in explaining the growth process of modern economies.

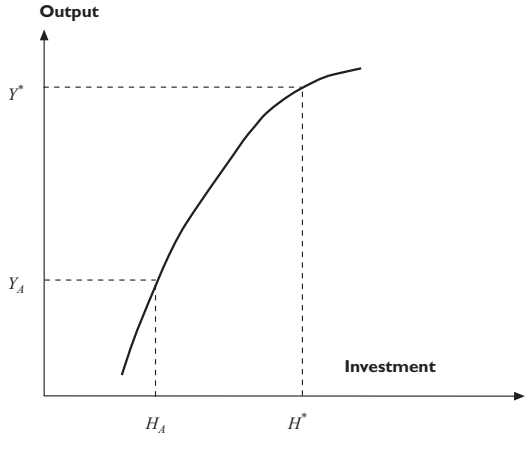
The argument is simple: Education not only causes direct costs but is also a period without income. Individuals who lack the necessary funds and cannot raise these funds on the capital market have only limited access to the education system. Low-ability children of rich parents will get educated, whereas poor high-ability individuals will not, resulting in an inefficient allocation of talents.

The crucial point can be made in chart 4. On the horizontal axis, we measure the level of human capital investment of a certain individual. The vertical axis shows the output level resulting from this investment. For simplicity, let us further assume that the relationship between investment and output is the same for all individuals (which means that all individuals are of equal ability).

The optimal investment level equates the marginal return of an additional year of education to the interest rate. In chart 4 this is the case at investment level $H^*$. When capital markets are imperfect, this may not be feasible for many individuals. The rich can invest the optimal amount $H^*$, whereas the amount of education that the poor can invest is lower, $H_A$. If the marginal returns are decreasing in the level of investment the wealth distribution affects the equilibrium outcome. The per

Chart 4

**Inequality and Human Capital Investment**



capita income of next period – the weighted average of $Y^*$ and $Y_A$ in chart 4 – is lower, the larger the fraction of individuals for whom credit restrictions become binding. Ceteris paribus, this fraction will be larger with a higher degree of inequality.

While capital market imperfections are certainly an argument that is of tremendous importance in developing countries, it is less clear how severe such capital market imperfections are in developed economies. Recent evidence by Cameron and Heckman (1999) suggests that educational outcomes are primarily determined by the social background – the family and the neighborhood in which an individual has grown up.

The truth lies most likely somewhere in between. In fact, a number of theoretical contributions, including Benabou (1996) and Durlauf (1996) demonstrate that if there are neighborhood effects in the accumulation of human capital (for instance, richer neighborhoods provide better schools) limited access to capital markets may lead to such segregation of the population by income thus reinforcing the importance of neighborhood effects. The economy ends up as a collection of communities across which there are high and persistent inequalities. Fershtman, Murphy and Weiss (1996) suggest further that status concerns associated with education may exacerbate such adverse inequality effects. Put in other terms, social background and imperfect capital markets are complementary rather than competing explanations. Whatever the particular channel, income inequality is a primary determinant of educational choices.

Do such theories help to explain U.S. and European differences in long-run productivity growth? First of all, it takes time for the process of human capital accumulation to manifest itself in productivity changes. The effects of inequality on educational choices are also long-term. A change in inequality today will have worked out its final effect not before the children of the youngest parents that are affected by the inequality change will have to make their education decision. Both observations suggest that we have to adopt a long-term perspective. In fact, we have seen that

there are long-run differences in productivity growth between Europe and the U.S. Moreover, there are persistent differences in income inequality which most likely have widened recently.

Due to higher inequality, constraints in educational choices due to capital market imperfections are more severe in the U.S. than in Europe. Note also that such constraints are exacerbated by institutional differences in the education systems. In the U.S., education has comparably high private costs, in particular for higher education. The typical U.S. student has to pay high tuition fees. At primary and secondary education levels, the decreasing quality of U.S. public schools leads many richer parents to send their kids to (costly) private high schools – an option that is not available to poorer families. In contrast, in most European countries, access to university education is free (or cheap). While private schools are also widespread in some

countries, lower European inequality implies that financing constraints may be less severe and widespread misallocation of talent is less likely.[1])

In sum, to the extent that better incentives for the accumulation of human capital are relevant for the superior (productivity) growth performance of Europe over the long run, lower income inequality may have contributed to that outcome.

## 6 Imperfect Competition on Product Markets: Inequality and Innovation Incentives

In the above models, the distribution of income and wealth affects the returns to accumulation and tomorrow's supply with factors of production. The demand for produced output plays a passive role. This is a convenient (while simplifying) assumption for many purposes. However, few economists would contradict the proposition that the expected level of demand for produced output is an important determinant of investment and innovation decisions.[2])

Income inequality comes into play, because consumer behavior is strongly determined by income. Consumers with different levels of income do not only spend different total amounts on consumption goods they also have a different structure of consumption. For instance, poor consumers will not only purchase (normal) goods in smaller quantity but will also purchase a different (smaller and lower quality) bundle of goods than the rich.[3]) As a consequence, the market demand for the various (in particular, new) products will depend on the income distribution. Hence income distribution may have an important effect on the incentives to innovate. To the extent that such innovations are a crucial source of technological progress, income distribution is a determinant of productivity growth.

To illustrate those mechanisms let us consider in more detail how income distribution affects the demand for new products: Suppose consumers have hierarchic preferences and concentrate their consumption expenditures on basic goods, before they start to buy conveniences and luxury goods. As a result, innovators will attract primarily rich buyers whereas poor consumers will not (immediately) be able to afford new goods. This leads to the presumption that a class of very rich people generates the necessary demand for new products. In fact, the idea that the consumption of luxury goods is an important engine of growth by creating new wants and maintaining incentives to provide effort also for the lower classes, is an argument which has already been stressed by the classical economists.

1 *Results from the PISA-study of the OECD suggest that the performance of pupils in the U.S. corresponds to the average of other OECD countries. Moreover, there is evidence that the variance in student performance with respect to certain skills (in particular, literacy skills) have a higher variance in the U.S. than in most European countries. Note that this is in line with our reasoning: Despite higher per capita incomes, education outcomes are not higher on average, and have a larger variance, than in lower-income and lower-inequality European countries.*

2 *There are only few theoretical studies that have explored the implications the role of income distribution for the incentives to innovate. Among these, studies are Murphy, Shleifer and Vishny (1989), Falkinger (1990, 1994) and Chou and Talmain (1996), and Matsuyama (2002). For empirical evidence on the importance of non-homothetic preferences, see Jackson (1984) and Falkinger and Zweimüller (1996).*

3 *While this is an obvious point, it should be noted that existing macroeconomic models that deal with many products (to explain the process of innovations and growth) assume homothetic preferences. Under this assumption a consumer is half as rich as some other consumer purchases exactly half of the same goods as the richer consumer. As a result income distribution is irrelevant for market demand.*

Can we argue that inequality is good for growth because it induces innovations? The answer is: not necessarily. The reason is that there is a trade-off between prices (which are high when a class of very rich people has a very high willingness to pay for new products) and market size (which will be low when incomes are strongly concentrated among a few rich). Moreover, what matters for innovators are not only profits today, but also how the market for the new product evolves in the future. Obviously, a more equal distribution of income is favorable in this respect. When there is a well-funded middle class market size rises quickly and fosters innovation incentives. In sum, it is a priori not clear whether positive price effects of high inequality outweigh the negative (static and dynamic) market size effects. Whether inequality is good or bad for growth strongly depends on whether or not there exist close substitutes for the new goods.[1])

The above mechanism is the most obvious by which income distribution can affect innovations, but it is not the only one. Industrial R&D activities are to a large extent targeted towards better quality of existing products.[2]) With a very skewed income distribution, the rich have a high willingness to pay for luxurious products, and innovators may target predominantly goods that are purchased by the rich. In such a situation, less R&D resources will be channeled into the improvement of mass production technologies. However, without substantial technological improvements in such mass consumption industries, that exploit economies of scale, productivity progress will be slow.

Furthermore, with a more even distribution of incomes, demand will be distributed more evenly across industries. This makes it easier for new methods of production to penetrate all industries in the economy. As a result, the *dissemination* of knowledge may be easier when there is a sizeable middle class.

These arguments may have played an important role to explain the exceptional catch-up that took place over the long run. During WWI and WWII the capital stock was destroyed and with it much of the sources of income inequality. In the 19th century, European incomes were distributed less equally than in the U.S. Ironically, a number of economic historians have pointed to the importance of the rather egalitarian U.S. income distribution to explain the superior performance of the U.S. over the second half of the 19th century. Abramovitz and David (2000) note

*"In all the European countries, a traditional class structure – which separated a nobility and gentry form the peasantry, the tradesmen, and an expanding middle class – survived in the 19th century. … Aristocratic standards of quality and individuality in consumption worked to inhibit the development of standardized goods and mass production, and they supported an extreme fragmentation of retail trade."*

The dramatic recent changes in income distribution in the U.S. seem to

1 *If there are close substitutes for the innovators' products positive price effects of high inequality will not be strong, because innovators face higher competition from those close substitutes. In such a situation inequality is detrimental to innovation incentives (Zweimüller, 2000). If substitution possibilities are limited, the rich have a high willingness to pay for new products (Foellmi and Zweimüller, 2002) and price effects dominate the market size effects.*

2 *See Zweimüller and Brunner (1998), Li (1996), and Glass (1996) for models where income distribution affects the incentive of innovators to introduce better quality of existing products.*

have important implications for the structure of aggregate consumer demand. How this will affect the innovation incentives will, to a large extent, depend on how the new rich will spend their income. Will this stimulate innovation of completely new products and the invention of new technologies that can be ultimately applied throughout the economy? Or are we back in a situation where the very rich (now those in the U.S.) use their income to satisfy the same "aristocratic standards of quality and individuality in consumption" that has hampered technological development in the Europe of the 19th century?[1]) To the extent that a less egalitarian consumption structure leads to a lower potential for exploiting economies of scale and a slower dissemination of new technologies across all sectors, the increase in inequality may have detrimental effects on productivity growth in the future.

These are very important questions and they are equally hard to answer. So far, very little empirical research has been done about the role of inequality in determining the extent and types of innovations that are conducted in the economy. Among the few studies is Kremer (2002) who showed that income distribution and market size is of crucial importance in the pharmaceutical industry.

One might object that the above arguments are less important today as many firms operate on *global* markets. In that case, the global distribution of income rather than the distribution of income *within* countries matters. This is clearly the case for tradable goods. And to the extent that productivity growth is driven by innovations in those industries, the income distribution within countries is indeed less important.

However, there are a number of reasons why home markets matter even in the global economy. First of all, many products are non-tradable, in particular in the service sector. By definition, these products are produced and sold in the home market and their market demand will depend on the distribution of income within the home country. Second, if transportation costs are substantial, markets are segmented by geographical distance. In that case the geographical borders coincide to a large extent with national borders. Third, substantial legal trade barriers still exist. The mere fact that huge efforts have been undertaken to convince European citizens to remove these barriers Europe underlines their importance. Even if no such barriers existed within Europe (and within the U.S.) significant trade barriers exist across these areas. Hence the distribution within Europe as a whole within the U.S. as a whole (and less so the global distribution of income) matters for many producers. Fourth, the trade volume between Europe and the U.S. is relatively small compared to aggregate output of these economic areas. In other words, most production within Europe is sold within Europe, and the same is true for the U.S. Finally,

1 *Frank (2000) and many others have pointed to the "luxury fever" and the dramatic changes in consumer behavior ("conspicuous consumption") that have been observed in the U.S. in recent decades.*

even in a world with no trade barriers and transportation costs the home market may be important, simply because consumers' preferences are biased towards products of the own country.

## 7 Conclusions

In this paper we have looked at differences in macroeconomic outcomes between European countries and the U.S. and have discussed these differences in the context of income inequality.

Since the 1950s, Europe had the clearly better record in terms of productivity progress. By the mid-1990s many European countries have reached U.S. levels of productivity and some European countries are even more productive than the U.S. Since the mid-1990s, productivity growth in Europe lags somewhat behind the one of the U.S. but the recent (negative) difference is small compared to the previous positive gap. Recent empirical evidence concerning income inequality suggests that inequality in the U.S. is considerably higher than in most European countries, and perhaps also higher than in Europe as a whole. Furthermore, the recent dramatic increase in U.S. top incomes suggests that the gap between Europe and the U.S. has dramatically widened along this dimension.

We have used arguments from the recent macroeconomic literature to interpret this empirical evidence. In particular, we were asking whether an even distribution of income is harmful or beneficial for productivity growth. While there are many potential channels by which income distribution might have affected, we have concentrated our discussion on two channels which seem to be of particular importance in modern economies: Human capital accumulation when there are imperfections in capital markets; and the effect of inequality on innovation incentives.

This analysis suggests that lower income inequality in Europe may have contributed to larger productivity progress. Other things equal, less inequality implies less restriction in the accumulation of human capital. To the extent that productivity growth is driven by the accumulation of human capital this may have been an advantage for Europe. Similar arguments can be made for innovation incentives. An income distribution that is less skewed towards top incomes may foster innovations and the adoption and dissemination of new technologies. ❧

## References

**Abramovitz, M. and P. David. 2000.** American Macroeconomic Growth in the Era of Knowledge-Based Progress: The Long-Run Perspective. In: Engermann, S. L. and R. E. Gallman (eds.). The Cambridge Economic History of the United States. Cambridge: Cambridge University Press. 1–92.

**Aghion, P. and P. Howitt. 1998.** Endogenous Growth Theory. Cambridge, MA: MIT-Press.

**Aghion, P. and P. Bolton. 1997.** A Trickle-Down Theory of Growth and Development with Debt-Overhang. In: Review of Economic Studies 64. 151–172.

**Alesina, A. and D. Rodrik. 1994.** Distributive Politics and Economic Growth. In: Quarterly Journal of Economics 109. 465–490.

**Atkinson, A. 1995.** Income Distribution in Europe and the U.S. Invited lecture at EALE Lyon, 1995.

**Banerjee, A. V. and A. Newman. 1993.** Occupational Choice and the Process of Development. In: Journal of Political Economy 101. 274–298.

**Benabou, R. 1996.** Inequality and Growth. In: Bernanke, B. S. and J. J. Rotemberg (eds.). NBER Macroeconomics Annual 1996. Cambridge, MA: MIT Press.

**Bertola, G. 2000.** Macroeconomics of Distribution and Growth. In: Atkinson, A. and F. Bourguignon (eds.). Handbook of Income Distribution 1(9). Amsterdam: North-Holland.

**Blanchard, O. 2003.** Macroeconomics. 3rd edition. Prentice Hall.

**Cameron, S. and J. J. Heckman. 1998.** Life Cycle Schooling and Dynamic Selection Bias: Models and Evidence for Five Cohorts of American Males. In: Journal of Political Economy 106, 262–333.

**Chou, C.-F. and G. Talmain. 1996.** Redistribution and Growth: Pareto Improvements. In: Journal of Economic Growth 1. 505–523.

**Durlauf, S. 1996.** A Theory of Persistent Inequality. In: Journal of Economic Growth 1. 75–93.

**Economist. 2003.** Chasing the Leader. Economics Focus. February 6.

**Engermann, S. L. and K. L. Sokoloff. 2002.** Factor Endowments, Inequality, and Paths of Development Among New World Economies. NBER Working Paper 9259.

**Falkinger, J. 1990.** On Growth Along a Hierarchy of Wants. In: Metroeconomica 41. 209–223.

**Falkinger, J. 1994.** An Engelian Model of Growth and Innovation with Hierarchic Demand and Unequal Incomes. In: Ricerche Economiche 48. 123–139.

**Falkinger, J. 1997.** Wachstum, Verteilung und Beschäftigung. Working Paper 9712. University of Linz.

**Falkinger, J. and J. Zweimüller. 1996.** The Cross-Country Engel-Curve for Product Diversification. In: Structural Change and Economic Dynamics 7. 79–97.

**Fershtman, Ch., K.M. Murphy and Y. Weiss. 1996.** Social Status, Education, and Growth. In: Journal of Political Economy 104. 108–132.

**Foellmi, R. and J. Zweimüller. 2002.** Heterogenous Mark-Ups, Demand Composition and the Inequality-Growth Relation. University of Zurich. Mimeo

**Frank, R. 2000.** Luxury Fever. The Free Press.

**Galor, O. and J. Zeira. 1993.** Income Distribution and Macroeconomics. In: Review of Economic Studies 60. 35–52.

**Glass, A. J. 1996.** Income Distribution and Quality Improvement. Ohio State University. Mimeo.

**Gottschalk, P. and T. M. Smeeding. 2000.** Empirical Evidence on Income Inequality in Industrial Countries. In: Atkinson, A. and F. Bourguignon (eds.). Handbook of Income Distribution 1(5). Amsterdam: North-Holland.

**Gordon, R. 2002.** Two Centuries of Economic Growth: Europe Chasing the American Frontier. Paper prepared for Economic History Workshop, Northwestern University.

**Jackson, L. F. 1984.** Hierarchic Demand the Engel-Curve for Variety. In: Review of Economics and Statistics 66. 8–15.

**Kremer, M. 2002.** Pharmaceuticals and the Developing World. In: Journal of Economic Perspectives 16. 67–90.

**Li, C.-W. 1996.** Inequality and Growth: A Schumpeterian Perspective. University of Glasgow. Mimeo.

**Matsuyama, K. 2002.** The Rise of Mass Consumption Societies. In: Journal of Political Economy 110. 1035–1070.

**Murphy, K. M., A. Shleifer and R. Vishny. 1989.** Income Distribution, Market Size, and Industrialization. In: Quarterly Journal of Economics 104. 537–564.

**Perotti, R. 1996.** Growth, Income Distribution and Democracy: What the Data Say. In: Journal of Economic Growth 1. 149–187.

**Persson, T. and G.Tabellini. 1994.** Is Inequality Harmful for Growth? In: American Economic Review 84. 600–621.

**Piketty, T. 2003.** Income Inequality in France, 1901–1998. In: Journal of Political Economy (forthcoming).

**Piketty, T. and E. Saez. 2003.** Income Inequality in the United States, 1913–1998. In: Quarterly Journal of Economics 108. 1–39.

**World Bank. 2003.** World Development Report.

**Zweimüller, J. and J. K. Brunner. 1998.** Innovation and Growth with Rich and Poor Consumers. CEPR Discussion Paper 1855.

**Zweimüller, J. 2000.** Schumpeterian Entrepreneurs Meet Engel's Law: The Impact of Inequality on Innovation-Driven Growth. In: Journal of Economic Growth 5. 185–206.

Bernhard Felderer

Bernhard Felderer
Director
Institute for Advanced Studies (IHS)

# Comments on

# Nicholas F. R. Crafts, "Prospects for European Economic Growth: A Historical Perspective"

# Norbert Zimmermann, "Why Is Growth in Europe Lagging Behind?"

# Josef Zweimüller and Reto Foellmi, "Inequality and Economic Growth: European Versus U.S. Experiences"

Productivity growth revival and productivity slowdown in Europe is not a matter of the 1990s, but rather a very old fact. As a recent paper of Gordon (2002) suggests, U.S. growth was leading already in the second half of the nineteenth century. This gap increased up to the eve of the Second World War (WWII). After WWII, Europe's growth rates were larger than those of the United States for about three decades. The same is true for productivity increase per working hour which continued to be higher in most European countries up to the 1980s.

They have been outperformed by U.S. labor productivity at different times from the first half of the 1980s till the mid-1990s. U.S. labor productivity increase in the second half of the 1990s was higher than in all European countries. The graphical exposition clearly shows that this development is a long-term trend and not a transitory event.

The period of high European growth after WWII can well be explained by the integration of European markets, by the transfer of workers

from agriculture to industry and services where marginal productivity was much higher. The enormous demand for reconstruction after the destructions during WWII, the important migration from Eastern Europe in particular to West-Germany, the imitation of American production and management methods, the emergence of a large number of multinational European enterprises – most of these factors where of a transitory nature and weakened and disappeared in the 1970s.

Growth rates of the United States in the 1960s and 1970s were also quite low. But in the 1980s the United States changed its institutional framework for economic policy in several respects. The liberalization of product markets (energy, telecommunication, etc.) and deregulation – rather by practical behavior than by law – of labor markets turned out to be important steps towards a more flexible economy, generating higher productivity increase and creating an economy better equipped to absorb exogenous shocks. In Europe, these reforms where deferred. E.g., the liberalization of the telecommunication market was implemented in Austria only on January 1, 1998. Deregulation of labor markets would be of particular importance in Germany, Italy and France. The smaller European countries have shown more ability to adapt to the new necessities of global competitive pressures.

The paper of Professor Crafts puts a lot of emphasis on the role of ICT investment in explaining the differences in economic growth. Undoubtedly, the United States have invested far more in ICT than Europe. The question is: Why should a European profit maximizing firm invest less in ICT if it enhanced productivity growth as it does in the United States? The reason obviously is that there are unfavorable incentive structures as obstacles to a rapid diffusion of computer technology in Europe. This was demonstrated in a paper by Gust and Marquez (2002) which shows that ICT investment – but not investment in general – is negatively related to employment protection. The reason is that employment protection legislation is an obstacle to the reorganization of work practices which is a necessary condition for increasing productivity by ICT. This point comes out very nicely in the paper of Professor Crafts and shows that the ultimate reason for the slower productivity growth in Europe are not differences in ICT investment but deregulated labor and product markets.

The paper of Norbert Zimmermann presents a representative view of an industrialist on European economic policy strategies. The most interesting point he raises is the fact that companies perform better than their economies. We have checked this asser-

tion by looking at the companies united in the German DAX. Most of these companies are independent of their German nationality and earn the largest part of their profits somewhere else. These multinational companies increase the competition between locations. This fact is a threat to relatively unattractive locations as Germany seems to be and an advantage for many other more attractive locations. Norbert Zimmermann is CEO of a company which has created a lot of jobs in recent years but most of them outside Austria and Europe.

The paper presented by Josef Zweimüller relates economic growth to the inequality of income distribution. Empirical studies together with theoretical explanations by Persson and Tabellini (1994) and Alesina and Rodrik (1994), followed by many others (Benabou, 1996; Saint-Paul and Verdier, 1992; Bertola, 2000; etc.) have shown that high levels of initial inequality are subsequently associated with lower long-run growth rates while low levels of initial inequality are followed by higher long-run growth rates. These empirical results have been repeatedly found with different data, cross section and time series. This is true for samples including developing countries and industrial countries. Different explanations have been advanced in literature. Persson and Tabellini (1994) related higher inequality to higher attempts of redistribution and thereby to higher distorting taxation that reduces the growth rate. Another explanation is that large differences in income lead to political instability that again affects investment and growth. The most widely accepted theory, however, is the one that relates inequality and the accumulation of human capital. Countries which started compulsory basic education and higher education earlier as most European countries did, triggered off two effects: more human capital increased the growth rate of GNP and of productivity. At the same time, more education reduced inequality as differences in education are the most important reason for productivity and wage differentials between individuals. Thereby, they achieved two goals: more growth and less income inequality. Obviously, the correlation between inequality and growth is negative.

Foellmi and Zweimüller claim that the accumulation of human capital and lower inequality may have contributed to a superior growth performance in Europe after WWII. The expression "may have" seems acceptable because the main reasons for the period of high GNP and productivity growth in Europe are, as mentioned above, the integration of European markets, the transfer of workers out of agriculture, postwar reconstruction demand, migration, etc. These transitory factors were certainly dominant because the human capital advantage in Europe with respect to the States still exists while long-term growth rates have fallen below those of the United States.

It would be wrong, however, to conclude that more equality necessarily means more growth. Assuming that we would try to reduce wage inequality by redistributional taxes or subsidies: the labor market sends us the signal that it needs more skilled labor and less unskilled labor, which means that skilled labor gets higher salaries than unskilled labor. If we dampened down these signals by distributional measures, we would certainly reduce the growth rate. This fact is not in contradiction to the observation that historically, more investment in education has reduced inequality and increased growth at the same time. ❧

## References

**Alesina, A. and D. Rodrik. 1994.** Distributive Politics and Economic Growth. In: Quarterly Journal of Economics 109. 465–490.

**Benabou, R. 1996.** Inequality and Growth. In: Bernanke, B. S. and J. J. Rotemberg (eds.). NBER Macroeconomics Annual 1996. Cambridge, M. A.: MIT Press.

**Bertola, G. 2000.** Macroeconomics of Distribution and Growth. In: Atkinson, A. and F. Bourguignon (eds.). Handbook of Income Distribution 1(9). Amsterdam: North-Holland.

**Gordon, R. 2002.** Two Centuries of Economic Growth: Europe Chasing the American Frontier. Paper prepared for Economic History Workshop, Northwestern University.

**Gust, C. and J. Marquez. 2002.** International Comparisons of Productivity Growth: The Role of Information Technology and Regulatory Practices. Board of Governors of the Federal Reserve System International Finance Discussion Paper 727.

**Persson, T. and G. Tabellini. 1994.** Is Inequality Harmful for Growth? In: American Economic Review 84. 600–621.

**Saint-Paul, G. and T. Verdier, 1992.** Education, Democracy and Growth. In: Centre for Economic Policy Research (CEPR) Discussion Paper 613. London.

Jean-Philippe Cotis

Jean-Philippe Cotis
Chief Economist and Head of Department
OECD

# Reforming European Labour Markets: The Unfinished Agenda

## Introduction

My mission today is to give you an OECD view about labour market reform in Europe. I will try to do that, but you will forgive me if I also draw on my past professional experience as a policymaker in Paris and Brussels. To save time, let me tell you upfront what the three main messages I want to convey are:

- First, Europe has made substantial progress reforming its labour markets over the last 10 years. Job creation has been stronger and unemployment has declined – not by accident but through better policies.
- Second, European countries have made uneven progress. Some of them have achieved remarkable success, for example the Nordic countries, Ireland and the United Kingdom. Substantial progress has also been achieved along the "Atlantic façade" – Spain, France, Belgium and of course the Netherlands. In contrast, Germany has only lately started to reform its labour markets.

– Third and last message: we may have travelled the easiest part of the road toward full employment and a lot remains to be done. Unemployment remains unacceptably high, in particular among young and low-skilled persons. Long-term joblessness is still a matter of concern and the employment rate of older workers is disappointingly low. Achieving the Lisbon Summit targets will indeed require a lot of ambition and courage.

## Substantial Progress on Labour Markets in Europe

I'd like now to come back to the past to draw lessons from experience. In the current context of doom and gloom, it is important to remember that good policies led to substantial progress on labour markets. Through hard work and continued efforts, a large number of European countries managed to generate a "labour-deepening process". Labour deepening simply means using more intensively the most abundant resource, that is, human resources. These countries mostly situated along the Atlantic façade did their best to price less-skilled workers back into the labour markets. They operated both from the demand side of the market, by cutting for instance non-wage labour costs and later from the supply side, through in-work benefits and tax credits designed to fight the so-called poverty and unemployment traps.

Governments were helped in their task by the considerable expansion of temporary and part-time employment in those countries where traditional labour contracts were deemed too rigid. These "special" contracts have indeed spread very rapidly in Spain, Portugal, France and Finland. It remains, nonetheless, a question of debate how much they added to overall employment.

The "labour-deepening" strategy has produced impressive results. Over the past 10 years (1993–2002), which is the full length of an economic cycle, employment in the business sector has increased by nearly 14 million in the European Union, nearly as much as in the United States (16.4 million). Altogether, unemployment declined from a peak of 10% in the mid-1990s to about 8% currently. In addition, these gains have withstood rather well the current slowdown. While unemployment has increased, it remains well below the peak reached during the last downturn. All in all, the fall in European unemployment seems to be a lasting one, borne out of better functioning labour markets.

## Uneven Speed and Spread of Labour Market Reforms Among EU Countries

For various reasons, the pace and scope of reform have differed across Europe in the past 10 years. Germany has been particularly timid until recently. France took useful measures in the mid-1990s but relapsed into Malthusian policies with the 35-hour week. Spain, and more recently Italy, have engaged in a continued effort to adapt labour market regulations and arrangements. Finally, the Nordic countries, the Netherlands, Ireland and the UK have been more comprehensive and persistent in their efforts.

As a result, labour market outcomes are quite uneven across Europe. Unemployment rates vary from the low levels of 4½% in Austria and Ireland to 9% and above in France, Germany and Spain. Employment rates are also highly dispersed. In Italy only slightly more than half (55%) of those of working age are employed. By contrast, three

out of four persons are employed in Denmark and the Netherlands.

As the OECD has shown in a recent study of the sources of growth, low utilisation of labour is the main reason why GDP per capita in Europe lags that in the US. As you all know, labour utilisation depends on both employment rates and the number of hours worked per employee. Using this measure of labour utilisation European countries look a bit more homogeneous than one might think prima facie. To give just one example, it appears for instance that the Netherlands and Germany have managed to keep relatively high employment rates by resorting to short working hours. In truth only a handful of European countries (Austria, Scandinavia, the UK) can meet the test of high labour utilisation.

Well functioning labour markets may not only be useful to reduce mass unemployment and stimulate long-term growth, but also to ensure the resilience of European economies in the short run. I do not have the time today to thoroughly address the interactions between labour markets and economic resilience. Let me just say that in the case of Germany, at least, lack of resilience seems deeply rooted in fragile labour markets.

## Most Difficult Challenges Are Still Ahead of Us

We first need to remember that past improvements started from a very low base. Europe had very poor employment prospects in the early 1990s so that even today the situation remains unsatisfactory with low employment rates, high unemployment and severe labour market exclusion for the most vulnerable groups.

In addition, the pace of progress has obviously receded in the recent past. At present trends, it will indeed be very difficult to meet Lisbon objectives for 2010. I don't need to remind you of the key figures. At 64%, the rate of employment in Europe is well below the 70% Lisbon target. For older workers, the situation is even worse. We aim for 50% in 2010 but the employment rate is still hovering at 39% today. This is a very large planning gap.

The problem is not only that a lot remains to be done; it is also that the easiest remedies have already been used up. So far, governments have often

reformed by stealth, or in other words, by turning a blind eye when markets were bypassing burdensome regulations. In countries such as France, Spain or Italy, for instance, hiring workers under "special" labour contracts has become *de facto* the norm while the highly protected sort of contract is reserved for long-standing employees. More temporary contracts make it easier for the economy to adjust to cyclical fluctuations. But it also contributes, negatively, to create a dual labour market.

Reforms have also been relatively "painless" because they have been financed through public budgets either in the form of lower taxes or higher spending. The deteriorated state of public finances in most European countries will make it very difficult to accentuate these policies in the future. Budgetary scope to expand further earned income tax credit kinds of schemes or lower taxes on labour will be much more limited.

These "painless reforms" have made important contributions. But they will be more difficult to mobilise to address the remaining problems I already mentioned. The next steps toward full employment will imply tackling labour market institutions and mechanisms more squarely than in the past, entailing at times a high "political cost" for the authorities in the face of strong resistance to change.

## Five Possible Priorities for Future Reforms

### Putting the Employment Rates of Older Workers on a Rising Track

Encouraging older workers to stay longer in the labour force is not an easy task. Obstacles will have to be removed from both the demand and supply sides of labour markets.

We have been working hard at the OECD on some of the supply-side issues. And we found that in most European countries the opportunity cost for older workers of staying in the labour force is often prohibitive.

This applies to people in their mid-fifties faced with the possibility of entering pre-retirement or similar schemes. It also applies to people in their sixties willing to stay beyond the legal working age. As a general rule, working extra years beyond the legal age does not bring you any increase in your future pensions.

According to a forthcoming OECD study, this very skewed set of incentives has had quite a negative impact on employment. Why did this absurd situation emerge? Because pension policies have often been subverted and used as auxiliary instruments for misguided labour market policies. It was often believed that by removing ageing workers from the labour force you would reduce unemployment.

This, of course, did not happen. Unemployment remained high in those countries which indulged in Malthusian policies while the long-term sustainability of pension systems was badly affected. It is now time for governments to roll back all these disincentives. This means dismantling preretirement and other similar schemes and allowing those people who want to work past the legal retirement age to do so.

On the demand side it will be important to make sure businesses adjust rapidly to the new policy set up and manage to retain ageing workers in the labour force.

All these changes on the pension side are of course needed to stimulate potential growth and buttress the sustainability of public finances. But they should also be seen as a first step toward more flexible systems, à la suédoise, where people will be able to choose when to withdraw in the full knowledge of the consequences on their pension incomes.

### Adapting Employment Protection Legislation to Meet the Present Needs of Our Societies

Here we need to provide adequate protection to all employees without penalising employment. Ideally, we should strive for shared flexibility and job security, or to put it differently full employment without dualism and precariousness in labour markets.

As you all know, special contracts, such as part-time or short-term contracts owe their current popularity to good and bad reasons. On the positive side, they provide employers and employees with flexibility in some special circumstances. They may help employers cope, for instance, with highly seasonal or uncertain activity. And they provide some employees with better opportunities to combine work

and other activities such as care giving, education or leisure.

On the less positive side, however, it may be suspected that the current spread of special contracts is reflecting excess regulation in the rest of the economy. In countries with strict employment protection, special contracts may indeed remain the only option to retain flexibility. This is probably why, in France, two-thirds of new hirings have taken the form of special contracts in the past few years. And why also, in Germany, during the same period, permanent jobs sharply contracted, while temporary employment increased.

Temporary jobs are now a significant reality of our labour markets. They have contributed to alleviate Europe's unemployment problem but with a cost. Labour turnover and job insecurity are now highly concentrated on vulnerable groups living at the fringes of labour markets. This kind of two-tiered labour market comes with additional drawbacks, too. Because it is less regulated than traditional labour contracts, temporary work is often less remunerated. It also provides a lower access to key fringe benefits, such as paid vacations, paid sick leave, unemployment insurance and pensions.

It is now time to move from second bests and palliatives to first best options. We need to give more balance to the currently polarised arrangements. It could mean reforming thoroughly permanent contracts with a view to reducing separation costs. A less encompassing solution may involve the introduction of a benchmark fixed-term labour contract, characterised by a reasonable but not excessively long duration and moderate separation costs. Whatever the options, labour contract reform is certainly needed to reduce dualism and social exclusion.

**Activating the Fight Against Unemployment and Poverty Traps**

Here we should aim at removing the strongest disincentives to take up low-paid jobs. Financial disincentives can be for instance very strong if high replacement incomes, relative to wages, are cut off abruptly when getting a job.

How to alleviate these unemployment traps is of course a matter of political choice and budgetary circumstances. Some countries might choose to boost in-work benefits while maintaining high replacement incomes. Others may choose to reduce them.

Most countries would be well advised, in addition, to review and tighten the management of unemployment schemes. A variety of parameters such as eligibility conditions, job searching requirements, time-degressivity of replacement incomes may have to be adjusted according to circumstances.

To be a bit more concrete, it would be good if practice matched principle, so that unemployment compensation is really withdrawn when job offers are systematically refused. One has to recognise, however, that regrettably enough unemployment compensation is very often paid regardless of job searching activities. Hence job placement agencies have an essential role to play to remedy these obvious deficiencies. Indeed, some countries have had remarkable success with so-called activation policies where replacement income is conditional on availability to various work-like or training activities.

To put it in a nutshell, we are still far off the mark when it comes to fighting unemployment traps. In this field, there is still a lot of unfinished business and more worryingly much unstarted business.

**Reducing Further Labour Costs for Low-Skilled Workers**

In most countries, there is no budgetary room for additional cuts in labour taxes should they be needed. In this context, the tough issue of reforming minimum wage formation cannot be bypassed any more. In France, the cost of unskilled labour is still relatively high with detrimental consequences for employment. In my home country, indexing minimum wages on consumer prices rather than average wages will help. More generally, adapting minimum wages to sectoral and regional specificities should also be advised.

**Pruning Active Labour Market Policies**

Active labour market policies have a tendency to proliferate and to detract policymakers' attention from more substantial labour market reforms. As such, they can easily reach the zone of negative returns.

To avoid such an overstretching they should be targeted to areas of proven value. A number of training and subsidised employment schemes directed to the youth and long-term unemployed seem indeed valuable. These programmes should of course be designed in cost-effective ways. All in all, European governments spend between 1% and 2% of GDP on active labour market policies. From past personal experience, I have the strong feeling that here lies a source of solid budgetary savings.

## Conclusion

To wrap up my thoughts, I would say that 10 years ago European labour markets were indeed in very bad shape. At the time and following the lead of pioneering countries such as the Netherlands and the UK, other countries launched difficult reforms. These attempts were often met with suspicion, derision or hostility, in wide segments of the population. With hindsight and contrary to naysayers' predictions they produced good results.

Now is the time to launch a second wave of reforms. If anything, this second wave may be more difficult to steer through than its predecessor. But it is no less needed. As you well know from newspapers, labour market reforms are back in the headlines, meeting again with stiff resistance. To those embattled reformers, I would say: Europeans made it once, they can succeed again. Let us go forward. ❧


Die Förderung des
Wirtschaftswachstums
in Europa

Karl Pichelmann

Karl Pichelmann
Research Adviser, European Commission,
Directorate General for Economic and Financial Affairs
Associate Professor
Institut d'Etudes Européennes, Université Libre de Bruxelles

# Labour Market Reform in the EU: Progress and Remaining Challenges

## 1 Introduction[1])

Europe's key challenges of restoring full employment, creating a knowledge-based economy, preparing for population ageing and safeguarding social cohesion are closely inter-linked and, as stressed in the EU Broad Economic Policy Guidelines, need to be addressed by a coherent and comprehensive economic policy strategy for the medium to long term. The overarching objective of this strategy is to enhance the capacity of the EU economy to generate high rates of non-inflationary growth over a prolonged period. Basically, this requires pressing ahead with deep, comprehensive reforms of product, capital and labour markets, backed up by a sound macroeconomic policy mix aiming at sustained rates of growth close to potential within an environment of price stability.

1 *The analysis presented in this paper draws heavily on several recent contributions from the EU Commission Services, in particular on material assembled in chapters 2 and 4 of "The EU Economy: 2002 Review". Special thanks are due to Werner Röger and Mary McCarthy for helpful comments and support. Of course, the usual disclaimer applies. The views expressed in this paper are strictly personal and do not necessarily correspond to those of the European Commission.*

Against this background, this paper takes another look at labour market reform in the EU. The paper is organised as follows. Section 2 examines the progress made over the past couple of years with respect to better-functioning labour markets, characterised by higher employment rates and reduced structural unemployment. It presents some stylised facts on observed improvements in labour market performance in a number of EU Member States, and for the area as a whole. Specifically, the paper reports on a reform assessment exercise based on simulation techniques which indicates that structural reform efforts over the past couple of years have indeed borne fruit and delivered significant benefits in terms of output and employment levels. However, the vast majority of EU Member States, both old and new, is still far away from the Lisbon employment targets, with, in particular, all the major economies of the euro area plagued by high structural unemployment rates in the 8–12% range. Thus, there can be no doubt that the momentum and the breadth of structural reforms will certainly have to be maintained and increased, given the long unfinished agenda to improve the functioning of EU labour markets.

If reform fatigue wins the day, Europe appears destined to suffer a set-back to a medium-term growth path barely exceeding 2%. In fact, as argued in section 3 of the paper, in the absence of policy change, population ageing will push Europe's potential growth even below this level. Section 3 provides an overview of the basic data on population trends in the EU, the US, Japan, with the rest of the world broken down into two groups of fast and slow ageing countries. It then goes on to illustrate the implications of the sketched demographic developments for potential output, growth of per-capita incomes and age-related public expenditure. The scenario analysis clearly shows the fairly dramatic economic and budgetary implications of the decline in the EU's working age population if governments do not take offsetting policy actions. The section ends with a brief discussion of the available options to attenuate the growth implications of ageing populations.

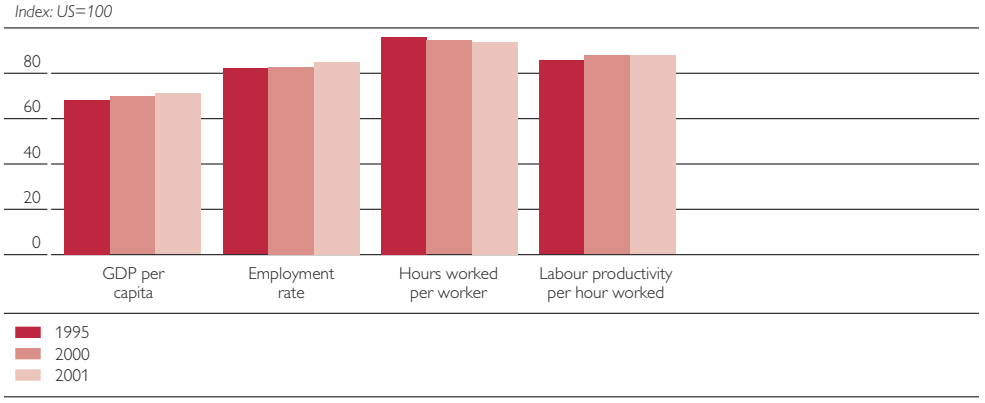
Finally, section 4 provides some brief concluding remarks. We argue for an urgent need to revitalise reform momentum. Action to improve incentives in order to make work pay, to facilitate job creation and to allow for efficient labour reallocation are fundamental to better-functioning labour markets. We also stress that determined efforts aimed at expanding the potential labour force are the most effective means of limiting the overall growth loss stemming from the declining and ageing population in Europe. Consequently, the current weakness in economic activity, with output growth clearly below potential, must not be taken as an excuse for further delays in implementing the comprehensive structural reform agenda as agreed in Lisbon and reinforced in Stockholm. Obviously, this is to be combined with growth-supportive macroeconomic policy making, which – while maintaining price stability and a sound medium-term orientation of fiscal positions close to balance or in surplus – should aim at stabilising growth close to potential.

## 2 Progress with Labour Market Reform: An Assessment

At their summit meeting in Lisbon in 2000, EU leaders set the ambitious goal for the EU to become the world's most competitive economy by 2010 and

Chart 1

**EU Performance**




*Source: EU Commission Services.*

agreed on a comprehensive structural reform agenda to boost employment and liberalise markets, now known as the "Lisbon strategy". This economic reform drive was largely motivated by the observation of a persistent income gap with the US and a widespread perception of falling even further behind.

Indeed, at the turn of the century EU income levels – measured in terms of GDP per capita in purchasing power parities – stood, on average, at only some 70% of the US level. However, it is important to note that the gap is somewhat less pronounced in terms of productivity per hour worked. The larger part of the difference in average levels of income is explained by the fact that Europeans work less than their US counterparts, both in terms of employment rates and, if employed, in terms of average hours worked.

Against this background, the four main planks of the comprehensive structural reform strategy to address the challenge to raise Europe's potential growth and to narrow the income gap are aiming at

– higher employment rates and lower structural unemployment;
– improving competitive conditions;
– fostering productivity and investment growth;
– efficient, integrated financial markets.

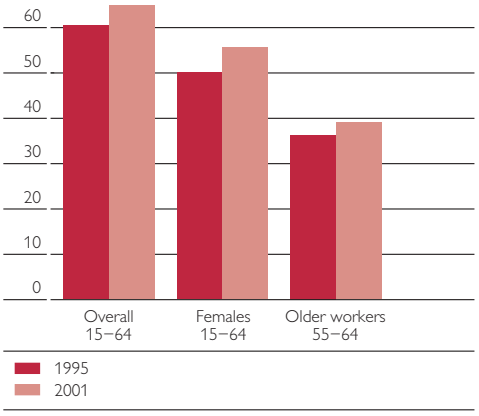
Obviously, the various interactions and synergies between reforms in different areas have to be taken into account in overall assessment of the impact of structural reforms. In particular, the vigorous pursuit of economic reforms to improve product market competition can be expected to have a positive impact on labour market performance, essentially by shifting the labour demand curve resulting in higher employment over the medium term. But clearly, the full benefits of increased product market competition will only materialise when the labour market structures in place allow for a smooth reallocation of labour. Lack of competition in product markets, on the other hand, is likely to curb the positive impacts of labour market reforms due to rent-seeking behaviour of workers and firms.

As regards labour market reforms, EU Member States have undertaken an array of reforms of labour market institutions over the past couple of years. Reform efforts aimed at stimulating employment have addressed, inter alia,

Chart 2

**Employment Rates in the EU**

*As a share of the total population of the same age group*




*Source: EU Commission Services.*

tax and benefit systems, for example in the form of cuts in payroll taxes for targeted groups or in-work financial support for low-wage earners, more active and preventive labour market policies, and a modernisation of work organisation, including the facilitation of part-time work and more flexible work contract arrangements.

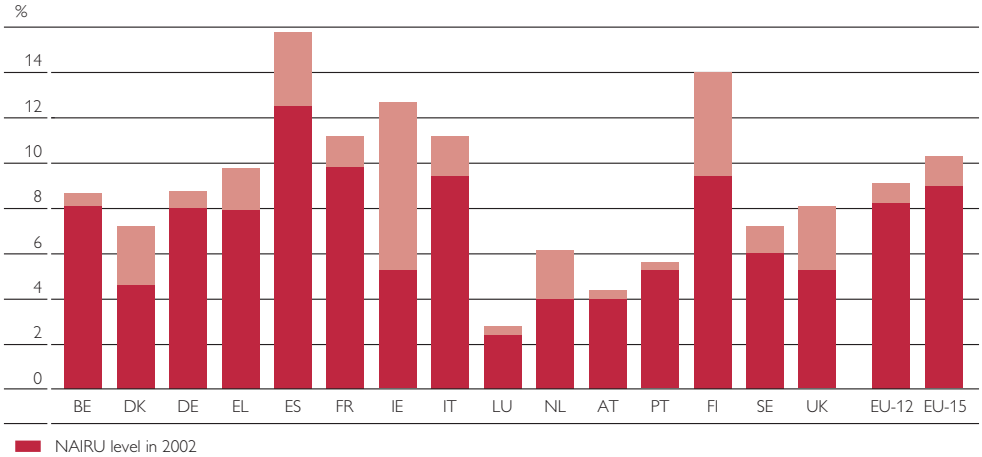
While it is certainly difficult to establish precisely the contribution made by the various reform efforts, there can be little doubt that they have produced significant results in terms of a higher employment content of growth, a trend increase in labour force participation and employment rates, and a reduction in levels of structural unemployment as indicated by a fall in the non-accelerating inflation rate of unemployment (NAIRU).

– In particular, over the period 1995 to 2001
– the total number of jobs in the EU-15 increased by about 13 million, and the overall employment rate increased by almost 4 percentage points;
– labour force participation rose by around 9 million, driven largely by women, reflecting an increase in the trend participation rate of around 1.5 percentage points; while
– unemployment fell by about 4 million, i.e. a reduction in the unemployment rate of around 3 percentage points, with about half of the overall decline being attributable to a fall in structural unemployment.

It must also be acknowledged, however, that progress in reform has been

Chart 3

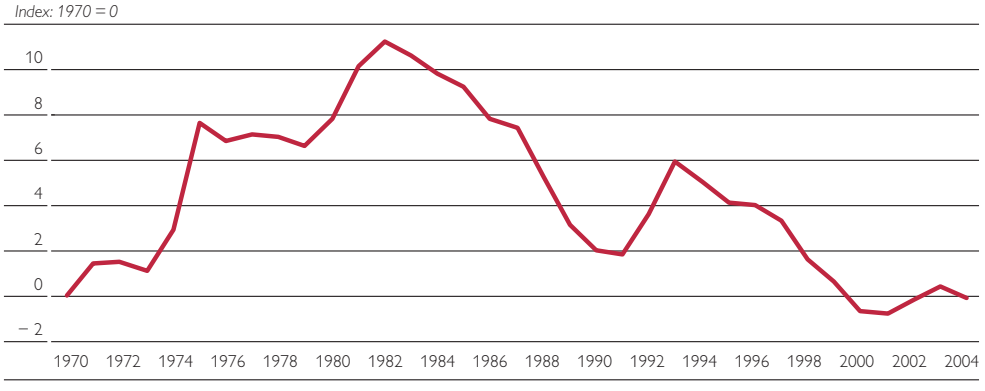
**NAIRU Level in 2002 and Change from 1995 to 2002**




*Source: EU Commission Services.*

Chart 4

**Real Wage Gap Indicator**




Source: EU Commission Services.

fairly uneven across countries and generally rather piecemeal. Moreover, all the major economies of the euro area are still plagued by relatively high structural unemployment. Overall, this suggests that the various labour market policy initiatives implemented over the past several years may offer only a partial explanation for the apparent area-wide improvement in the short-run unemployment-inflation trade off. It is difficult, in fact, to account for the fall in the NAIRU without invoking the role of widespread wage moderation, inter alia based upon informal incomes policies in a number of countries, which do not constitute reforms per se.

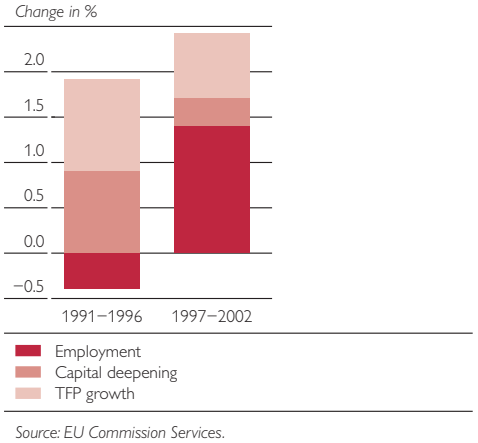
A simple growth accounting approach demonstrates that the second half of the 1990s has seen a significant change in the growth pattern of the EU economies. Not only has average growth of GDP in the EU-15 accelerated from a meagre 1.5% over the period 1991–1996 to an average rate of 2.35% for the period 1997–2002, but the contributions to growth from factor inputs and productivity improvements have also changed fundamentally in the latter period (see chart 5). In line with the observed real wage moderation over the past couple of years, and supported by some structural labour market reform efforts, factor input proportions have altered in a labour-friendly way. In particular,

– the labour contribution to growth has turned positive, broadly matching those in the US;
– the contribution from capital accumulation and TFP growth has been subdued.

Chart 5

**Employment and Productivity**

**Growth in the EU-15**

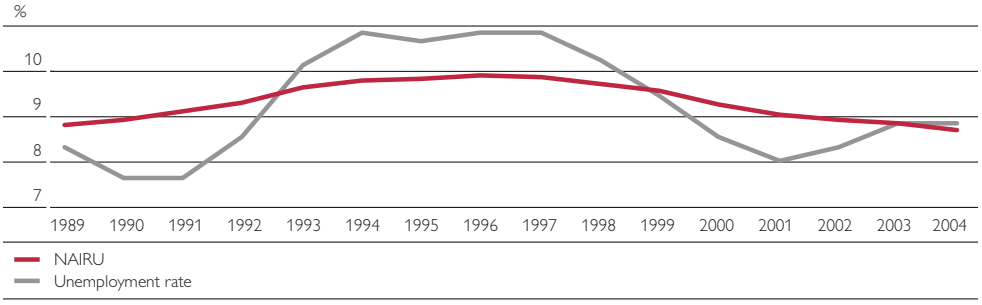



Source: EU Commission Services.

As a result, EU growth over the period 1997–2002 was characterised by relatively strong employment gains, in combination with significantly lower

Chart 6

**Unemployment and the NAIRU in the Euro Area**




*Source: EU Commission Services.*

capital deepening and, thus, weak apparent labour productivity growth. Two additional factors have to be kept in mind in terms of actual growth accounting: Labour input growth in terms of total hours worked was smaller than in heads, because a significant share of the net additional jobs represented part-time work. Moreover, apart from cyclical factors, the recent slowdown of labour productivity also partly reflects the employment of formerly unemployed or inactive workers with less-than-average productivity.

In the course of 2001, however, the EU entered a period of fairly sluggish economic development, with actual output growth now falling below potential for more than 8 consecutive quarters. In the initial phase of the slow-growth period employment held up quite well and the rise in the unemployment rate remained limited. However, now the resilience of the labour market appears to have weakened and the protracted weakness in economic activity is taking its toll in terms of net job losses and rising unemployment, with labour market adjustment biting particularly hard in Germany. However, from an overall perspective, the fairly moderate increase in unemployment (at least so far) is likely to reflect also some improvements in underlying structural factors, rather than simply delayed adjustment due to employment rigidities. Indeed, empirical analysis suggests that, if anything, the cyclical responsiveness of employment has risen relative to the past, and estimates for the Okun-coefficient do not differ significantly between the EU and the US.

Reviewing the broad patterns of structural reforms and improvements in the functioning of factor and product markets in the past couple of years, DG ECFIN has attempted to assess the overall impact of these reforms on output and (un-)employment in a backward-looking illustrative macro-econometric simulation exercise.

The labour market reform scenario has been implemented in the form of a gradual increase in the overall participation rate by a cumulated 1.5 percentage points combined with an ex ante downward shift of the wage-setting rule by 1% uniformly in all countries; moreover, reflecting the structure of net job creation (part-time jobs, temporary work etc.), it has been assumed that the average productivity of additional employment amounts to only 80% of the baseline level.

As regards product market reform, the numerous efforts undertaken in the second half of the 1990s to increase the level of competition on European product markets are probably best illustrated by the significant progress

made in completing the Internal Market for goods and by the move towards liberalisation and deregulation of the network industries. The liberalisation and deregulation in the network industries, notably in telecommunications and, to a somewhat lesser degree, in electricity, has paid off in terms of lower (relative) prices. For example, simply summing up the estimated reduction in price mark-ups in the electricity and the telecommunication sector, weighted by their relative share in business sector output, results in a decline of the economy-wide mark-up of almost 50 basis points. Overall, roughly translated into aggregate figures to be used in the simulation assessment exercise, it is estimated that the sketched developments corresponded to a reduction in the average price mark-up of about ½ percentage point.

A remaining channel for structural reforms to raise output and employment is via their impact on productive efficiency. However, in general the empirical evidence is not at all supportive of a significant acceleration of total factor productivity growth in the EU over the past couple of years. Against this background, the simulation exercise has been restricted to analysing a level shock to labour productivity; translated into model terms, this has been implemented as once and for all level increase of total factor productivity (TFP) by 1%.

Turning now to the results of this simulation assessment exercise, a stylised structural reform scenario equivalent in scale to a hypothetical reduction in the NAIRU by 1.5 percentage points, a reduction in the price mark-up by ½ percentage point and a level increase of TFP by 1 percentage point has been analysed. The simulation results suggest a medium-term increase in GDP relative to its baseline level of about 3–4%. In terms of growth rates, this translates into an acceleration of output growth by almost ½ percentage point annually over a period of 7 to 8 years. Our assessment suggests that without the progress in structural reforms, and not forgetting the observed wage discipline, there would be 5–6 million fewer jobs in the EU today, about 2 million more unemployed people, and the average growth rate would have been 2.2% instead of the 2.6% realised in the period 1996–2001. Thus, structural reform efforts have indeed borne fruit and delivered significant benefits in terms of output and employment.

However, it has to be kept in mind that typical estimates of the euro area's potential output growth rate have been in the 2¼–2½% range; moreover, as our results indicate, the growth stimulus from past structural reforms tends to fade away over time. Indeed, if reform fatigue were to win the day, Europe would appear destined to suffer a set-back to a medium-term growth path barely exceeding 2%; in fact, as will be argued in the next section, in the absence of policy change, population ageing will push Europe's potential growth even below this level. Obviously, to achieve the overall employment rate target of 70% for the EU as a whole by 2010, as formulated at the Lisbon Summit, the momentum and the breadth of structural reforms will certainly have to be maintained and increased. Consequently, the current weakness in economic activity, with output growth clearly below potential for more than two consecutive years, must not be taken as an excuse for further delays in implementing the long unfinished agenda to improve the working of EU labour markets. The main areas of urgently required action, as

identified in the Broad Economic Policy Guidelines, are the following:

- improving the combined incentive effects of tax and benefit systems
- ensuring that wage bargaining systems allow wages to reflect productivity differentials
- promoting more adaptable work organisation, in particular efficient employment contracts
- facilitating labour mobility, both geographically and occupational
- ensuring efficient active labour market policies

Clearly, while many of these policies involve a good deal of instantaneous pain, it often takes a considerable time span before the full benefits become manifest, requiring a firm and continued commitment to reform. Moreover, given that structural reforms are almost always, in one way or another, associated with the reduction or elimination of economic rents, considerations of "distributional fairness", both from an intra- and an intergenerational perspective will inevitably have to be taken into account; indeed, they may actually be an important factor to overcome stubborn reform resistance.

## 3 The Impact of Ageing[1])

In coming decades, the EU – and also its accession countries – will undergo unprecedented changes in the size and structure of its population. Fertility rates are expected to remain well below the natural replacement rate, and life expectancy is projected to continue to increase by about one year each decade. Migration flows are hard to predict, but in the absence of major policy changes, they are unlikely to reverse the overall demographic pattern. According to the central baseline scenario of Eurostat, the total EU-15 population is projected to increase from 376 million in 2000 to 386 million in 2020. After that, it will to start to fall, reaching 364 million by 2050. These EU developments stand in sharp contrast with those in the US. The recent census there has indicated a rebound in the fertility rate to 2.2%; coupled with higher levels of inward net migration, the US population is projected to increase by 130 million between now and 2050. The significance of this becomes evident considering that 50 years ago the US population was only half that of the current 15 EU Member States, whereas it will be 40 million larger than in the EU-15 by 2050.

It should be noted that the aggregate picture for the EU masks significant differences across countries. France and the UK, for example, are projected to see an increase in total population size over the period until 2050, while other countries such as Germany and Italy will witness large declines.

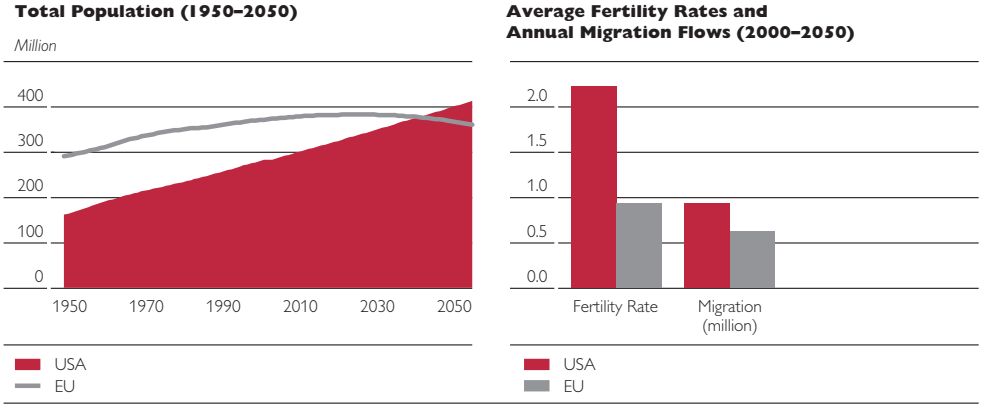
Obviously, the EU is not the only region in the world facing demographic upheaval due to falling birth rates and increased longevity. This is evident from chart 8 which compares dependency ratios for five country blocks, the EU, the US, Japan and with the rest of the world broken into two distinct groups of countries, namely "fast ageing" and "slow ageing". This classification for the rest of the world is similar to the approach adopted by Turner et al.[2]),

1 *This section is largely based on the analysis presented in chapter 4 of Mc Morrow, K. and W. Röger. 2002. The EU Economy 2002 Review. European Commission. See also Mc Morrow K. and W. Röger. 2002. EU Pension Reform – An Overview of the Debate and an Empirical Assessment of the Main Policy Reform Options. European Commission Economic Paper 162.*

2 *Turner, D. et al. 1998. The Macroeconomic Implications of Ageing in a Global Context. OECD Economics Department Working Paper 193.*

Chart 7

**Demographic developments in the EU and the US**




*Source: EU Commission Services.*

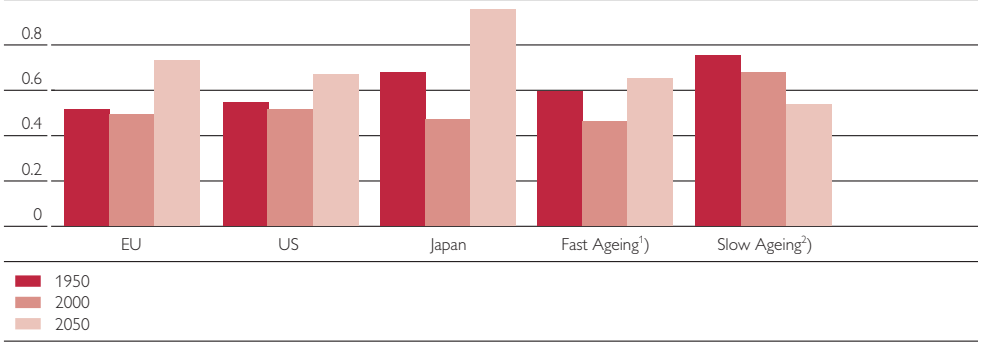
and it is based on the dependency ratio calculations underpinning the UN's latest global population projections. In effect, those countries which are predicted to experience an increase in their overall dependency ratio over the coming decades are classified as fast ageing, with this latter group made up of OECD member countries (other than EU-15, US, Japan, Mexico and Turkey) plus all of the Eastern European countries, Russia, China, Hong Kong, Korea, Singapore and Thailand. As regards future projections, while uncertainties exist, especially regarding the evolution of fertility rates, one fact appears indisputable: large increases in the share of the over 65s in the overall populations of all five areas are set to occur over the coming decades due to global increases in life expectancy. These trends in life expectancy are also a feature of the last 50 years but what is new is the reduction in the share of the population of working age which provides the economic support for the youth and retired populations. Changes in the 15–64 age group will ensure that increases in dependency ratios will occur in four of the five areas with the "slow ageing" group being the only exception. It is envisaged that the ageing process, leading to higher dependency ratios in the remaining areas, will have major economic and social consequences for the countries affected.

In Europe, the working-age population of the EU-15 is projected to decline very significantly from 243 million in 2000 to 203 million in 2050, a drop of 40 million persons or 18%. Over the same period, the population over older persons (aged 65 and over) will increase by 40 million persons, an increase of over 60%. Of this group, the biggest increase will be amongst the very elderly, i.e. persons aged 80 and over. Their numbers will triple in size from 14 to 38 million by 2050, which is particular relevant given that they are the most intensive users of health care and long-term care.

Overall, these shifts in population structure will lead to a dramatic change in the old-age dependency ratio, which is projected to approximately double from 24% for the EU-15 today to almost 50% in 2050. While the demographic burden of ageing will differ significantly across current EU Member States in absolute terms, with old-age dependency ratios rising to levels well above 50% in some countries, what is common for all is the strong

Chart 8

**Dependency Ratio Developments**

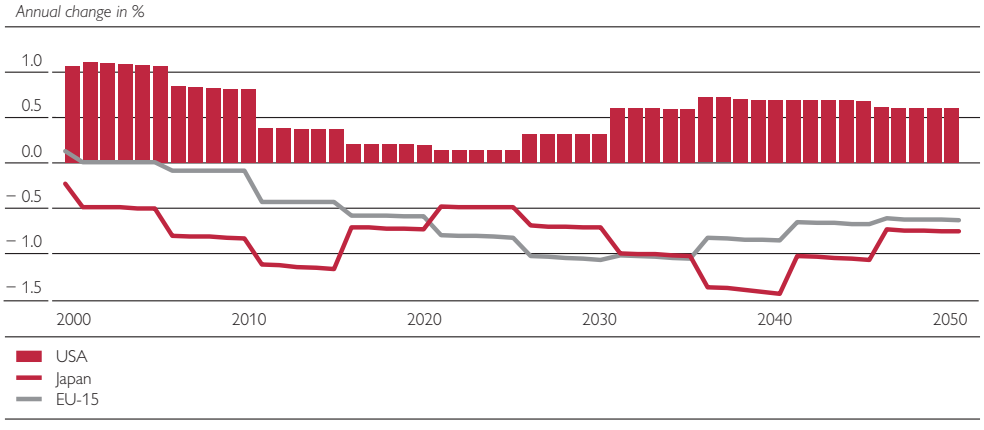



*Source: EU Commission Services.*

*1) Rest of OECD countries excluding Mexico and Turkey, all of the Eastern European countries, Russia, China, Hong Kong, Korea, Singapore and Thailand.*
*2) Remaining countries of the world not classified elsewhere.*

Chart 9

**Working-Age Population in the EU-15, the US and Japan**




*Source: EU Commission Services.*

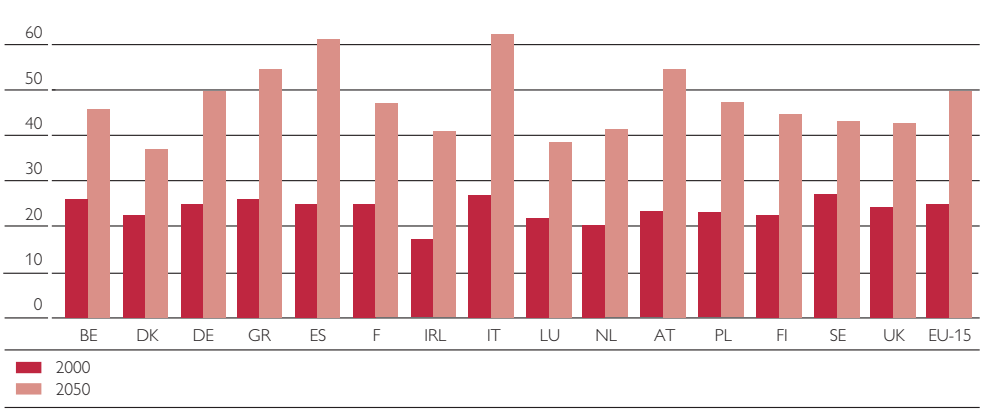
increase relative to current levels. Recent UN population projections suggest broadly similar trends in old-age dependency ratios for the EU accession countries, exhibiting even lower fertility rates and significant net out-migration.

Clearly, increasing levels of prosperity over time have been closely linked to sustained increases in labour supply and high levels of productivity growth. However, population ageing means that these sources of growth cannot be taken for granted in the future. As indicated above, the working-age population in the EU will start to shrink as of 2010 when the post-war baby-boom cohorts enter their retirement years. If translated into a corresponding fall in labour supply, and unless offset by increases in productivity growth, this development is bound to reduce the rate of potential growth.

The EU Commission's macroeconometric model QUEST II has been used to assess the quantitative implications of demographic change. In absolute terms the EU's annual average potential growth rate over the period 2000–2050 would fall from

Chart 10

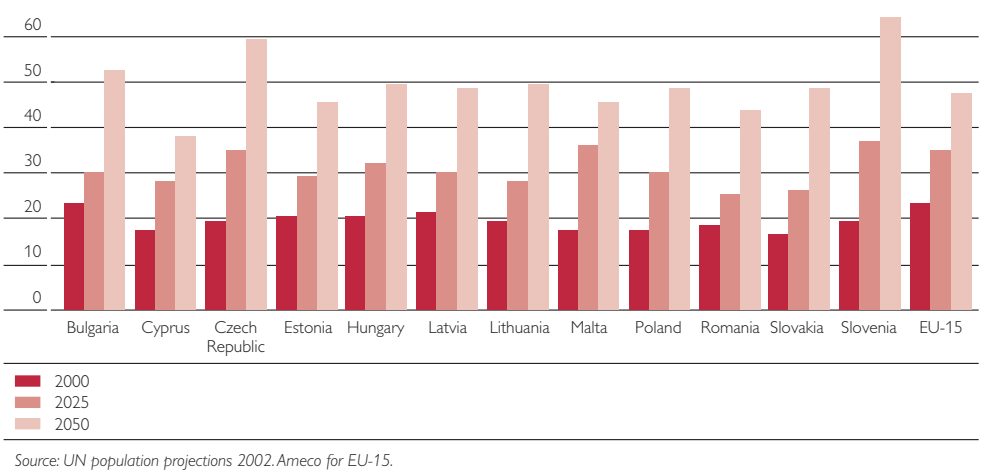
**Old-Age Dependency Ratio in the EU-15**




Source: EU Commission Services.

Chart 11

**Old-Age Dependency Ratio in EU Accession Countries**



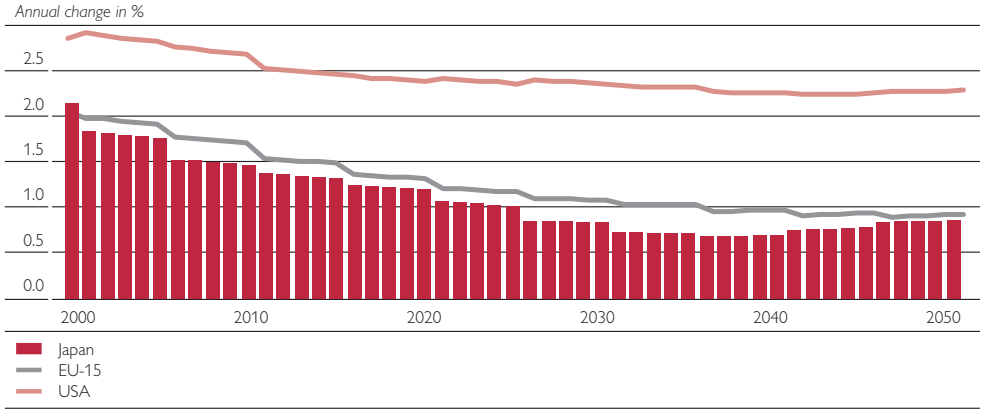

Source: UN population projections 2002. Ameco for EU-15.

the baseline rate of 2.1% to 1.3% in a no-policy-change scenario, with the Japanese potential growth rate falling even more, to an average of only 1.1%. It should be underlined that these are annual average growth rates and that the EU will witness individual years with potential growth rates at the end of the simulation period of slightly below 1%, with Japan experiencing growth rates substantially below 1%.

Note that the effects on potential output in the various areas are much greater than the impact on changes in living standards. This divergence between the two indicators reflects the influence of differences in the outlook with regard to the population of working age which has an important effect on the relative productive capacity of economies. In overall terms, in the case of the EU and Japan, the fall in average potential growth rates over the next 50 years is roughly double that of the decline in living standards compared with the technical

Chart 12

**Simulated Potential Growth Rates in the EU-15, the US and Japan**




*Source: EU Commission Services.*

baseline of no change in population trends.

In terms of growth rates of GDP per capita, ageing is expected to reduce the annual average rate of growth, relative to the baseline, by around 0.4 percentage point in the case of the EU and Japan and by around ¼ percentage point in the US. The pattern of change in living standards globally is largely dictated by underlying productivity and dependency ratio developments, with the failure of the slow ageing countries to capitalise on their more favourable demographics, in the form of a rapid catching up in income per head, reflecting their ongoing relatively poor productivity performance.

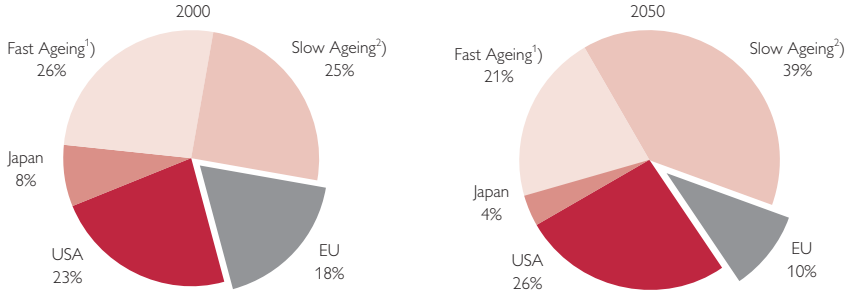
Thus, with respect to GDP per capita growth rates, the scenario shows very few differences over the next 50 years between the EU, the US and Japan, with annual average growth rates in income per head in a very narrow range of between 1.5% to 1.7%. However, it is when one compares potential output growth rates that one sees the extent of the difference in the economic outlook for the respective areas, with the US expected to grow at a healthy annual average of 2½% over the next 50 years compared with rates of 1¼% and 1% in the EU and Japan respectively. These differences in potential growth rates are almost totally explained by changes in the outlook for the growth in the population of working age, since the model assumes that there is no change in TFP growth rates; moreover, any effects from higher levels of capital intensity on labour productivity are of a relatively small order of magnitude, especially as a significant proportion of the excess savings is likely to be invested abroad and not in the domestic capital stock.

Growth developments along these lines would have a profound impact on global output distribution. Chart 13 shows the position in 2000 and in 2050, with the most important developments being:

– The growth in the relative share for the slow-ageing group of countries, which sees its share of world output growing from 25% in 2000 to 39% in 2050; the main driving factor behind this increased share is due to demographic developments as opposed to any underlying productivity improvements.
– The US enjoys a small increase in its share of world production which contrasts sharply with the relative

Chart 13

**Global Output Distribution**




*Source: EU Commission Services.*

*[1]) Rest of OECD countries excluding Mexico and Turkey, all of the Eastern European countries, Russia, China, Hong Kong, Korea, Singapore and Thailand.*

*[2]) Remaining countries of the world not classified elsewhere.*

Chart 14

**Expenditure as a Share of GDP in 2000**


*Source: Table 4.1 from http://europa.eu.int/comm/economy_finance/publications/european_economy/2001/eers0401adv_en.pdf*

*[1]) Results for public expenditure on long-term care are not yet available for a number of Member States.*

*[2]) Results for Ireland are expressed as a share of GNP.*

*[3]) Weights are calculated according to the Member States for which results are available. Therefore for health care it is a weight for the EU-14, and for long-term care, and total expenditure on health and long-term care, the average is for 10 Member States.*

performance of the EU and Japan, both of which are expected to witness a significant decline in their relative economic importance in the world over the coming decades. – In the case of the EU, its share of world output falls from 18% at present to 10% in 2050, with Japan's relative share being halved from 8% at the moment to 4% at the end of the simulation period. Finally, it is worth remembering that in 1970, the EU produced 25% of global output compared with 23% for the US. While the US has been able to retain its share over the last 30 years and is expected to continue to do so over the next 50 years, the EU has already witnessed a steady erosion

in its share of global output, a trend which is forecast to continue over the coming decades.

Obviously, a decline in potential growth is not only a concern because it will lead to a relative decline in prosperity, but also because it will make it ever more difficult to meet the expectations and demands of a growing elderly population. Much of the pension entitlements which citizens are accruing in Europe's public systems today are based on an assumption of a potential

growth rate of around today's level. EU policymakers concern about the consequences of ageing populations in the first instance arose from the projected implications for public spending on pensions, health care and long-term care. Indeed, the most recent report by the EU's Economic Policy Committee on the budgetary challenges posed by ageing populations arrives at the conclusion that on average, age-related public spending could increase by between 5 and 8 percentage points of GDP by 2040, and by much larger amounts in certain countries.

Obviously, failure to address the budgetary challenges indicated in this type of no-policy-change scenario analysis would lead to unsustainable public finances in the long run. In this context, sustainability is not simply a matter of avoiding debt accumulation. Sustainability also requires keeping the tax burden at a reasonable level, and not squeezing out other essential public expenditures such as investment in human capital and in R&D.

It is against this background that the EU growth strategy agreed in Lisbon has been refined and amended. The Lisbon European Council diagnosed the key long-term challenge facing Europe as slow growth. It set in place a strategy to inject dynamism into the European economy and fixed an ambitious goal for the EU to raise the potential growth rate to 3% by 2010. The Stockholm European Council in 2001 was more specific on the policy prescription to deal with demographic changes. It endorsed a three-pronged approach which should be tailored to the specific situation of each Member State. This consists of:

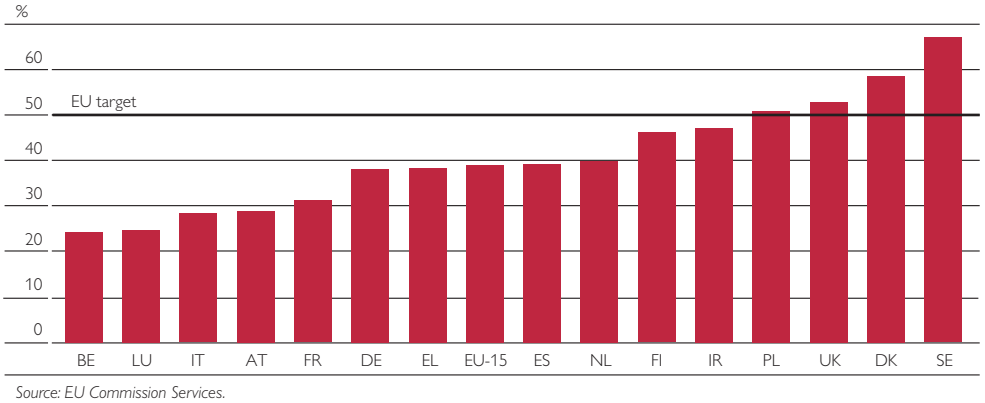
– first, a fast pace of debt reduction;
– second, raising employment rates especially of women and older workers; and
– third, reform of pension and health care systems, including where appropriate greater recourse to the funding of pension systems.

A thorough assessment of how EU Member States are faring as regards each of these three prongs is clearly outside the scope of this paper. Ambitious targets have been set until 2010 to raise the employment rates of older workers to 50% and to increase the effective retirement age by 5 years. However, simple inspection of current levels and the lacklustre progress made so far clearly indicate that the targets are in jeopardy of not being met.

Indeed, raising the effective retirement age appears to be the single most potent reform option tackling the negative growth impact from declining working-age populations, with a 1 year increase estimated to shave off between 0.6 to 1 percentage point from the public expenditure rise. However, most EU

Chart 15

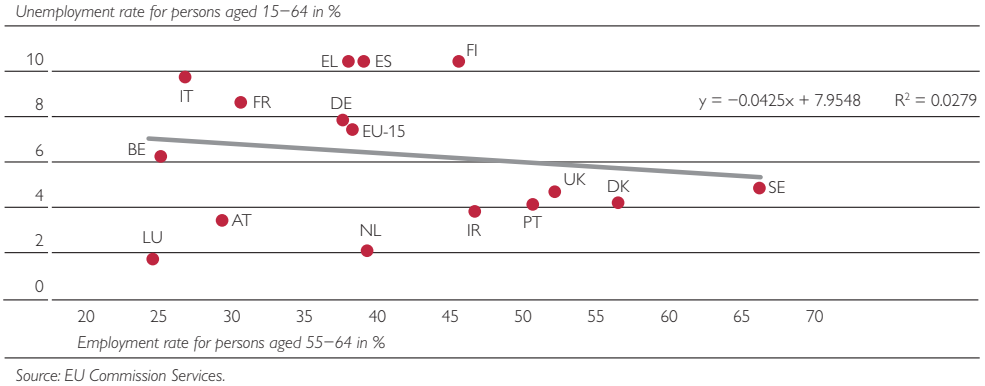
**Employment Rates of Older Workers**




*Source: EU Commission Services.*

Chart 16

**Employment Rates of Older Workers and Overall Unemployment**




*Source: EU Commission Services.*

Member States are still shying away from the required bold action, and the employment targets are therefore in jeopardy of not being met. Clearly, encouraging longer working lives will typically require modification of incentives embedded in pension and tax-benefit systems that encourage early withdrawal from the labour market; and in many countries access to early retirement schemes will have to be handled in a much more restrictive way, including the blockage of potential "escape routes" via invalidity pension schemes.

Concerns have been raised that determined action along such lines may cause additional labour market frictions, at least in the short run, with some arguments based on the lump-of-labour fallacy that "retirees free jobs for others". However, the number of jobs in an economy is clearly not fixed and, indeed, cross-country patterns in the EU reveal no relation at all between employment rates of older workers and overall unemployment. Moreover, flanking measures to improve the employment prospects of older workers, such as adequate training and retraining programmes and a more adaptable individual workplace environment with flexible pathways to retirement, could also be supportive to raise effective retirement ages. Last but not least, a fundamental shift in attitudes of employers to older workers will have to take place, so as to create meaningful work opportunities for older persons.

## 4 Concluding Remarks

The very first years of the new century have seen weak economic activity in the EU, largely reflecting cyclical adjustments to global and internal imbalances. In the initial phase of the slow-growth period employment held up quite well and the rise in the unemployment rate remained limited. However, now the resilience of the labour market appears to be weakening and the protracted weakness in economic activity is taking its toll in terms of net job losses and rising unemployment. However, from an overall perspective, the fairly moderate increase in unemployment (at least so far) is likely to reflect to some extent improvements in underlying structural factors, rather than simply delayed adjustment due to employment rigidities.

The empirical evidence is indeed suggestive of some progress made over the past couple of years with respect to better-functioning labour markets, characterised by higher employment rates and reduced structural unemployment in a number of EU Member States, and for the area as a whole. However, the vast majority of EU Member States, both old and new, is still far away from the Lisbon employment targets, with, in particular, all the major economies of the euro area plagued by high structural unemployment rates in the 8–12% range. Thus, there can be no doubt that the momentum and the breadth of structural reforms will certainly have to be maintained and increased, given the long unfinished agenda to improve the functioning of EU labour markets. Determined action is required to improve incentives in order to make work pay, to facilitate job creation and to allow for a smooth and efficient reallocation of labour.

Unfortunately, there can be little doubt that the underlying rate of potential growth in Europe has failed to accelerate in a sustained way. Moreover, available long-term scenarios paint a relatively alarming picture of significant reductions in potential growth rates in the EU over the coming decades, with the slowdown in potential growth also making the budgetary implications of ageing, in terms of higher pensions and health care costs, more difficult for the individual economies to bear. While such projections based on no-policy-change assumptions may be somewhat unrealistic given that governments are unlikely to stand idly by, they nevertheless give an idea of the scale of the task faced by EU policymakers, and the speed with which they must act, in devising policy measures aimed at avoiding, or at least cushioning, the shock to peoples' relative living standards and to their expectations in terms of future potential growth.

It is clear that the EU Member States will have to adopt a range of macro and structural policy actions to moderate the economic burden of ageing. In terms of fiscal policy, the broad framework for ensuring budgetary sustainability, in the face of substantial age-related spending pressures, would appear to be in place in the form of the Stability and Growth Pact. The Pact will be crucial in avoiding the emergence of unsustainable deficit and debt positions; indeed, recent Commission calculations suggest for such a threat to be present on the basis of current policies in a majority of the Member States of the euro area.

However, the challenge for public finances posed by ageing populations cannot be tackled only by debt reduction or the meeting of aggregate budget targets. In many countries much more action will be required to ease the significant disincentive effects in relation

to work effort and labour supply decisions. With regard to the degree of readiness of the Community's labour markets to withstand the inevitable shock which is looming, increases in labour force participation rates, reductions in structural unemployment and an increase in the average effective retirement age from less than 60 at present to the statutory age of 65 are all highly desirable reforms. Encouraging longer working lives will typically require modification of incentives embedded in pension and tax-benefit systems that encourage early withdrawal from the labour market; and in many countries access to early retirement schemes will have to be handled in a much more restrictive way, including the blockage of potential "escape routes" via invalidity pension schemes.

Finally, the EU must also continue to promote higher factor productivity growth through structural reforms aimed at both enhancing allocative efficiency and at increasing the flexibility of goods, services and capital markets in the Community, whilst simultaneously acting to ensure open and competitive trading conditions at the global level.

There appears to be a growing consensus among pundits and policymakers in the EU about the key economic policy issues and priorities to improve labour market performance, to lift potential growth and to tackle the challenge of ageing populations. At the Community level, peer pressure, benchmarking and the provision of best practices in the context of the so-called open method of coordination can be helpful to increase the momentum for reform. However, experience has shown that there is a long way to go from diagnosis to cure; and implementation of reforms has proven difficult given their inevitably complex and sensitive nature, often touching the very heart of the social contract between governments and citizens. While far from being "draconian", there can be no doubt that bold reform measures are required in many countries. Only determined action in good time will safeguard the welfare of both current and future generations and help to respect the basic goals of fairness and solidarity that underpin the social contract in Europe. ❧

Karl Aiginger

Karl Aiginger
Deputy Director
Austrian Institute of Economic Research (WIFO)

# The Contribution of Labour Market Reforms, Macroeconomic Policy and Growth Drivers to Economic Growth

## Europe in a Low-Growth Trap

Europe has a severe problem of insufficient growth. Three years of meagre growth at about 1% is the famous smaller part of the iceberg to be seen at the surface. Europe underperformed in the nineties relative to the US in growth, productivity and employment creation. The difference in growth performance maintained during the crisis, which had started and was caused by US problems. The latest figures for 2003 again show the US well ahead of Europe in growth of output and productivity. I believe that the growth differential will also exist in the future: Europe is on a growth path of at best 2%, while the US posts a 3% growth perspective over the next decade.

### The Importance of Growth

The importance of economic growth for welfare has to be fully evaluated at another occasion. Here it matters that in Europe employment rates are

8 percentage points lower than in the US and the Lisbon target of a 70% employment rate seems to be out of reach. Unemployment is sticky at 8%, which is quite high, even if it is good news (Cotis, 2003) that it did not climb higher in the current slow-growth period. The costs of the European retirement systems will become unbearable if there is no growth, and European enlargement will not work smoothly if economic growth does not accelerate. There are strategies to increase the employment content of given low growth rates, but they are neither nice nor easy to implement. The easier of them have been implemented.

Growth is important for employment, pensions, budget, and enlargement. All these reasons together may explain why Europe has to try to reach the Lisbon target of a 3% growth path.

### The Main Suspect for Low Growth in the EU: Market Inflexibility

In looking for the reason of low growth in Europe and for the growth differential towards the US, the main suspect usually is (Pichelmann, 2003; Cotis, 2003) the market inflexibility in Europe. Inflexible labour and product markets decrease employment and consequently economic growth. Higher utilization of labour would guarantee higher output. Labour utilization is understood as limited by regulations, high costs, high taxes, high welfare, and big government. There is a whole family of explanatory attempts along this line, the two papers choose the following variants:

In the wording of OECD: key policies to raise labour utilization are well known: to reform tax and benefit system, specifically unemployment support and tax wedge, to ease labour and product market regulation (OECD, 2003, chapter 5). Or in the wording of Cotis: "reforming labour markets will create jobs and stimulate growth" (Cotis, 2003, p. 7) or "a recent study on the sources of growth has shown … low utilization of labour is the main reason why GDP per capita in Europe lags that in the US" (Cotis, 2003, p. 3).

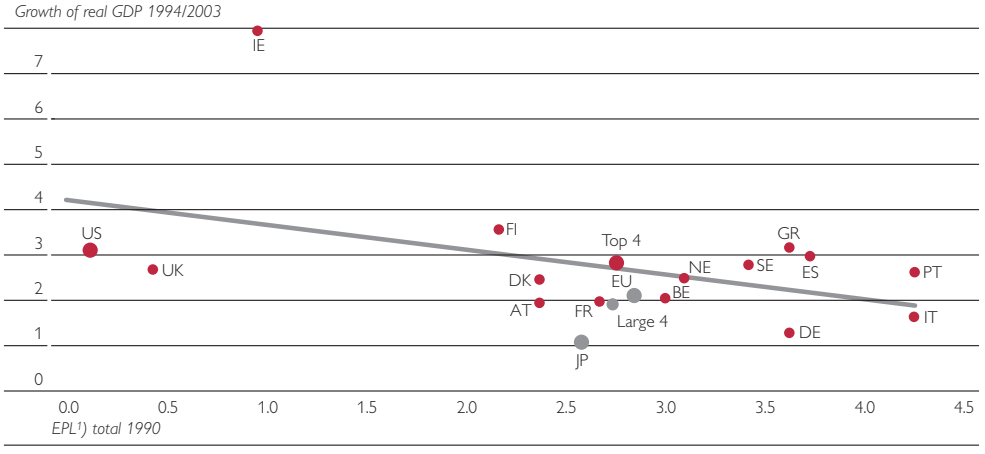
Or in words of Pichelmann: "A coherent strategy with the goals of non inflationary rate of growth … basically requires deep comprehensive reforms of the product, capital and labour markets. … Growth is sluggish since labour utilization is low in Europe" (Pichelmann, 2003).

### Labour Market Flexibility Is One out of Three Differences Between the US and Europe

Comparisons between the faster growing US economy and the slower growing European economy show three sets of differences (with many sub items in each): The first is market flexibility, the second are differences in investment into growth drivers and the third set comprises differences in fiscal and monetary policy. Labour market reforms (and related reforms of product market, keeping costs in line with productivity, investing in a favourable environment for business) are – I completely agree here with Cotis and Pichelmann important for increasing employment and output. Their growth enhancing effects may probably not come that quick and may not be that robust, that labour market reforms automatically generate growth. If macroeconomic policy is restrictive and if the economy does not invest into its future, the upcoming blossoms of liberalization may not find the sun and the water they need for growth and expansion. Functioning of market is the necessary condition for growth, but investment into the

Chart 1

**EPL 1990 and Growth of GDP**




*Source: WIFO calculations using OECD Database on Regulation Indicators.*
*[1]) Indicator on employment regulation (0 = low, 6 = high).*

determinants of long-run growth is the sufficient condition for growth. Without investment into the long-term determinants of growth liberalization does not create long-term growth.

**Deficit No. 1:**
**Underinvestment into Growth Drivers**

Economic growth in developed economies depends on research, education and the diffusion of new technologies. Europe underperformed in investment into the future at least to the same extent as in market perfection. In a set of 16 indicators measuring input and output of research, input and output of education, production and consumption in ICT, Europe shows inferior performance in 14 indicators.

**Deficit No. 2:**
**Evidence on Labour Market Inflexibility**

Labour markets are more restricted by law, rules, and collective bargaining in Europe than in the US. Using the OECD indicator on labour market regulation which uses a scaling between 0 (= unregulated) to 6 (= regulated) the US labour market is assessed as practically unregulated (0.2 points). European labour market had been assessed as 2.9 in 1990 and this indicator decreased to 2.6 in the average of EU countries in 1998. For regular contracts the regulation did not change much, only the two countries with the toughest regulation (Spain and Portugal) did deregulate standard contracts significantly. Most changes happened for temporary contracts. While this allows flexibility for firms without changing the basic rules for existing contracts, this asymmetry leads to danger of a dual labour market (Cotis, 2003).

There have been changes over the last decade. Karl Pichelmann cites "tax and benefit reforms for targeted groups, in work support, more active labour market policy, part-time work and more flexible work contracts". He calculates that the impact of structural reforms might have increased European growth by about half a percentage point. Actual growth was 2.6% between 1996 and 2001, without reforms it may have been as low as 2.2%. Jean-Philippe Cotis calls the reforms substantial progress, with the most difficult part ahead.

Chart 2

**Growth Drivers; Europe Versus USA**


*Source: WIFO calculations using OECD Database on Regulation Indicators.*
*Remark: Each indicator outside the unit circle shows a superior performance versus the USA.*

**Deficit No. 3: Growth Orientation in Fiscal and Monetary Policy**

Monetary policy has been focussing primarily on price stability in Europe. In the US the Fed targeted at inflation free growth. The capacity and determinedness of the Fed to counteract declining demand would have been criticized as ultra-Keynesian by Milton Friedman and many European experts for monetary policy. Fiscal policy in the US had successfully managed balanced budgets in the late nineties and could now out of this position allow automatic stabilizers to run the budget into a high deficit in the downturn, and to announce sweeping tax cuts at the deepest point of the business cycle in addition to an increased bill for security and war. This is not the place for a full evaluation of macroeconomic policies. And we have to keep in mind that the European Central Bank could not be more supportive to growth before it had established the credibility to be tough on inflation. And we want to stress that countries with deficits above 3% or 4% of GDP are not really in the best position to kick-start their economy by increasing deficits even more. But there had been unused chances over the past ten years to support growth by both policies. This indeed would have been done if the Lisbon target of 3% growth would have been taken as equally earnest as the 3% deficit ceiling. And strictly speeking the first is the goal, the second only an instrument.

**Learning from the Best: Choosing Top 4 Performers in the EU**

Looking at European countries shows a large diversity in growth and employment creation. Progress has been un-

even in the words of Pichelmann as well as of Cotis for labour market reforms. Choosing a broad set of indicators on economic performance, like growth of output and productivity, employment generation, inflation and fiscal stability, we get a group of four best performing countries in the EU, namely Sweden, Finland, Denmark and maybe also the Netherlands. We group these four countries together, independent of some caveats relating to the position of the Netherlands, as the top 4 countries.

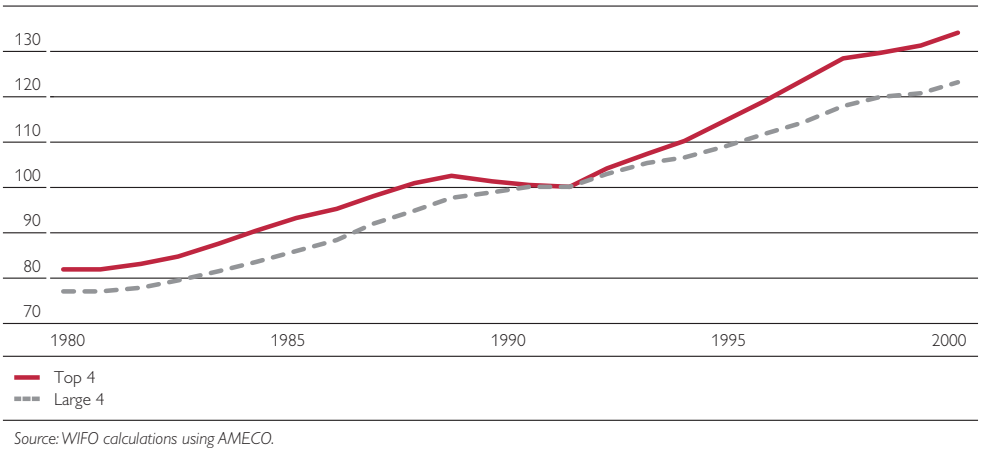
This list of top performers is not too different from Jean-Philippe Cotis' top league of performance, which aimed at singling out top performers on the labour markets. We just delete the United Kingdom from the group of top performers, knowing that the UK currently faces the challenge to either leave the country's infrastructure to deteriorate or massively raise taxes to finance education and health and traffic. And we add the Netherlands due to remarkable low unemployment, high employment rate and top productivity (knowing that costs are running high again and the attempt to regain employment out of the one million people in unemployment or disabled schemes proves next to impossible). Where I differ from Jean-Philippe Cotis is that I believe that the remarkable success of the Nordic countries is only to the smaller part due to labour market policy and to a large extent to growth promotion via research, education and embracing the information and communication technology.

**Performance Differs Significantly Between Top 4 and Large 4 Countries**

The top 4 countries post higher growth (2.7% in 1993/2002), as compared to 1.9% for the large 4 European countries. This holds for productivity increase and output growth in manufacturing. Employment rates are higher, unemployment lower. The most striking difference occurred in the public sector indicators. Public debt had been higher in 1993 and is now lower relative to GDP in the top 4 countries. While budget deficits which were 5% in both groups at the beginning of the nineties, now the top 4 countries post a surplus and set the target to have surpluses at about 1% or 2% of GDP over a business cycle to cover past debt or future

Chart 3

**Differences Between Top 4 and Large 4 Countries in GDP Growth**




Source: WIFO calculations using AMECO.

commitments for pensions. At the same time three out of the large 4 countries are dangerously near or above the penalty area of the Stability and Growth Pact. The turnaround of the top 4 countries has been partly the result of discrete budget cuts, partly of self imposed expenditure limits. The higher growth rate then helped to make the reforms self-enforcing, since growing economies post higher revenues at constant or declining statutory tax rates, while the big low-growth countries faced decreased revenues, which called for the next budget cuts and so on (downward spiral).

### The Top 4 Countries Invested into Economic Growth

The top performing countries lead in any ranking targeted to measure innovation, new technologies or progress towards information society. Specifically impressing is the performance in research and development. The top 4 countries used to invest about 1½% of GDP in 1982; this was less than the 1.9% of the large 4 countries. The top 4 countries overtook the large ones in 1988 and increased their research efforts irrespective of the crisis in the early nineties continuously to 3%. Sweden has with 3.8% the highest share in the EU countries, the average of the top 4 countries is 2.8%. The share in the large 4 countries has peaked in 1987 and is slightly decreasing to 1.9% in 2000.

The top 4 countries are also leading in other indicators on research (business expenditure, patents, and publications), have a higher ratio of secondary and tertiary education and are leading in all indicators on the production and diffusion of information technology. Overall the top 4 countries have today an advantage in 14 out of 16 indicators and improved its position in the nineties relative to the large economies.

### The Top 4 Countries Did Reform Institutions

Looking at the indicators on product market and labour market regulation, the surprising result is that the top 4 countries are not really outliers with higher regulation (as one would suspect from their position in welfare costs and

Chart 4

**The Growth Driver Hierarchy**

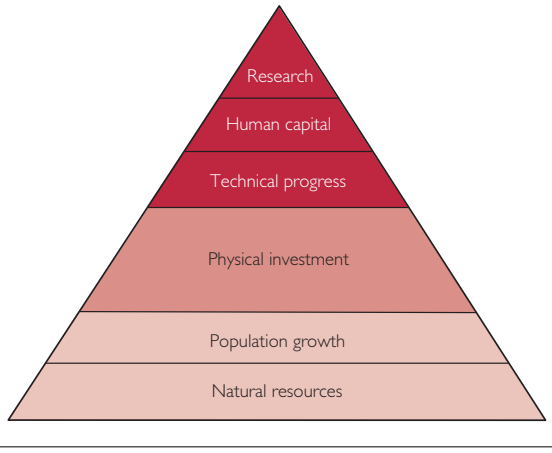
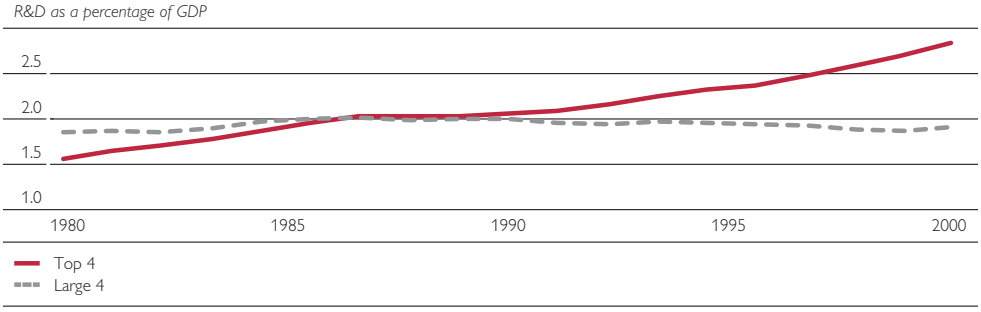


Chart 5

**Differences Between Top 4 and Large 4 Countries in R&D**




Source: WIFO.

taxes). Product market regulation[1]) is approximately on EU average (or slightly below, with 1.5 for the top 4 countries and 1.6 for EU average). It is marginally higher in Finland due to remaining state control and government ownership, but slightly below EU average. As far as liberalization of markets is concerned, top 4 countries had been less liberalized in 1988 and are now all more liberalized. Measured by the decline in regulation in the network industries the top 4 countries are the champions in liberalization. Average regulation is now 2.65 in the top 4 countries versus 2.96 in the arge 4 countries and 3.26 in the EU (on average), but still far from 1.02 in the UK and 1.36 in the US.

As far as labour market regulation[2]) is concerned, the top 4 countries had been in the average position in 1990, with lower regulation in Finland and in Denmark and higher in Sweden and the Netherlands. Looking at the change in the nineties three of the top 4 countries did reduce labour market regulation strongly (Denmark, Sweden, and the Netherlands) and Finland reduced its less strict regulatory scheme marginally. The labour market regulation of the top 4 countries is now below that of the EU and of the large 4 countries. The change did come mainly from deregulation of temporary contracts, where the regulation indicator dropped from 3.1 to 1.6[3]). For regular contracts only a few changes were

1 *The data set supplies an overall indicator on product market regulation for 1998, which contains 17 data on the state control over business enterprises (e.g. size public sector, voting rights, legislative control, and price control). Demand and control regulation in general, barriers to entrepreneurship, and barriers to international trade and investment (non-residents discrimination, regulatory burden, and tariffs).*

2 *The OECD data set on regulatory indicators contains 15 indicators of strictness of employment protection grouped into workers with regular contract and workers with fixed-term contracts or temporary work agencies.*

3 *Examples for changes regarding temporary contracts are that either or both fixed-term contracts and contracts can now be used in a wider range of situation than in the beginnings of the nineties (for example in Denmark, the Netherlands, and Sweden). In Denmark and Sweden, all restrictions on the types of work for which temporary work is legal have been removed (Nicoletti et al., 2002, p. 49). In Denmark the restrictions on the number of renewals have been removed. The maximum duration of successive contracts has been increased in Germany, Belgium, Denmark, Italy, and the Netherlands (Nicoletti et al., 2000, p. 50). France has restricted the types of jobs that could be offered by temporary work arrangements and reduced the maximum number of successive fixed-term contracts.*

made, like reductions in the replacement ratios[1]), stricter obligations to accept job offers and to upgrade qualification.

Summing up the top 4 countries had – despite of being considered as countries with an elaborate welfare system a system of regulation of product and labour markets which was not significantly tighter than that of other countries. In the nineties they managed to fine-tune their system in the direction of better incentives: they enforced part-time work, activation of unemployed through qualification, they intensified their active labour market policy, and enforced liberalization in network industries. They maintained the key elements of a comprehensive welfare system, but circumvented its negative incentives for work and leisure decisions. These countries however also realized that they can afford their high costs only if they strive for high productivity and if they stimulate economic growth. They increased their investment into research, education and promoted the diffusion of new technologies. Consequently they performed better than European average in the nineties (and in the current three years of slow growth).

## Which Labour Market Reforms Are Specifically Attractive?

### The Surprise of Non-Marginalizing Part-Time Work

The real miracle in the Netherlands was that part-time work is no longer seen as marginalizing. Among the measures used to accomplish this were that part-time earners have got a priority right to become fully employed after two years of part time work, that switching to part-time work and (with some restrictions) changing back to full-time work has recently been legally guaranteed, that part time work is also chosen voluntarily by employees with higher qualification (and even by managers) and is no longer seen as detrimental for the further career. Furthermore social contributions, insurances and benefits are paid pro rata relative to the number of hours worked. These rules limit the upcoming of a dual labour market as feared by Jean-Philippe Cotis. Part-time work is no longer that much a characteristic of a person or a position in the firm, but a voluntary decision for a certain phase in one's life.

### In-Work Benefits

Benefits for people working are a very important incentive. However, they can be very expensive specifically if the replacement rates (for unemployment or pensions) are high. The difference between income in work and income out of work may not be as decisive as many advocates of reduced benefits believe since countries with very high replacement rates are leading in employment (Sweden, Finland, the Netherlands, and Denmark)[2]). The problem is that in-work benefits can be very expensive for government and that they should be used only for a well-specified time.

### "Welfare to Work" with a Human Background (Assistance and Commitment)

Denmark reformed its labour market system first by decentralizing and sec-

1 *Changes for permanent occurred in Finland, Portugal, and Spain which have significantly reduced regulation for permanent workers, furthermore in Finland both the delay to the start of notice and the notice period itself were reduced, and procedures somewhat simplified (Nicoletti et al., 2002, p. 49).*

2 *One characteristic of the top 4 countries is their high replacement ratio for low incomes, replacement ratios for unemployment and pensions are declining for higher income (this is a consequence of the redistributive effect of Nordic type welfare states).*

ondly by dividing the period for which unemployment insurance is paid into different phases. In the second phase efforts to activate the unemployed is increased by raising both the obligations and the intensity of help (up to personal training plans and job offers in the non-market segment). The system has been and has to be fine-tuned, but is an interesting variant of the welfare-to-work system, with less offensive rhetoric and real commitment to help the unemployed.

### Retraining and Making Employment Attractive for Older People

Specific attempts are made to make work more attractive for older workers, and in parallel to decrease costs for firms and to learn to use more fully the specific ability and knowledge of this group. Lifelong learning is necessary to upgrade qualifications. Changing work and career pattern for people in different phases of their work life should become available, reducing the steepness of wage schemes is necessary. Keeping the older workers on the job is an essential part of the Lisbon strategy, it reduces the burden of the retirement systems, and provides a valuable human resource, specifically if Europe heads into a period of labour shortage (as forecast for the period from 2010 on).

### Longing for Empirical Research: "Lump of Labour Fallacy" Versus "Labour Supply Creates Labour Demand"

There are two hypotheses which mark the extreme views on labour markets and which are used by different groups of economists, both without sufficient evidence:

"*Lump of labour fallacy*": The first extreme view is that labour demand is fixed, and each older worker remaining "in the market" steals away the job of somebody else (maybe a younger). Shifting people into a disabled scheme or into early retirement is consequently seen as a strategy to reduce unemployment. This is one extreme viewpoint, sometimes called lump of labour fallacy. It implies that preventing early retirement aggravates unemployment problems.

"*(Labour) supply creates demand*": The other extreme is a new variant of Says law, this time for the labour market: each person who leaves the European "pockets of inactivity" and who can be persuaded to enter the labour market automatically increases GDP, even if he or she is less productive than the current members of work force and gets lower wage. For this view see the characteristic statement: "… low utilization of labour is the main reason why GDP per capita in Europe lags that in the US" (Cotis, 2003, p. 3).

It is evident that the truth lies in between these extremes: increasing effective labour supply increases economic growth and per capita income. The important question is to which extent? Will it be high enough to compensate for the implicit value for leisure, will it be enough to increase net income per worker? Will it be higher if supply comes from disabled, older workers, out-of-workforce people? And from the other perspective: to which extent will the older people which are kept on the labour market add to GDP and to which extent will they only prevent young people to enter? These questions are open to empirical research and should not be solved by statements.

The data presented by Karl Pichelmann in chart 5 indicate that the consequence of increasing the labour content to growth increased economic growth a little bit but to a larger extent reduced the capital content of growth and the rate of multi-factor productiv-

ity. Overall growth would not really accelerate, specifically if we extended the chart to 2003. The data for 1997–2002 seem to be the most favourable evidence, since growth accelerated a little bit relative to 1991–1996. But if we take 2003 into account or if we look at the medium-term prospects of a 2% growth, we will not be able to contend that increasing employment by 13 million people (Karl Pichelmann) or 14 million people (Jean-Philippe Cotis) did not accelerate growth. Increasing employment did change the employment content of growth, but reduced the other two components of productivity growth (capital deepening and multi factor productivity). Ceterum censeo only investment in growth drivers is able to increase the long-term rate of growth. Flexible labour markets are important, but do not work alone, at least in the short or medium run.

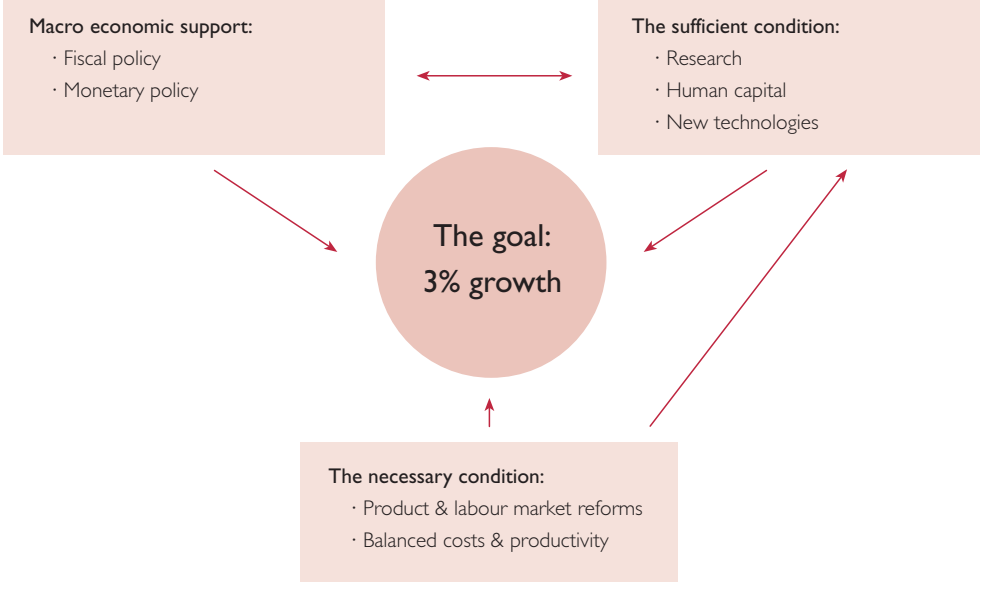
**The Conclusion: Labour Market Reforms Are Needed, but Are not Sufficient to Return to Growth**

The experience for Europe relative to the US, as well as the strategies of successful European countries versus the big ones, tells us that no single policy set is likely to bring Europe back to a medium-term growth rate of 3%. This session of the 31st Economics Conference is about labour markets, and the two papers consequently focussed on labour market policy, attesting Europe "substantial albeit uneven progress" and calculating "a 0.4% contribution" of structural reforms to medium-term growth.

My personal view and reading of the evidence is that all three policy sets together are to be used to bring Europe back to a 3% growth path:

– Making markets more flexible and containing private costs (mainly labour costs) and public costs (government expenditures) is the necessary part of the strategy.
– Investing into the future drivers of growth is the sufficient part of the strategy. While the EU and the OECD are hard in fiscal discipline, in liberalization and in labour market deregulation and while the ECB is successfully heading towards repudiation for inflation

Chart 6



mindedness, all instances are soft if governments and countries are not investing enough into the future, if they are violating innovation targets and not investing enough in pan-European infrastructure.

– A fiscal and monetary policy not biased against growth is of great help for the period necessary for structural reforms to translate into higher growth and also for the period long-term investments into the future need to become effective. The economic policy in the US as well as that of the successful European countries have followed a comprehensive approach including labour market reforms, investment into growth drivers and a prudent macroeconomic policy. ❧

## References:


**Aiginger, K. 2003.** A Three Tier Strategy for Successful European Countries in the Nineties. WIFO Working Paper 205.

**Aiginger, K. 2003.** The Relative Importance of Labor Market Reforms to Economic Growth. WIFO Working Paper 208.

**Aiginger, K. 2002.** The New European Model of the Reformed Welfare State. European Forum Working Paper 2. Stanford University.

**Aiginger, K. 2002.** Framework for Business Decisions. Firms, Markets, and Policy Strategies in Europe. Course material, Graduate School of Business. Stanford University. June 13: http://www.wifo.ac.at/Karl.Aiginger

**Aiginger, K. and M. Landesmann. 2002.** Competitive Economic Performance. The European View. WIFO Working Paper 179.

**Cotis, J.-P. 2003.** Reform of the European Labor Markets: A View from the OECD. Draft prepared for the 31st Economics Conference of the OeNB. Mimeo.

**Nicoletti, G., St. Scarpetta and O. Boyland. 2002.** Summary Indicators of Product Market Regulation with an Extension to Employment Protection Legislation. Working Paper 226. Economic Department, OECD. Paris: OECD.

**Organisation for Economic Co-operation and Development – OECD. 2003.** Economic Outlook 73. June.

**Pichelmann, K. 2003.** Reform of the European Labor Markets, Progress and Remaining Challenges. Draft prepared for the 31st Economics Conference of the OeNB. Mimeo.

Hannes Androsch

Hannes Androsch
Industrieller
AIC Androsch International Management Consulting GesmbH

# Eine tragfähige Investitionsstrategie für Europa

Nach der Phase des Wiederaufbaues nach dem Zweiten Weltkrieg erfreuten wir uns für ein Vierteljahrhundert eines Goldenen Zeitalters (laut angloamerikanischer Terminologie „Golden Age", laut französischer „les trente glorieuses") mit einem wirtschaftshistorisch beispiellosen Wirtschaftswachstum. Dieses schlug sich in einer bis dahin unvorstellbaren Steigerung des Massenwohlstandes bei gleichzeitig beträchtlich sinkender Wochen-, Jahres- und Lebensarbeitszeit nieder. Frei- und Urlaubszeiten konnten erhöht, der Wohlfahrtsstaat beträchtlich ausgeweitet werden. Dank der jährlich erwirtschafteten kräftigen Zuwächse war auch die Verteilungsfrage in Form höherer individueller Einkommen und vermehrter Sozialleistungen vergleichsweise leicht zu lösen. Darüber hinaus standen ausreichende Mittel für in die Zukunft gerichtete Investitionen zur Verfügung.

Mitte der Siebzigerjahre kam es, ausgelöst durch den ersten Erdöl-Preisschock vom Oktober 1973, zu einer ausprägten Rezession. In der Folge verlief die Wachstumskurve entschieden

flacher, womit auch nur mehr geringere Zuwächse zur Verteilung zur Verfügung standen. Eine Ausnahme bildete in den Neunzigerjahren der aufgeblähte Boom der „New Economy" und der Aktienbörsen in den USA. Das Platzen dieser Blase hat die nunmehrige Stagnation samt Rekordarbeitslosigkeit ausgelöst.

Das neue Jahrhundert ist in wirtschaftlicher Hinsicht bislang durch Flaute, also verloren gegangene Dynamik, Stagnation oder gar Rezession gekennzeichnet. Dieser Befund gilt schon über ein Jahrzehnt für Japan, inzwischen auch für die USA und im Besonderen für Europa, vor allem jedoch für Österreich. Die wirtschaftliche Verfassung der Triade der drei größten Wirtschaftsblöcke, auf die zusammen mehr als 70% der Weltwirtschaft entfallen, hat negative Auswirkungen für die restliche Welt.

Die unerfreuliche wirtschaftliche Entwicklung ist sicherlich eine, wenn auch hartnäckige konjunkturzyklische Erscheinung, zu einem beträchtlichen Teil allerdings auch die Folge ungelöster Strukturprobleme. Dieser Befund trifft jedenfalls für Europa und besonders augenscheinlich für unser Land zu. Das fehlende Wachstum wirkt sich negativ auf Einkommen und Beschäftigung aus, bewirkt steigende Arbeitslosigkeit, verschärft die ohnehin ungelösten Probleme der öffentlichen Finanzen, erschwert die Sicherung der Sozialsysteme und untergräbt die Wahrnehmung von Zukunftsaufgaben. Wichtige Investitionen unterbleiben, anstehende Probleme werden prolongiert. Sie drohen sich zu Lawinen auszuwachsen. Dennoch üben wir uns in Realitätsverweigerung. Unsere Verhaltensweisen und Erwartungen orientieren sich trotz eines sich immer stärker verändernden Umfeldes an einer längst verloren gegangenen Zeit. Dieser Vorwurf ist insbesondere auch an die politischen Entscheidungsträger zu richten.

Wie meinte doch Keynes: „Wenn sich die Umstände ändern, ändere ich meine Meinung. Was machen Sie, Sir?" Keynes ist auch in dieser Hinsicht zu Unrecht ins Ausgedinge gestellt worden.

Österreichs Wirtschaftsentwicklung befand sich über das sogenannte „Goldene Zeitalter" hinaus lange Zeit auf der Überholspur. In den Neunzigerjahren fielen wir trotz der Impulse der Ostöffnung als Folge der lahmenden großkoalitionären Politik – (deren Leistungskatalog enthält immerhin unseren EU-Beitritt, die Abschaffung der Vermögens- und Gewerbesteuer oder die Ermöglichung von Privatstiftungen) – auf die Kriechspur zurück. Seit 2000 befinden wir uns im Zustand der Stagnation.

Andere, ebenfalls kleine Länder wie Finnland, Schweden oder Irland haben ihr Schicksal eindrucksvoll in die eigene Hand genommen. Sie haben mit Erfolg ihre Wirtschaft gründlich restrukturiert und modernisiert sowie das Sozialwesen reformiert und zukunftstauglich gestaltet.

Mit der Politik der Aufrechterhaltung des Status quo ohne Berücksichtigung der inzwischen eingetretenen Veränderungsprozesse wurde gleichsam ein Wechsel auf die Zukunft gezogen. In einer Art Generationsbilanz mögen es Jahreswirtschaftsleistungen sein, die bereits verbraucht worden sind, ehe sie noch überhaupt erwirtschaftet worden sind. Natürlich könnte man angesichts der europaweit mehr oder weniger stagnierenden bzw. in absehbarer Zeit sinkenden Gesamtbevölkerung und so hohen Wohlstand auch die Frage stellen, wozu wir denn überhaupt Wachstum, das ohnehin nur die begrenzten Ressourcen des Biotops

Erde belastet, brauchen? Nun ich glaube, es gibt eine Reihe von Gründen, warum wir dennoch Wachstum brauchen: Zum einen, weil sicherlich noch kein die gesamte Bevölkerung in den Industriestaaten umfassendes Niveau an Wohlstand erreicht wurde, wie es im Idealfall wünschenswert wäre, ganz zu schweigen vom Rest der Welt. Und zum anderen werden wir die Leistungen angesichts der demographischen Entwicklung einer zunehmend älter werdenden Gesellschaft mit einer zahlenmäßig geringer und länger in Ausbildung stehenden jüngeren Generation nicht in dem benötigten Ausmaß bestreiten können, schon gar nicht angesichts unserer budgetären Situation.

Dass es auch für kleine Länder im derzeit ungünstigen konjunkturellen Umfeld möglich ist, aus dem Ruder gelaufene Budgets wieder in Ordnung zu bringen, hat Professor Aiginger eindrucksvoll aufgezeigt.

In den letzten drei Jahrzehnten stand die Bekämpfung der Inflation im Zentrum der Wirtschaftspolitik. Als Instrumentarium kam die auf Preisstabilität ausgerichtete monetaristische Wirtschafts- und Fiskalpolitik zum Einsatz. Die antizyklische Nachfragepolitik wurde in die Besenkammer der Wirtschaftspolitik gestellt – allerdings nicht in den USA unter Reagan sowie Bush Vater und Sohn.

Inzwischen stellt die Inflation keine weltwirtschaftliche Bedrohung mehr dar. Vielmehr besteht eine globale Nachfragelücke, weil vielfach – wiederum besonders in Europa, aber auch in Japan – die Sparquote die Investitionsquote übersteigt. Es wäre daher hoch an der Zeit, zu einer Wirtschaftspolitik zurückzukehren, die nachfrageseitig auf Keynes und angebotsseitig auf Schumpeter aufbaut sowie dem deflationären Umfeld durch eine entsprechende Geld- und Währungspolitik entgegenwirkt. Auf Dauer wird sich der Sozialstaat, eine sich immer weiter aufblähende Verwaltung oder eine wettbewerbsverzerrende Subventionspolitik, wie im Speziellen im Agrarsektor, nicht auf Pump durch Deficit Spending finanzieren lassen, wie dies in Europa seit den Achtzigerjahren zunehmend der Fall ist. Zu nennen sind auch die gigantischen und zu Lasten der Entwicklungsländer wettbewerbsverzerrenden Agrarsubventionen der Industriestaaten.

Auch wenn nunmehr ein Ende der konjunkturellen Talsohle erreicht zu sein scheint, ist das Tal vor – allem in Europa – noch längst nicht durchschritten. Vor der Euphorie eines raschen Konjunkturaufschwungs muss daher vor allem in der EU gewarnt werden. Diese Hoffnung könnte sich allzu rasch als „expectation bubble" erweisen. Es kristallisiert sich immer deutlicher heraus, dass die Automatik von wirtschaftlichen Stabilisatoren alleine nicht genügt, um die Wirtschaft anzukurbeln und die bestehende Nachfrageschwäche zu kompensieren.

Überdies hält die EZB unbeirrt am Ziel der Bekämpfung der Inflation fest. Die Zinssätze wie auch die Wechselkurse des Euro sind allerdings zu hoch, um kurzfristig eine Besserung der Konjunktur und des Wirtschaftsstandortes bewirken zu können. Im Übrigen herrschen weltweit zum Teil schwer wiegende Ungleichgewichte, wie das US-Außenhandelsdefizit, Verzerrungen auf dem Agrarmarkt oder

bei den Wechselkursen, wie etwa die Unterbewertung des Renminbi zeigen. Weitere Abschwächungen des US-Dollar müssen erwartet werden.

Viele der derzeit virulenten Probleme sind auch Ausfluss einer unzureichenden Auseinandersetzung mit dem technologischen Fortschritt, mit der Globalisierung und Liberalisierung der Märkte, mit den neuen geopolitischen und geostrategischen Gegebenheiten (Beendigung des Kalten Krieges, Fall der Berliner Mauer am 9. Novem-

ber 1989), mit dem neuen Terrorismus (Anschlag auf die Twin Towers am 11. September 2001) oder den vielfältigen gesellschaftlichen Veränderungen. Zu deren gravierendsten Umbrüchen zählen unter anderem ein neues Selbstverständnis der Frauen, eine dramatische Änderung der Alterstrukturen in den Industriestaaten und der Übergang zur Wissensgesellschaft.

Die meisten der neuen Herausforderungen werden sich nur durch eine verstärkte internationale Zusammenarbeit nachhaltig lösen lassen. (Mit dem Scheitern in Cancun wurde eine große Chance vergeben.) Dasselbe Axiom gilt auch für die Bewältigung der Bedrohungen, denen die Menschheit etwa durch Hunger, Mangel an sauberem Trinkwasser, international organisierte Kriminalität, Drogen, Klimaveränderung, neue Seuchen wie Aids, radikale Ausbeutung der Umwelt oder durch ethnische Konflikte ausgesetzt ist.

Die Bekämpfung dieses Konfliktpotenzials findet derzeit in der internationalen Zusammenarbeit noch keine adäquate Entsprechung. Dieser Vorhalt richtet sich insbesondere an die großen Staaten der Erde, allen voran die USA, aber auch an Europa, letztlich aber an jeden einzelnen Staat. Die Setzung von Initiativen ist notwendigerweise nicht an territoriale Größe gebunden. Dominanz kann Kooperation und dementsprechende Allianzen nicht ersetzen. Dies gilt auch für die Wirtschaftspolitik. Die damit verbundenen Aufgaben können nicht nur an die EU delegiert werden, sondern müssen von den einzelnen Staaten im Rahmen ihrer Möglichkeiten wahrgenommen werden. Die Schubkräfte für wirtschaftliches Wachstum müssen wieder aktiviert werden. Unser Land und Europa brauchen eine wirtschaftliche Wachstumsoffensive.

Voraussetzung dafür ist eine moderne, zukunfts- und wachstumsorientierte Wirtschaftspolitik. Nur mit Verständnis darauf werden Beschäftigung und Einkommenszuwächse erwirtschaftet, die öffentlichen Finanzen in Ordnung gebracht, das Sozialsystem gesichert, angemessene öffentliche Leistungen angeboten und Zukunftsaufgaben wieder wahrgenommen werden können.

„Get growth going" muss wie in den USA auch in Europa und bei uns zum Motto werden.

Auf die einzelnen makroökonomischen Ansätze als indikativen Auslöser zugunsten von wirtschaftlichem Wachstum möchte ich nicht im Einzelnen eingehen. Einen Schlüsselpunkt dabei stellen jedenfalls Investitionen zur Steigerung der Produktivität und zur Ausschöpfung des vorhandenen, aber bei weitem nicht ausgeschöpften Wachstumspotenzials dar, also die

Förderung von Innovationen, Investitionen und Infrastruktur.

Als ein Beispiel von vielen möchte ich in diesem Zusammenhang die im klassischen Sinn verstandenen Infrastrukturbereiche unterstreichen. Was wir benötigen sind moderne Verkehrsverbindungen und nicht, denken Sie an unsere sogenannten Autobahnen, Parcoursläufe zwischen den einzelnen Baustellen, oder das unbefriedigende Dienstleistungsangebot der Bundesbahn, deren Güterwaggons angeblich nur zu 18% ausgelastet sind.

Neben der materiellen Infrastruktur wird im Zuge des Übergangs zur Wissensgesellschaft Bildung, Schul- und Weiterbildung immer wichtiger. Wenn hier gespart wird, dann entspricht dies der Vorgangsweise eines Bauern, der sein ganzes Saatgut konsumiert statt es zu säen und sich daraufhin wundert, dass er keine Ernte mehr einbringen kann. Dieser drastische Zusammenhang trifft insbesondere auch auf die Bereiche Innovation, Forschung und Forschungsförderung zu sowie auf die Dotation und Ausstattung der Universitäten. Dies gilt für den öffentlichen Bereich ebenso wie für den unternehmerischen.

Mit einem ausgeprägten Forschungsbewusstsein sowie einer höheren Innovationsbereitschaft ließe sich manches, wahrscheinlich sogar vieles zum Besseren wenden. Hier besteht ein Defizit, das sich auch in der Förderpraxis der öffentlichen Hand widerspiegelt. Österreich etwa hat nur eine halb so hohe Forschungsquote wie Finnland. Wenn man bedenkt, dass Finnland vor 12 Jahren im Zuge der Implosion der Sowjetunion geradezu einen wirtschaftlichen Schock durch den Verlust von 20% seines Außenhandels erleben musste, dann soll man von der erbrachten Leistung nicht nur den Hut, sondern durchaus entsprechende Schlussfolgerungen für notwendige Reformen im eigenen Land ziehen. Dabei sind insbesondere auch die Rahmenbedingungen für die einzelwirtschaftliche Tätigkeit zu hinterfragen und drastische Reform-Maßnahmen zu setzen. Ein vordringliches Anliegen dabei muss die Entbürokratisierung sein. Dem Wildwuchs an Vorschriften ist Einhalt zu gebieten, die Bürokratie ist zu verschlanken, die Behördenwege sind zu verkürzen. Dies trifft vor allem auf die Ebene der Bundesländer zu. Die Aushöhlung der Bundesebene durch die zunehmende Verlagerung von Kompetenzen auf die Ebene der Länder hat in diesem Zusammenhang kontraproduktive Auswirkungen.

Lassen Sie mich auch auf die Situation vieler Industriebetriebe kurz eingehen. Gegenwärtig wird diskutiert, ob wir noch eine Inflation oder bereits schon eine Deflation haben. Ich meine, wir haben beides. Wir sind im Dienstleistungssektor, im Bereich der öffentlichen Hand mit inflationären Tendenzen konfrontiert, während der industrielle Bereich immer stärker dem Phänomen der Deflation ausgesetzt ist, was im Verlust der Preissetzungsmacht der Unternehmen besonders deutlich zu Tage tritt. Dies bedeutet, dass massiver Druck nicht nur auf die Preise, sondern logischerweise in der Folge auch auf die Margen besteht, mit Auswirkungen insbesondere auch auf die Bonität und die Finanzierungsfähigkeit, was vor dem Hintergrund von Basel II ein besonderes Damoklesschwert darstellt. In der Folge stehen die Unternehmen neben der Optimierung der Kosten gleichzeitig auch vor der Notwendigkeit, hinreichende Investitionen zu tätigen und ihre F&E-Aktivitäten voranzutreiben, um jenen Mindestzuwachs an Produktivität zu erreichen, der das Überleben auf dem Markt ermöglicht.

Man könnte nun zur Ansicht gelangen, eine Bereinigung des Marktes sei gar nicht so schlecht, da diese zu einer Konsolidierung führen wird, die im weiteren Sinne eine schöpferische Zerstörung bewirken könnte. Allerdings: Nicht jede Zerstörung ist auch eine schöpferische. Zudem wird der freie Wettbewerb weiterhin durch staatliche Eingriffe verzerrt, siehe etwa die Regelung von Chapter 11 in den USA.

Letztlich bedingen einander einzelwirtschaftliches und volkswirtschaftliches Wachstum. Bei aller einzelwirtschaftlichen Verantwortung braucht es aber eine entsprechende Politik, die wiederum den Mut und die Bereitschaft für Veränderungen und Aufgeschlossenheit gegenüber Neuem voraussetzt. Und gerade in diesem Bereich haben wir das gravierendste Defizit. Was wir benötigen, ist eine neue Aufbruchsstimmung, Fortschritt und Modernität statt Rückschritt, vor allem aber eine zukunfts- und damit wachstumsorientierte Investitionspolitik. ❧


Meerlechner

Josef Taus

Josef Taus
CEO
Management Trust Holding AG

# Wirtschaftswachstum, Finanzkapital und Investitionen

Europa, die EU, besonders der deutsche Sprachraum, zeigen seit einigen Jahren erhebliche Wachstumsschwächen. Die Diskussion über „Grenzen des Wachstums", wie sie etwa ab Ende der Siebzigerjahre des vergangenen Jahrhunderts mit großer Intensität geführt wurde, scheint zunächst ausgestanden zu sein. Aus ökonomischer Sicht sind Wachstumsgrenzen nicht erkennbar.

Gleichmäßiges Wachstum ist bei gegebenem Wissensstand wahrscheinlich nicht erreichbar, Wachstumsschwankungen sind daher als systemimmanent anzunehmen. Stagnation oder gar Schrumpfphasen des Systems sollten aber als „Krankheitszustand" definiert werden, weil sie die Funktionstüchtigkeit erheblich vermindern.

Die Frage, dies sei in Parenthese erwähnt, wann eine Marktwirtschaft in einen stationären Zustand mündet, hat schon Alfred Marshall und besonders John Maynard Keynes beschäftigt. In den „Essays on Persuasion"[1]) wird die Frage behandelt, wann der Kapitalismus in einem stationären Zustand

1 *Keynes, J. M. 1931. Essays on Persuasion. London: MacMillan.*

landet. Der Zustand ist erreicht, wenn es keine Anreize zur Kapitalakkumulation mehr gibt, wenn der Realzins 0 geworden ist. Im voll entwickelten Kapitalismus sind die Produktivität und die Einkommen so hoch, dass alle Bedürfnisse befriedigt sind. Die Arbeitszeit ist so kurz geworden, dass die Menschen mit ebensolchem Vergnügen arbeiten, wie sie heute zum Beispiel Tennis spielen. Dann, so prognostiziert Keynes, wird es einen Wandel der Werte geben: „Wenn ein-

mal die Ansammlung von Reichtum ihre soziale Bedeutung verliert, wird es im Kodex der Moral große Änderungen geben. Wir werden uns von pseudomoralischen Grundsätzen befreien können, die uns 200 Jahre lang beherrschten, Grundsätze, die einige der unangenehmsten menschlichen Eigenschaften zur höchsten Tugend machten. Wir werden es uns leisten können, das Geldmotiv nach seinem wahren Wert einzuschätzen. Doch Vorsicht! Die Zeit dafür ist noch nicht gekommen. Noch weitere 100 Jahre werden wir uns vormachen müssen, dass das Gute schlecht und das Schlechte gut ist – denn das Schlechte ist möglich und das Gute nicht. Geiz und Wucher und Vorsorge müssen noch für eine Weile unsere Götter bleiben. Nur sie können uns aus dem Dunkel der wirtschaftlichen Notwendigkeit ans Licht führen" – so weit Keynes.[1]) Das mag ja so manchem nicht gefallen, aber es ist unbestreitbar geistvoll.

Abgesehen von den Keynes'schen Visionen werden wir noch weiter mit dem marktwirtschaftlichen System leben, wie lange? Ich weiß es nicht. Faktum jedenfalls ist, dass dieses System in den „entwickelten Industriestaaten" schon eine noch vor 60, 70 Jahren schwer prognostizierbare Produktivitätssteigerung entwickelt hat und dem größeren Teil der Menschen in diesen Ländern auch einen nicht leicht vorhersehbaren Wohlstand und eine steigende Lebenserwartung gebracht hat. Vom Schlaraffenland sind wir zwar noch weit entfernt, auch in seiner modernen Gestalt der Keynes'schen Vision. Aber immerhin, es ist erkennbar viel geschehen. Es sollte daher darum gehen, auch in der Phase des „noch nicht voll entwickelten Kapitalismus" einigermaßen akzeptabel und in einer als einigermaßen „gerecht" empfundenen „Verteilungslage" zu leben. Dazu gehört meines Erachtens, dass das „marktwirtschaftliche System" in einem – so weit wie möglich – stetigem Wachstumsprozess sich bewegt. Stagnation und Schrumpfung sind daher als „Krankheiten" des Systems anzusehen, dauern sie an, ist eine Dauerkrise des Systems nicht auszuschließen. Ein triviales Modell möge dies verdeutlichen. Nehmen wir eine beliebige Periode von 10 Jahren: Am Anfang beträgt das BSP eines beliebigen Landes 100.000 WE, es wächst im Durchschnitt dieser Periode noch um 4% p.a. – eine optimistische Annahme. Das BSP nach 10 Jahren würde daher (zinseszinsmäßig berechnet) rund 150.000 WE betragen. Stagniert das BSP in diesen Jahren,

1 *Engels, W. 1982. Moral und Geschäft. In: Kaltenbrunner, G.-K. (Hrsg.). Kapitalismus. Freiburg–Basel–Wien: Herder (Herderbücherei Initiative 47).*

das heißt, es beträgt am Ende der Periode real ebenfalls nur 100.000 WE, ist relativ einfach festzustellen, was das bedeutet. Die Spannungen in der Gesellschaft, sei es im sozialen, ökonomischen Bereich oder in sonstigen Bereichen, würden erheblich wachsen, die politische Instabilität zunehmen. Radikale Ideologien könnten die üblichen irrationalen Hoffnungen auf eine bessere Welt wecken usw. Das ist ja alles nicht so neu, hat es schon gegeben und gibt es potenziell noch immer.

Gegenwärtig lassen sich ökonomische Wachstumsgrenzen nicht erkennen, das heißt nicht, dass solche nicht existieren. Über Qualität und Steuerung des Wachstums wird es immer politische und wissenschaftliche Diskussionen geben. Um es noch einmal festzuhalten, ein marktwirtschaftliches System braucht, um funktionsfähig zu bleiben, Wachstum, das im 10-Jahres-Durchschnitt bei einigermaßen entwickelten Volkswirtschaften nicht unter 2 bis 3% real p.a. liegen sollte (nominell etwa zwischen 3 und 6%).[1])

Seit 2, 3 Jahren wächst die europäische Wirtschaft und besonders die Deutschlands und auch Österreichs weniger als 2 bis 3% real. Die Schwierigkeiten häufen sich. Politisch und wirtschaftlich. Die Budget- und Steuerdiskussionen, auch die Pensionsdebatte, die steigende Arbeitslosigkeit sind Symptome dieser Entwicklung.

Diese Tagung hat umfangreiches Zahlenmaterial gebracht, ich kann mich daher auf weniges beschränken. In der Mai-Ausgabe der Monatsberichte der EZB wurde für den Euroraum 2001 ein Wirtschaftswachstum von 1,4% gemessen, 2002 0,8% und für 2003 wird ungefähr 1% erwartet. Die Bruttoanlageinvestitionen sanken 2001 um 0,6% und 2002 um 2,6%. In den Jahren vorher stiegen sie etwa zwischen 4,9% und 5,8%, nur um auf einiges hinzuweisen.

Angenommen, die Wirtschaftspolitik im Euroraum wird nicht überdacht, und die USA bringen es nicht fertig, Konjunkturlokomotive für die EU zu spielen, dann ist eine Rückkehr zu einem „normalen" Wachstumstempo (z. B. 3% real) in nächster Zukunft nicht zu erwarten. Wirtschaftspolitisch wäre es meines Erachtens notwendig, eine Gleichrangigkeit z. B. von Beschäftigungs- und Währungspolitik zu statuieren. Es gibt nicht den geringsten Anlass, die Währungspolitik dominieren zu lassen. Wachstum, Beschäftigung, technischer Fortschritt sind gleichrangig.

1 *1951 erschien im Humboldt-Verlag, Wien–Stuttgart, ein Buch des österreichischen Psychologen Peter R. Hofstätter mit dem Titel „Die Psychologie und das Leben". Im Kapitel V („Die Randbedingungen der Demokratie") sind auf S. 93 ff. folgende Sätze zu lesen: „Die expansive Natur der Demokratie und die notwendige Bindung ihrer Ideologie an den Fortschrittsgedanken und an den der Freiheit – der Nicht-Eingefügtheit in einen Ordo – findet ihren charakteristischen Ausdruck in dem Theoriengebäude der neuzeitlichen Wirtschaftslehre. Ein gegenwärtiger Besitz repräsentiert eine Möglichkeit, in der Zukunft einen größeren Besitz festzustellen, er wächst – der Theorie nach – ins Unendliche und er 'wächst' so eigentlich nicht, denn das hieße, dass er sich auf eine bestimme Endgestalt zu entwickelte; er unterliegt vielmehr – der Theorie nach – einem unendlichen Progress. Es ist gewiss kein Zufall, dass die Entwicklung der Demokratie seit dem 17. Jahrhundert mit einer immer stärkeren Betonung des ökonomischen Denkens Hand in Hand ging. Es ist ebenso wenig ein Zufall, dass die vom Ordo-Gedanken getragenen Systeme, die Kirche des Hochmittelalters, Faschismus und Kommunismus in der individuellen Benützung des Kapital-Progresses und des Zinsen-Mechanismus eine Sünde erblickten und erblicken, die bis in die Beichtvorschriften hinein verfolgt wurde. … Die Randbedingungen des Kapitalismus sind daher auch nahezu identisch mit denen der Demokratie: Eine allgemein verbindliche Fortschrittsideologie – der Freiheitsgedanke, die Gleichheitsthese und schließlich die expansive Tendenz, deren Behinderung gleichbedeutend mit einer Katastrophe ist. …"*

Es fehlt hier der Platz, sich mit neoklassischer Analyse, Keynesianismus, Monetarismus auseinander zu setzen: So viel sei aber festgehalten: Die Annahme der sehr raschen Anpassung von Preisen und Löhnen an die jeweilige wirtschaftliche Lage sowie rationale Erwartungen der Menschen, ja, ein auch nur durchschnittlicher Informationsstand der Wirtschaftssubjekte sind kühne Annahmen, die sich praktisch kaum realisieren lassen. Eine einigermaßen vernünftige staatliche Wirtschaftspolitik, die dort eingreift, wo sie es für nötig hält, wird auch in Zukunft notwendig sein, wobei es wie in vielen Bereichen menschlichen Handelns ein Weg zwischen Skylla und Charybdis ist. Eine überbürokratisierte und regelungswütige staatliche Wirtschaftspolitik ist für die Wirtschaftsentwicklung genauso schlimm, wie der Traum vom Markt, der wie ein Deus ex Machina eine „vernünftige" Entwicklung der Wirtschaft erzwingt. Wir müssen zur Kenntnis nehmen, dass wir mit einem einigermaßen vernünftig handelnden wirtschaftlichen und damit auch wirtschaftspolitischen Trial-and-Error-Prozess leben müssen. Vergleiche hinken zwar meistens, aber schon in der klassischen Pharmazie war bekannt, dass es auf die jeweilige Dosis ankommt. Grundsätzlich gilt das auch für die Wirtschaftspolitik.

Konkrete Finanzsysteme sind in der Regel das Ergebnis sehr langer historischer Entwicklungen, wie z. B. das anglo-amerikanische oder die kontinentaleuropäischen Finanzsysteme. Ich möchte mich daher, auch wenn Österreich zu den kleineren Mitgliedstaaten der EU gehört, mit dem österreichischen auseinandersetzen und zwar im Licht der internationalen Entwicklung, vor allem der Diskussion in der EU. Vor allem möchte ich kurz auf die bis vor wenigen Jahren in Österreich einigermaßen allgemein akzeptierten Spielregeln hinweisen.

Der österreichische Wiederaufbau nach dem Zweiten Weltkrieg, der Aufstieg unseres Landes in die obere Hälfte der Industriestaaten, ist von der Finanzsystemseite her in praxi bis zum heutigen Tag im Wesentlichen von zwei Elementen getragen worden:

Von der Innenfinanzierung der Unternehmen und vom Bankkredit. Die Bilanzstruktur der österreichischen Unternehmen spiegelt dies wider. Die Eigenkapitalausstattung der Masse der österreichischen Unternehmen ist international gesehen unterdurchschnittlich. Die Oesterreichische Nationalbank veröffentlicht seit Jahren die Bilanzanalysen einiger hundert österreichischer Unternehmen: Nach meinem Wissensstand ist im industriellen Bereich eher das „obere" Drittel der österreichischen Unternehmen enthalten. Der für unser Land existenznotwendige Fremdenverkehr wurde – ich übertreibe (aber nicht sehr) – wirtschaftlich praktisch mit keinem oder einem sehr geringem Eigenkapital aufgebaut, um nur auf einiges hinzuweisen.

Der organisierte Kapitalmarkt spielt bis zum heutigen Tag nur eine untergeordnete Rolle. Es gibt dafür eine Reihe von Gründen: Einmal, Österreich hat nur relativ wenige große Unternehmen im Sinne der Vorstellungen der westlichen Wirtschaftswelt von börsefähigen Unternehmen. Es gab zwei Konzerne, die vielleicht diesen Vorstellungen entsprochen hätten, die Verstaatlichte Industrie und der CA-Konzern. Beide gibt es nicht mehr.

Unternehmen, die in Österreich als groß angesehen werden, sind international bestenfalls größere Mittelständler; sie sind, wenn sie keinen

Mehrheitsaktionär besitzen, ziemlich sicher Übernahmekandidaten.

Dabei ist Österreich ein Land, das nicht „risikokapitalschwach" ist. Im Gegenteil: Der österreichische Sparer ist mangels hinreichender Anlagemöglichkeiten im eigenen Land eben ein großer „Kapitalexporteur" – ich werde noch einmal darauf zurückkommen.

Weiter oben habe ich auf die Innenfinanzierung hingewiesen, ohne nun im Einzelnen darauf eingehen zu können. Seit dem Wiedererstehen unseres Landes 1945 war die Steuerpolitik von der Begünstigung der Innenfinanzierung geprägt. Das mag in den ersten 20, 30 Jahren nach dem Ende des Zweiten Weltkrieges durchaus vernünftig gewesen sein; hat auch heute noch im Lichte hoher Steuerbelastung seine Bedeutung. Aber bisher sind alle Versuche, die steuerlichen Voraussetzungen für einen organisierten Kapitalmarkt zu schaffen, wenig erfolgreich gewesen. Gewiss waren dafür politische Gründe maßgebend. Die großen politischen Lager Österreichs waren an fundamentalen Änderungen der Eigentümerstruktur wenig interessiert, da verkauft man lieber an ausländische Käufer, gegen die grundsätzlich nichts einzuwenden ist – wenn sie in Österreich investieren wollen, dann sollen sie es tun. Nur: In der EU ist ein solches Verhalten auch der kleineren Staaten nicht üblich. Die EU hat zwar einen gemeinsamen Markt, ist aber kein Bundesstaat und wird es meines Erachtens auch in absehbarer Zeit nicht werden. Sie ist ein Staatenbund sui generis, wie das in der Tradition der österreichischen Staatrechtslehre zu formulieren wäre. Als Beispiel sei hier die Doppelmonarchie Österreich-Ungarn herangezogen, die als Realunion bezeichnet wurde. Was war das? Nun eben eine Realunion, ein Konstrukt sui generis.

Aber kurz zurück zur EU. In der EU gibt es meines Erachtens sehr wohl einen Wettbewerb der Staaten, nicht nur der Unternehmen. Daher ist es wohl angebracht, sich zu überlegen, welche Rolle die Eigentümer spielen. Nationale Überlegungen werden in der EU in den nächsten Jahrzehnten gewiss nicht verschwinden, das gilt es zu beachten. Wollte man tatsächlich einen österreichischen Kapitalmarkt aufbauen, wäre eine grundlegende Änderung des seit langem eingefrorenen steuer-

politischen Denkens notwendig. Gewiss sind das eminent politische Entscheidungen, aber gesellschaftspolitische Entscheidungen – und Steuerpolitik ist Gesellschaftspolitik – sind eben immer politische Entscheidungen.

Der Aufbau eines organisierten Kapitalmarktes ist Vermögensbildungspolitik, sie verändert Einkommens- und Vermögensverteilung. Wenn man davon ausgeht, dass ein breit gestreutes Vermögen die Stabilität einer Gesellschaft festigt und zu große Unterschiede in der Einkommens- und Vermögensverteilung vermindert, dann ist es unter den gegebenen Verhältnissen wahrscheinlich vernünftig, steuerpolitisch beim „Mittelstand" anzusetzen, der in jeder Gesellschaft die Entwicklung trägt und im Wesentlichen erhebliche Teile seines Einkommens als Steuer abliefert. Um Klartext zu reden: Um die Reichen in einer Gesellschaft, die weder verherrlicht noch verteufelt werden sollen, braucht sich der Staat wenig zu kümmern. Sie können sich

selbst helfen. Den Armen muss geholfen werden, sie sollten Chancen bekommen, in den Mittelstand aufzusteigen.

Der Mittelstand ist es, der in der Regel mehr als 50% der Bevölkerung eines entwickelten Industriestaates umfasst. Dort muss steuerpolitisch angesetzt werden. Es sei nur kurz skizziert: Einmal-Ausschüttungen von Unternehmen sollen für das Unternehmen Abzugsposten sein, das heißt so behandelt werden wie Zinsen. Ver-

luste von Risikowertpapieren sollten für jedermann absetzbar sein – um Steuerausfälle nicht zu groß werden zu lassen, wäre auch eine abgestufte Deckelung denkbar. Zinsen für Kredite zum Ankauf von Risikowertpapieren sollten ebenfalls absetzbar sein, Deckelung ist vorstellbar. Das EU-Recht sollte zugestehen, dass ein Mitglied zur Förderung seines Kapitalmarktes diese Maßnahmen nur für Gewinnwertpapiere von Unternehmen im eigenen Land ermöglicht. Also, wenn ein Österreicher US-amerikanische oder französische Risikowertpapiere kauft, gelten diese Vorteile nicht.

Auch Änderungen im Gesellschaftsrecht wären notwendig, doch darauf sei nur hingewiesen, ebenso auf die Bedeutung von „private equity"-Gesellschaften usw.

Nun aber einige Hinweise zur Kreditfinanzierung. Das wesentlichste Elemente für die Außenfinanzierung in Österreich waren und sind Bankkredite. Sie sind zu einem erheblichen Teil – das sei klar gesagt – bislang ökonomisch gesehen zum Teil Eigenkapitalersatz. Das hat bislang tadellos funktioniert. Bei normalem Wachstum sind die Risiken bei den gut entwickelten Sicherungs- und Überwachungstechniken der Banken einigermaßen beherrschbar. In einem marktwirtschaftlichen System sind aber Verluste nicht vermeidbar, sie halten sich bei einigermaßen stabilen Wachstumsverhältnissen in der Regel in überschaubaren Grenzen. Die Situation ändert sich, wenn, aus welchen Gründen immer, wachstumsschwache oder gar Perioden einer schrumpfenden Wirtschaft eintreten. Mit steigenden Insolvenzen, zunehmendem Liquiditätsbedarf, sinkenden Investitionen ändert sich das Risikoprofil einer Wirtschaft und das Risikoverhalten der Kreditgeber.

Die unterschiedliche Haltung zum Risiko von Unternehmen vergrößert sich in krisenhaften Perioden im Kreditapparat, nicht der Preis für Kredite – der Zins – ist dann entscheidend, sondern die sinkende Neigung zur Krediterteilung aus Angst vor den wachsenden Risiken spielt die entscheidende Rolle. Die Verfügbarkeit von Krediten für Unternehmen ist entscheidend. Wird der Liquiditätsbedarf nicht hinreichend gedeckt, beginnt in der Regel in den Unternehmen der Kampf gegen die Kostenremanenz: Investitionen werden gekürzt, Arbeitskräfte werden freigesetzt.

In welche Richtung entwickelt sich nun das Bankgeschäft? Es gibt eine intelligente Definition des Bankgeschäftes, die vom deutschen Ökonomen Wolfgang Stützel stammt: Bankgeschäft ist ein Handel mit Risiken. Wenn nun eine so wichtige Branche wie die Banken ihre Geschäftspolitik in Richtung „Risikoaversion" oder, anders formuliert, Risikovermeidung durch Bürokratisierung ändert, wie

das Basel II z. B. birgt, dann ist das ein Risiko für eine Marktwirtschaft. Der Preis des Geldes, der Zins, ist – wie erwähnt – nur ein Teil der Wettbewerbspolitik einer Bank.

Wesentlicher ist das Element Risikobeurteilung. Der Wettbewerb unter Banken spielt sich vor allem in der unterschiedlichen Einschätzung des Risikos ab. In einem bestimmten Fall gewährt die Bank A einen Kredit, die Bank B würde das nicht tun. Das ist das entscheidende Wettbewerbselement. Wenn nun im Licht von Basel II die Banken „Riskmanagements" einrichten, die oft mehr als zwei Dutzend abgestufte Ratings enthalten, dann klingt das nach Orwells „1984" im Bankgeschäft: Bürokratismus pur. Viel zu spät beginnt nun in Europa die organisierte Kritik an Basel II.

Allgemeine, auf Gesetzesebene gehobene Regeln zur weitgehenden Risikovermeidung einzuführen heißt, das Wesen des Bankgeschäftes in einer Marktwirtschaft misszuverstehen. Um Missverständnissen vorzubeugen: Es soll leichtsinniger Risikopolitik nicht das Wort geredet werden, aber Vereinheitlichung von Risikobeurteilung, „Bestrafung" von schwachen Unternehmen mit höheren Zinsen, ist eine marktwirtschaftlichem Denken zuwiderlaufende Vorgangsweise. Dann könnte gleich eine Kreditverteilungsbehörde eingerichtet werden, das wäre einfacher. Reduzierung des Wettbewerbs unter Banken ist mindestens so schlimm wie überhaupt Einschränkung und Behinderung des Wettbewerbs in anderen Branchen. Geschieht das noch durch staatliche Anordnung, dann ist das eine Sünde wider den Geist eines Wettbewerbssystems.

Noch eine Überlegung sei angefügt. Ein unter den gegebenen Verhältnissen einigermaßen funktionierender Kapitalmarkt bedarf der Teilnahme einer möglichst großen Anzahl von Anlegern. Das heißt, es kann kein Markt allein der Institutionen und „Reichen" sein, sondern es sollte – da ist freilich eine persönliche gesellschaftspolitische Wunschvorstellung enthalten – auch und zu einem guten Teil ein „Markt des Mittelstands" sein. Darauf wurde weiter oben schon hingewiesen. Die Mittel hiezu gibt es in Österreich. Nur: Es sind meines Erachtens einige wesentliche Änderungen im Steuersystem notwendig – in der Kürze einige Hinweise:

Risikobereite Mittel sind in Österreich hinreichend vorhanden. Eine einzige Zahl möge dies verdeutlichen: Das Volumen ausländischer Emittenten in österreichischen Investmentfonds betrug Ende 2002 rund 60,7 Mrd EUR, wenn davon nur 20% in österreichischen Risikowertpapieren angelegt worden wären, also rund 12 Mrd EUR, würde der organisierte Kapitalmarkt in Österreich etwas anders aussehen, ich halte das für möglich, aber nicht unter den gegenwärtigen Verhältnissen, sie gehören grundlegend geändert, wenn nicht, wird der österreichische Kapitalmarkt das bleiben, was er seit Jahrzehnten ist: ein Mauerblümchen im europäischen Kontext. Aber: Wir sind nicht nur Kapitalexporteure, wir sind auch Humankapitalexporteure. Der Brain-Drain aus Österreich, vor allem bei der technisch-naturwissenschaftlichen Elite, ist erheblich. Er ist durch den Import von wenig qualifizierten Personen nicht zu ersetzen, darauf sei aber nur gewissermaßen in Parenthese hingewiesen, ohne einen xenophobischen Hintergrund.

Vor einigen Jahren erzählte mir z. B. Fritz Paschke, dass an seinem Institut an der Wiener Technik sehr viele talentierte Absolventen vor allem nach Deutschland und den USA beruflich

auswandern und dort bedeutende Karrieren machen.

Nun einige Überlegungen zu Investitionen. Die Investitionstätigkeit hängt in einer Wirtschaft mit nicht zu stark differenzierenden Einkommens- und Vermögensstrukturen, das heißt in einer Gesellschaft mit einem Mittelstand, der mehr als 50% der Bevölkerung umfasst, zu einem erheblichen Teil von der Verfügbarkeit von externen Finanzmitteln ab. Gleichgültig, ob diese in Form von Bankkrediten oder externen Eigen- oder Quasieigenmittelzuführungen bereitgestellt werden. Banken sind ja nur deshalb im 20. Jahrhundert groß geworden, weil es eben zu einer Änderung in der Einkommensverteilung und damit zum Massensparen kam. In welcher Form nun der Finanzmitteltransfer vom Sparer zum Investor stattfindet, ob durch Kredite oder Eigenmittel, ist ökonomisch gesehen wenig relevant, ist aber in den meisten Rechtsordnungen anders geregelt. Besonders wichtig sind aber immer die Finanzierungsspielregeln, ändern sich diese, wie das z. B. zurzeit im deutschen Sprachraum der Fall sein könnte, durch eine bewusste Risikoreduktionspolitik der Banken, dann ist der wirtschaftliche Daueреffekt dieser Änderung der Spielregeln, nämlich eine Wachstumsbremse, wahrscheinlich.

Woher kommt Wachstum, woher kommen steigende Reallöhne und eine über den Zyklus hinweg zumindest gleichbleibende Kapitalrendite? Lange hat man es nicht genau gewusst, aber seit einigen Jahrzehnten ist es ziemlich klar, empirisch festgestellt: Es ist zum großen Teil der technische Fortschritt, der diese Entwicklung gebracht hat. Technischer Fortschritt fällt nicht vom Himmel, er ist das Ergebnis eines umfassenden gesellschaftlichen Prozesses. Er ist, je höher eine Gesellschaft im technisch-ökonomischen Sinn entwickelt ist, von der Effizienz des Bildungssystems abhängig, von der gesellschaftlichen Bewertung von Bildung und Ausbildung, vom Glauben an den Fortschritt, vom Stellenwert von Wissenschaft und Forschung in einer Gesellschaft, von der unternehmerischen Substanz, von der Ausnutzung des unternehmerischen Potenzials einer Gesellschaft, vom Willen und dem Mut zum Eingehen von Risiken; ohne das Wissen und die Akzeptanz von Risiko, ohne die Akzeptanz, dass auch Scheitern möglich ist, gibt es keinen technischen Fortschritt. Ohne technischen Fortschritt gibt es wahrscheinlich kein einigermaßen kontinuierliches Wirtschaftswachstum und damit keine steigenden Reallöhne, keine hinreichenden Gewinne.

Um es deutlich zu machen: Forschung und Entwicklung sind teuer und riskant – für einen kleinen Industriestaat wie Österreich, mit seiner im Wesentlichen mittelständischen Wirtschaft, eine nationale Herausforderung. Ein risikoavers werdendes Bankensystem, ein mangelhaft funktionierender Kapitalmarkt sind keine hinreichende Voraussetzung, um im internationalen Wettbewerb mithalten zu können. Soweit das heute einigermaßen abschätzbar ist, wird technischer Fortschritt und damit auch Wachstumspolitik noch für Jahrzehnte das Alpha und Omega wirtschaftspolitischen Handels bleiben. Allerdings sollte die Mahnung P. A. Samuelsons nie vergessen werden: „Historische Trends stellen keine unabänderliche Entwicklung dar. Dass es diese Trends im Wirtschaftswachstum gibt, mag vielleicht zu dem Schluss verleiten, hier handle es sich um unvermeidliche Entwicklungen, also beispielsweise zu der Annahme, dass wir für alle Zeiten mit einem raschen Anstieg der Pro-Kopf-

Produktion sowie der Reallöhne und der realen Produktionsleistung rechnen können.

Dieser verlockenden Vorstellung eines konstanten Wirtschaftswachstums sollten wir widerstehen, denn damit würden wir falsche Lehren aus Geschichte und Volkswirtschaftstheorie ziehen. Obwohl es sich um anhaltende Trends handelt, zeigt die nähere Betrachtung, dass es innerhalb von zehn- oder mehrjährigen Perioden immer wieder zu starken Schwankungen oder Abweichungen vom Durchschnitt gekommen ist. Es gibt schließlich auch keinerlei theoretischen Grund anzunehmen, dass der technologische Wandel immer in demselben Tempo fortschreiten würde, und dass unser Lebensstandard immer weiter steigen muss. Irgendwann kann das Ertragsgesetz wieder schlagend werden, oder vielleicht können eines Tages die gegen die Umweltverschmutzung oder eine globale Bedrohung unserer Umwelt nötigen Maßnahmen nicht mehr durch den technologischen Fortschritt abgefangen werden. Die Periode seit 1973 – mit einer deutlich langsameren Wachstumsentwicklung, weniger ausgeprägten Reallohnsteigerungen und geringeren Zunahmen der Produktionsleistung pro Arbeitskraft – soll uns daran erinnern, dass kein einziges Gesetz der Volkswirtschaft garantieren kann, dass die Zukunft ebenso wie die Vergangenheit durch ein kräftiges Wachstum der Einkommen gekennzeichnet sein wird, wie wir es im auslaufenden Jahrhundert erleben durften."[1])

Es ist zu hoffen, dass es gelingt, ein nachhaltiges Wachstum noch für geraume Zeit zu erreichen. Denn in praxi darf auch nie vergessen werden, dass westliche Demokratie und Marktwirtschaft mit hoher Wahrscheinlichkeit siamesische Zwillinge sind, und es fragwürdig ist, ob das eine ohne das andere existieren kann. ❧

1 *Samuelson, P. A. und W. D. Nordhaus. 1998. Volkswirtschaftslehre. Übersetzung der 15. amerikanischen Auflage. Wien / Frankfurt: Wirtschaftsverlag Carl Ueberreuter. S. 625 f.*

Karl-Heinz Grasser

Karl-Heinz Grasser
Austrian Federal Minister of Finance

# Topical Budgetary and Fiscal Issues

Well, indeed, I am happy that this conference organized by the Oesterreichische Nationalbank is being held for the 31st time. Of course, discussions on pertinent economic issues are important for the country, for the central bank and for the population at large.

When I talked to Vice-President Papademos over dinner yesterday, I tried to pin him down so that he will concede that an economic recovery is already underway. He hasn't quite said that but let's give an overview of the situation.

There are different opinions. I talked to some who are full of economic pessimism and who say the current juncture – the third year of an economic downswing – is catastrophical.

On the other hand, ladies and gentlemen, consider for a moment what has happened in these three years and what had happened before that. There was a period of ten years of an economic upswing which we had hardly experienced after the Second World War. It lasted for ten years, and now we have entered a time that was coined by September 11, 2001.

– An event that at that time nobody would have considered to be conceivable. Still, we mastered this

event: The financial markets showed quite some stability and resilience.

– Let us think of the fight against terrorism, the war in Afghanistan, and the current situation in Iraq: Will there be a war or not? What will all the negative impacts be on the economy? Then the war was launched with the negative impacts on the oil prices, etc.
– In addition, the confidence in the economy was shaken by the accounting scandals, such as Enron, etc.

So, in considering what has happened over the past three years, we may say that the world-wide economy is still quite stable and resilient. Sir Karl Popper once said "optimism is a duty, is an obligation". And we know that forecasting is tough, especially when it concerns the future. The recovery has been forecast twice and everybody shirks from forecasting it a third time and making a mistake. But I do think and I admit that one should not play on sentiments in the central bank, but I personally have a feeling, and there are some indicators that confirm this that we can think positively when it comes to the future. And I do hope the financial markets are also right by confirming my optimism by and large. You see that the trading volume has gone up and how volatility has gone down, that in the meantime we do have higher levels of share prices and that the trend is positive as regards the earning situations of companies. Then I think this also will have a positive confidence impact on CEOs and on executive levels. When you have enough liquidity, then you may decide to resume investing. Investments are, of course, a necessary basis for a sustainable upswing, for sustainable growth.

I think we can be optimistic, more for the U.S.A. than for Europe in particular when we look at the expansive monetary policy and fiscal policies, with low interest rates and the tax package of 330 billion dollars. So, if you look at the dollar-euro-relation from the US position and if you consider in addition that President Bush knows this very well – Kissinger was here yesterday and he said the elections in the United States were won via the economy and not via security policy or foreign policy – you will have this extreme pressure to set an economic policy agenda. So Bush will do everything to avoid what has happened to his father. He will push for the upswing.

In Europe, the Lisbon strategy serves as a framework. By 2010 we want to be the most competitive area in the world, the area with the highest growth. Well, this is a rather lofty aim, and we also know that the strong impulse for growth will come from the United States.

What are our expectations in the third year of weak economic development? If we are too pessimistic and if we regard growth rates of 1% in Europe, of 2% in the United States, as catastrophical, then we will have to ask ourselves: Is it realistic to expect growth rates of 5% in the United States? I think the US is well on its way and I think Europe gives no reason for pessimism either. But there is still the disadvantage that we in Europe are less flexible, that we are less deregulated, that we are less

adaptable than the US, and therefore I think, as far as the economic upswing is concerned, we are lagging behind by about three to six months. So there is this time lag, no doubt. But we may add that there is no economic indicator pointing to an upswing in the Europe of the 15.

Still, we can be glad about the past policy of the European Central Bank. Of course, no central banker likes a finance minister commenting on monetary policy. That is why I am simply looking forward to the future monetary policy of the European Central Bank. We received this positive signal, i.e. the changed definition of price stability of (close to) 2% rather than "between zero and two".

And thus the question arises: What flexibility do we have? Although co-ordination is an interesting thing, we do not want ex ante co-ordination between monetary and fiscal policies. To be clear, I repeat that we shouldn't have any ex ante co-ordination. Of course, the policy mix must be right, and we are moving towards an expansive monetary policy, no doubt.

I strongly advocate a strong fiscal policy. The Stability and Growth Pact is important to me, just as an active growth policy for Europe is. These are the two pillars that we have to centre on. There are many empirical examples that show that an expansive fiscal policy towards larger deficits does not lead to more growth and employment in the long run. This is a fact, and this is reasonable, and therefore we must not make this mistake again to engage in deficit spending. The next question is: How do we interpret the Stability and Growth Pact? The key issue is: Do we adhere to the Pact or not? I think that no matter what the details may look like, in the medium and long term – especially, if we think of pension liabilities – stability-oriented fiscal policies will have to be a central pillar for our growth policy combined with price stability, as was mentioned by Governor Liebscher.

And this takes me to my second subject – growth policy. One thing is evident. We must implement the Lisbon strategy at the national level with much more determination, in particular structural reforms. Of course, this is the way to achieve growth in the long run. The issue is how much do we translate into national legislation?

Here the situation differs decisively, if we compare 2003 with the years 2002 and 2001. I may refer to the Austrian situation. In yesterday's Cabinet meeting we had a very intensive and vivid political debate. It was a tightrope walk over the past weeks, I must say. Yesterday, however, we agreed on essential structural reforms in Parliament, with the most comprehensive pension reform that Austria has ever seen in its Second Republic.

The situation differs between 2003 and the years 2002 and 2001, because both in Europe and in the Member States, the discussion about reforms has been going on now for two years. And it's clear that we do have a problem here. And the major part of the population and also the trade unions know that we have got a problem. And this is why the approaches to solve the problems are different. The discussion has intensified and the pressure to implement reforms has also intensified. In Germany and France, this pressure has led to problems, and there is need for action also as far as curbing high

deficits is concerned. I am talking about Austria, because in Austria we find ourselves in a better position than the average EU Member State. And therefore, it was much more difficult for us to implement the reforms in a situation,

– where we have record employment levels,
– where we have the third-lowest unemployment rate in Europe,
– where we have a positive trade balance,

– a positive current account,
– an inflation rate significantly below 2%,
– a growth rate above the European average.

In such a situation it was much more difficult for us politicians to give an explanation to the Austrian people that unpleasant reforms will have to be implemented if we want to guarantee sustainable growth in the years to come. So, when you have such a positive environment, it will be much more difficult to push reforms.

Of course, one can refer to France, Germany, Italy, and many other countries and the debates that are going on there. This certainly helps you to implement nationally what is actually important and imperative.

A labour market reform in addition to pension reforms also plays a decisive role, especially when looking at Germany and France. Because adaptability and adjustment are important in a global economy. Here, the US has the leading edge. It is quite obvious that if an employee can stay in a company forever because you cannot give notice to this employee, then the whole structure will become petrified and rigid. So, we need deregulation, we need more flexible labour laws.

And, of course, the Single Market has not been completed yet. Many issues still remain to be tackled. Look at the energy market, at the financial services, at privatisation in many countries. So, we still have a lot of work to do.

How will we tackle these challenges? We will aim at a labour-sustainable growth and combine this with pension reforms and thus with the issue – Michael Mussa mentioned this today: Can we integrate the ageing population into the employment process, and what does this entail for our growth potential? If we do not manage to make people participate in the working process – in Austria people usually say that we have the oldest students and the youngest retirees – it will be crystal-clear that the economy would go from a growth rate of potential output of 2% to around 1.5%. This is the threat, and this is why we have started the reform process, and we need these reforms. And this is why we need the participation of the older generation in the working process. And I am positive that these reforms will be actually implemented.

Turning back to the current Austrian policy, somebody talked about the supply-side revolution since the year 2000. And I fully underline this. We do not need a demand-side policy that has prevailed over the past decades. What we need are supply-side reforms. This is the key to more growth. And we have pressed this part with determination since 2000, combined with a stable financial policy and fiscal policy, privatisation, liberalisation, pension reform

in 2000 and now an administrative reform and a clear objective to consolidate the public budget and the aim to reduce taxes. At the moment, we face a tax burden of around 44.5% of GDP, we will move down to 40% by 2010, as a major policy goal, including shifts in the structure of taxation. Structural reforms on the one hand, stability-oriented growth on the other hand will be combined within a ten-year strategy.

Let me turn to the enlargement of the European Union, which should be conceived as an opportunity. We have welcomed the ten acceding countries that will join us most warmly. We Austrians have said: We must invest in these countries in transition. This is an opportunity for growth. This is an opportunity to bring about changes.

Well, summing up, this all has helped Austria to achieve higher sustainable growth and greater independence from Germany. For a long time, Germany was the benchmark for Austria. Today, our benchmark is no longer Germany. Our benchmark is the top 3 position in Europe, and this is where we want to get. This is our objective. And thus competition within Europe is important, because it will help us to be successful. ❧

# 31. Volkswirtschaftliche Tagung 2003














# 31st Economics Conference 2003














Vito Tanzi
Jon Cunliffe
Jens Henriksson
Martti Hetemäki
Kees van Dijkhuizen

# Fiskalpolitisches Statement und Podiumsdiskussion: Reformerfahrungen im öffentlichen Sektor

# Fiscal Policy Statement and Panel Discussion: Experience with Public Sector Reform

Vito Tanzi
Undersecretary of State, Italian Ministry of Economic and Finance[1])
Ludger Schuknecht
European Central Bank[1])

# Public Finances and Economic Growth in European Countries

## 1 Introduction

Growth is a complex phenomenon that, in spite of considerable progress over the years by economists such as Schumpeter, Kuznets, Solow, Dennison, Lucas, Barro, Romer and others, is still not well understood or explained.

There is the experience of countries, such as Japan, that after a sustained and fast rate of growth come to an almost full stop. And countries, such as China and Korea, that after stagnating for centuries start growing at a very fast pace. Thus, "the miracle of growth" remains as mysterious as most miracles and attempts to explain it through the behavior of single or few variables (capital, labor, technology, human capital, etc.) often prove disappointing. The unexplained part of growth remains always uncomfortably large in spite of the fact that, as time passes, more and more variables are added in the attempts to provide fuller explanations of the "miracle of growth".

A major attempt at explaining the Sources of Economic Growth in OECD Countries has been made recently by the OECD (2003). This study has looked at many factors that may contribute to growth. Its major conclusion is that "long-term sustainable economic growth has many sources and cannot be fully steered by policy-makers".

Relating growth to the public finances of countries may be a quixotic enterprise because of the role played by non-fiscal variables and because public finances can be decomposed into many variables some of which may be more important than others. Furthermore, some of the more important ones cannot be measured.[2]) In this paper we are concerned about sustained, or long-run, growth rather than about short-run or cyclical developments. Under specific circumstances, Keynesian fiscal, counter-cyclical policy can be useful to pull a country out of a temporary slowdown. However, counter-cyclical policy cannot promote *sustained* growth. It is important to keep these two aspects separate because in the current popular discussion, they are often confused and it is argued that the abandonment of the Stability and Growth Pact and a reduction of interest rates by the European Central Bank (ECB) would promote growth.

## 2 Public Finances and Growth: Theory

If public finances affect growth, they will do it through one or several of the following variables.

1 *The views expressed are strictly personal and do not necessarily reflect the official views of the institutions of the authors.*

2 *Even though the theoretical public finance literature has many references to growth and many public finance books have the word "growth" in their titles, the specialized literature on growth has much less to say about it. For example, a good recent book on economic growth almost totally ignores public finance (see Jones, 2002)*

### 2.1 The Level of Taxation

A high level of taxation is likely, ceteris paribus, to reduce the growth potential of a country because of the negative impact that it might have on work incentives, investment, saving decisions, and on the allocation of resources in general. In a global environment high taxes in one country may also reduce growth in that country by inducing capital flight towards lower taxed countries. It is for these reasons, in addition to the belief that lower taxes may increase demand in the short run, that several countries (France, Germany, Italy, U.S.A.) have recently reduced their taxes. The level of taxation is important because (a) taxes are almost always distortive because truly neutral taxes do not exist in the real world; and (b) taxes transfer resources from the private to the public sector and there is often the presumption that the private sector is more efficient in their use.

While taxes may reduce growth by being too high, they might also reduce it by being too low. This will happen if the level of taxation is too low to give the public sector of a country the resources necessary to provide essential government services. Here, the presumption is that there is a level of resources that can be used more productively in the public than in the private sector. Furthermore, if, over a sustained period of time, government revenue is much lower than total public spending, (thus, creating unsustainable macroeconomic imbalances and public debt accumulation) growth may be reduced because the private sector might come to see the fiscal situation as unsustainable (as it may be happening in Japan); or because the macroeconomic imbalances could create high inflation or other macroeconomic problems (as used to be the case in Latin American countries).[1]) Often, in these situations, the monetary authorities react by raising interest rates thus reducing growth.

At least in theory, there must be a level of taxation that could be considered "optimal" from a growth point of view because it would be just sufficient to finance the *essential* public services in an *efficient* way. When the tax level of a country exceeds this optimal level, a lowering of it could lead to faster growth.

Two observations can be made related to this aspect. First, the precise determination of this optimal level is pratically impossible to make in the real world. Second, all the industrial countries have now tax levels that, at least from the point of view of financing essential spending, are above the optimal level. Therefore, a reduction of the tax level in these countries would promote a faster rate of growth as long as this reduction were accompanied by a reduction in non productive spending. We shall return below to the connection between public spending and growth.

### 2.2 The Structure of Taxation

Over the years, in an enormous literature, public finance experts have analyzed the impact of different taxes on important economic variables. In fact, the tax side of the budget has been much more studied than the expenditure side. These experts have generally concluded that not all taxes have the same impact on the economy. Taxes that are imposed with high marginal rates are

1 *The OECD study (2003) finds a negative correlation between the rate of inflation and economic growth. But no relation is evident at low rates of inflation (p. 65).*

more damaging because economic theory teaches that the dead-weight cost of taxes grows with the square of the marginal tax rate. For this reason, on efficiency grounds, value added taxes (that are basically proportional taxes on consumed income) are preferred by many tax experts to personal income taxes that are often applied with high marginal tax rates on both consumption *and saving.*[1]) When income taxes are applied with high marginal tax rates, they are likely to have signifi-

cant negative effects on variables such as work effort, saving and investment that are important determinants of growth. A recent paper using OECD data has provided empirical support to the conclusion that income taxes reduce the rate of saving (see Tanzi and Zee, 2000).

For the reasons mentioned above, revenue neutral tax reforms can affect a country's capacity to grow by changing the distortionary impact of taxes. For example, the tax reform introduced by the Reagan administration in 1986 probably contributed to the faster growth that the U.S. economy experienced in later years. In general, reforms that broaden the base of income taxes and reduce the marginal rates, or that replace income taxes with proportional sales taxes improve the efficiency of an economy. However, even the change of specific features of tax systems may have an impact on growth. Recently the Bush administration has been arguing that a reduction of the tax on dividends will promote growth. The reform just enacted, will reduce the tax on dividends but will also reduce the level of taxation, combining thus incentive and demand effects. Expenditure is not supposed to change, thus fiscal deficits would widen unless the reform has a substantial positive effect on growth.

### 2.3 Tax Stability

There is an old adage that maintains that "old taxes are good taxes" because economic operators have got used to them and the economy has already incorporated their effects. For example, existing taxes have been capitalized in the prices of the assets. While this aspect should not be overplayed, because, as mentioned above, there are tax changes that improve the efficiency of the economy, it is also true that when tax systems are changed frequently in their structural and level aspects, these changes introduce "tax uncertainty", and this could have negative effects on growth. Tax reforms cannot be made frequently and cannot be stretched over too long a period of time when they are made. Uncertainty makes more difficult economic decisions involving the future. It, thus, encourages individuals to postpone making some decisions. This can happen especially when tax uncertainty is likely to create time consistency problems. For example, a tax reform may introduce tax incentives to stimulate investment but, because the incentive will cost revenue to the government, the investors may fear that they may be removed or reduced

1 *For similar reasons there has been a strong movement especially in the United States to replace traditional personal income taxes with flat rate taxes. If the flat rate taxes were levied on consumed income, they would go a long way toward eliminating distortions.*

after the investments have been made.[1]) Some commentators on the current American tax reform have referred to the instability in the U.S. tax system introduced by recent changes. But this is not a typical U.S. phenomenon as, until recently, the United States had had infrequent tax changes. A soon to be published survey of "Tax Systems and Tax Reforms in Europe" has evidenced this increased instability of European tax systems (see Bernardi and Profeta, 2003)

### 2.4 Other Tax Aspects

While the attention of economists is often directed towards tax levels and statutory tax structures, *the reform of the tax administration* may also play a significant role if it brings about a lowering of compliance and administrative costs. Recent studies have shown that these costs, and especially compliance costs, can be very high in some countries (see Sanford, 2000). Unfortunately, the information needed to take this factor into account in studies of growth is not available.

A final point to be made in relation to the impact of taxes on growth is the role that some taxes (registration taxes, transfer taxes and so on) have in discouraging transactions. This is an aspect generally ignored by economists, except for the recent attention to the Tobin tax. In a recent paper (in Italian), one of the authors of the present paper has elaborated on the connection between transactions, taxes, and economic growth. Simply put, the more transactions take place in an economy, the greater the chance that the economy will grow. It follows that if some taxes impede, or reduce, the number of transactions, they will have a negative impact on growth (see Tanzi, 2003). In some countries, such as Italy, taxes on transactions connected with particular forms of contracts (sales of property, rentals, etc.) remain very high and are likely to reduce transactions and growth.

### 2.5 Public Spending

We now shift our attention to public spending. It is obvious that the government collects taxes to finance its spending. Therefore, one cannot or should not separate the revenue side from the expenditure side of the budget. *A government that collected taxes in the most neutral way and used the revenue collected to finance, in the most efficient way, public spending that is essential to the functioning of the economy would promote growth*. Unfortunately, this is rarely the case in the real world. The taxes collected are often far from being neutral. The expenditure made are not all essential to the functioning of the economy, and they are made with substantial degrees of inefficiency. They are thus unproductive. In terms of the objective of growth, unproductive expenditure often tends to be a large proportion of total spending.

To do empirical work, it would be necessary to separate productive from unproductive expenditure and distortionary from neutral taxes. But there are formidable theoretical obstacles to this distinction and of course insurmountable practical difficulties.

In the empirical literature that tries to link public finances with growth, three expenditure variables have been considered: public investment spending, public consumption spending and social welfare or redistributive spending. Some of this literature has also considered public spending that increases human capital and spending

*1 Of course, the change to remove the incentives may be made by another government.*

that contributes to innovation such as that for research and development (R&D).

### 2.6 Core Spending

It seems trivial to mention that there is some governmental activity and some related public spending that is essential for the performance of the economy. Public finance text books provide the theoretical reasons for this spending. This "core", or "essential", or "productive" spending may be as important to growth as capital and labour. Without it the economy will not function well and will not grow. The level of this spending depends on how efficient the government is in using the resources available. The less efficient is the government, the higher must be the spending level. But the role of the government and needed spending depends also on the level of development of the country and on the sophistication of its market.

Core spending would include spending for essential administrative services, justice, basic research, basic education and health, public infrastructure, internal and external security and so on. It would exclude public spending of a purely redistributive nature as well as inefficient spending made for political or other reasons.[1])

The level of core spending is of course very difficult or even impossible to determine in part because of theoretical difficulties in deciding what to include and because of the inefficiency with which public resources are used. A more efficient government may be able to provide the same essential services with less spending than a less efficient one. But the level of core spending is also likely to depend on the state of technology which may create or eliminate public goods and on the development of the private market which may be able to replace the government in the protection against some risks. These developments make possible the transfer of some activities from the public to the private domain or the other way around, thus reducing or increasing public spending (see Tanzi, 2001).

The level of core spending is likely to be much lower than the current level of total public spending in industrial countries. The reason is that in the past half century many of these countries have allowed public spending of a purely redistributive or transfer nature to grow rapidly (see Tanzi and Schuknecht, 2000). While transfer spending can be justified by ethical or political reasons, much of it is unlikely to contribute to growth in spite of some arguments made in its favour.[2]) For example, much spending for health and pensions goes to individuals who have already left their productive activities and cannot thus contribute to growth. This spending is of a consumption-sustaining nature. In conclusion an increase in efficiently executed core spending can promote growth while an increase in non-core spending can be assumed to retard growth.

### 2.7 Public Investment

Public investment is a narrower concept than productive or core spending. It is more specifically directed to the

1 *Some economists have argued that some welfare or redistributive expenditure could also be considered productive because it reduces some risks for individuals thus allowing them to play a greater role in the economy.*

2 *It must be recalled that much of this spending is not pro poor but of a "fiscal churning" kind. The government taxes you to finance me; then it taxes me to finance you. In the process it introduces disincentives or inefficiencies on both the taxation and the spending side.*

creation of physical infrastructures. It is often argued that public investment on infrastructure is necessary to crowd in private investment and to reduce some private costs. Normally this type of public spending is limited to around 2–3% of GDP and is much favoured by economists and politicians. At the moment, there are proposals within Europe aimed at relaxing the parameters of the Stability and Growth Pact to introduce a "golden rule", as in the United Kingdom, that would exclude public investment from the fiscal accounts relevant to the European Union's Pact.

There is no question that (a) public investment may contribute to growth; and (b) if it does, there may be a good argument for excluding it from politically imposed fiscal ceilings. In general one would agree that reducing government consumption to finance higher public investment would be a growth stimulating policy. It could also be argued that raising tax revenue to allow higher investment spending could be a growth-promoting policy. It is, however, more questionable whether financing higher investment spending through a higher fiscal deficit is necessarily a growth friendly policy. The reasons for this scepticism are several.

First, the definition of what is an investment is somewhat arbitrary and could lend itself to manipulation.

Second, investment decisions are often made politically and not economically. The use of strictly objective cost-benefit analysis has yet to enter this area. There is always the danger that at least some of the investments could be white elephants with little value to the economy. There is the evidence of Japan that over the last decade has increased its public investment to extraordinary level – higher than any other OECD country – without much impact on growth.

Third, the increase in the fiscal deficit and in the public spending that would accompany the increase in investment spending could send some negative signals to the market and could even crowd out some private investment.

Still, in spite of these reservations, it must be maintained that properly defined public investment and efficiently executed public projects would contribute to growth.

### 2.8 Fiscal Deficits and Public Debt

The relationship between public finances and economic growth may come from differences between the level of public spending and ordinary public revenue. If these differences are large and are sustained over a period of time, they may lead to the accumulation of large public debts that require servicing and that under certain circumstances could become unsustainable and lead to financial crises. In normal situations these large public debts always lead to higher tax levels to service them.

In a recent article, Tanzi and Chalk (2000) have analysed the relationship between large public debt and economic growth. They identified six channels trough which public debt may reduce the growth rate of a country. Two of these merit mention. First, there is the inevitable and positive relationship between the size of the public debt and the level of taxation. High debt requires a higher tax level; and higher taxes lower the rate of growth because of the distortions they create. Second, the servicing of the debt often comes at the cost of public investment that may be important for growth.

As mentioned earlier, trying to find a relationship between public finances

and growth may be a quixotic enterprise. For sure in empirical work it is not justified to separate the revenue side from the expenditure side of the budget. And one cannot ignore the composition of tax revenue and of expenditure as well as the difference between revenue and expenditures.

## 3 Public Finances and Growth: Brief Literature Review

There is by now a considerable literature that analyses empirically the relationship between fiscal variables and economic growth. Much of this work has been carried out by macroeconomists who pay little attention to the quality and the significance of the data. For example, in one of these studies, that about 20 years ago attracted much political attention and was even mentioned by President Reagan, Marsden paired 10 groups of countries showing that "low-tax countries" such as Brazil grew faster than "high-tax countries" such as the Philippines.

The author was not aware that for Brazil, and for some other countries in his survey, he was using only central government revenue, that was less than half total tax revenue while for the Philippines he was using total general government revenue. For developing countries, most of the empirical studies have used the data published in the IMF's *Government Finance Statistics*. These data, while the best available, refer to central government only and often have major problems. Many of the empirical studies have used four public finance variables: taxation, investment spending, consumption spending, and social welfare spending.

For taxation, some authors – Easterly and Rebelo (1993); Folster and Henrekson (1999); Cashin (1995); Miller and Russek (1997); de la Fuente (1997); Kneller, Bleaney and Gemmell (1999); Hiebert, Lamo, Romero de Avila and Vidal (2002) – have found significant negative effects on growth as one would expect from theory. Of these, Folster and Henrekson; Cashin; de la Fuente; and Kneller et al. have used OECD sources. There are, however, other studies that have not found any relationship. None seems to have found a positive relationship.[1]) A few of the empirical studies have dealt with the impact of specific taxes on particular economic variables. For example, Tanzi and Zee (2000) have dealt with the impact of direct taxes (income and social security taxes) on saving; Daveri and Tabellini (2000) with the impact of labour taxes on employment; Daveri and Maffezzoli (2000) with the impact of labour taxes on growth. These studies have used OECD data and have found the expected results.

Turning to public spending, the relationship between public investment and growth has attracted the most attention. Significant positive relationship for OECD countries has been found by Cashin (1995) and by de la Fuente (1997). When public investment is replaced by the broader category of "productive spending", a significant and positive relation with growth was found by Kneller, Bleaney and Gemmell in two studies (1999 and 2000).

For consumption spending, the few studies that have dealt with OECD countries – Alexander (1990); Dow-

1 *Over the years, while at the IMF, one of the authors of this paper tried several times to find a statistical relation between taxes and growth but was unable to do so.*

rick (1993); Devarajan, Swaroop and Zou (1996); de la Fuentes (1997); and Kneller, Bleaney and Gemmell (1999 and 2000) have found either a negative relationship or no significant effect.

For the impact on growth of social welfare spending, some have found significant, negative effects – Korpi (1985); McCallum and Blais (1987); Castles and Dowrick (1990) – but, interestingly, others have found significant, positive effects – Weede (1986 and 1991); Nordstrom (1992), Persson and Tabellini (1994); Cashin (1995). However, many authors did not get any significant relationship.

Thus, with increasing sophistication in estimation techniques and in the use of data some conclusions have emerged. However, many studies are not conclusive and when they are the size of the coefficients differs strongly among different authors and the findings are not robust. It is difficult to decide how much weight to give to these results.

The causality between variables remains a major difficulty in spite of the efforts made. For example, higher growth creates traffic problems and other bottlenecks. These bottlenecks require more public investments. Growth also facilitates fiscal consolidation. Thus, it is easy to argue that it is growth that determines public investment, fiscal deficits and some kinds of spending such as more health expenditure because this expenditure is income elastic. The relations are also often non-linear because marginal returns to growing public expenditure are likely to decline while marginal costs are likely to increase for rising taxation. Furthermore, some countries may be below the optimum in some spending areas and above it in others.

Expenditure and tax efficiency also differs across countries and this is not captured in standard equations that look at levels or ratios of fiscal variables.[1]) Finally, the timing of effects is difficult to anticipate. After how long an increase in public investment should lead to higher growth? Lower taxes, if believed to be sustainable and part of a comprehensive reform package may yield positive effects on investment and growth *after some time*. Lower taxes that are not adequately financed, that signal volatility of the tax system, and that are prone to reversal may have no effect or even negative effects on growth. Finally, reliable infra-annual data are not available, and data are not always comparable across countries and over time.

For all these reasons, it is understandable why it is difficult to get empirical results that are beyond questions. It is thus wise to see these results at most as broad indicators of directions or effects.

## 4 Public Finances and Growth: Stylized Facts

Rather than adding another (questionable) econometric contribution to this literature we will conduct a simpler but hopefully still informative exercise, building on and extending a data set that we had used in the context of our earlier work on public expenditure in industrialised countries (see Tanzi and Schuknecht, 2000). We will

1 *For a first study that tries to measure public expenditure efficiency, see Afonso, Schuknecht and Tanzi (2003).*

present long-term trends in economic growth and in relevant fiscal variables for country groups, that may be of particular relevance in the European context. We will then derive stylized facts as to the relationship between fiscal variables and growth hoping that they will hold lessons for country groups that share certain characteristics. We will make no claims about causality but simply rely on a priori theorizing for judging the results.

We consider 24 OECD countries and allocate them in three groups of relevance in the European context:[1])

- high- (above-median) versus low-growth countries *in the 1990s*
- Anglo-Saxon versus non-Anglo-Saxon EU versus other OECD countries
- big Anglo-Saxon (UK, US) versus big non-Anglo-Saxon EU (France, Germany, Italy) countries

Growth data are presented as 10-year averages for each decade while data for a number of fiscal variables are presented as point-data for the beginning of the decades.[2]) This is based on the presumption that it is fiscal variables that influence growth. In addition, we present decade averages for gross-fixed capital formation and employment ratios to explore possible links between fiscal variables and growth via these items. Please keep in mind that the classification of countries as low growth or high growth refers exclusively to these countries' performance in the 1990s.

### 4.1 Per Capita Economic Growth

Economic growth across the different groups was relatively similar in the 1960s (see table 1). However, per capita growth was also typically much higher in low-income than in high-income countries indicating that convergence was taking place in this period. Chart 1 illustrates this stylised fact by plotting the correlation between PPP-based per capita GDP in 1960 (on the x-axis) and average per capita GDP growth in the 1960s (on the y-axis) for the 24 sample countries.[3]) The

Table 1

**Real Annual Per Capita Economic Growth, 24 OECD Countries**

| | 1960s | 1970s | 1980s | 1990s |
|---|---|---|---|---|
| | % | | | |
| Average all countries | 4.3 | 3.1 | 2.3 | 2.2 |
| High-growth 1990s[1]) | 4.1 | 3.2 | 2.7 | 3.1 |
| Low-growth 1990s | 4.4 | 2.9 | 1.9 | 1.3 |
| Anglo-Saxon[2]) | 3.2 | 2.1 | 2.0 | 2.4 |
| Non-Anglo-Saxon EU[3]) | 4.6 | 3.1 | 2.1 | 2.1 |
| Other OECD[4]) | 4.9 | 4.3 | 3.3 | 2.1 |
| Big continental (D, F, I) | 4.3 | 3.1 | 2.0 | 1.4 |
| UK, US | 2.8 | 2.3 | 2.1 | 1.8 |

*Source: AMECO.*
*[1]) Growth on average equal to or above median of 1.74, all groups exclude Norway.*
*[2]) Australia, Canada, Ireland, New Zealand, UK, US.*
*[3]) EU except Ireland and UK.*
*[4]) Iceland, Korea, Japan, Norway, Switzerland.*

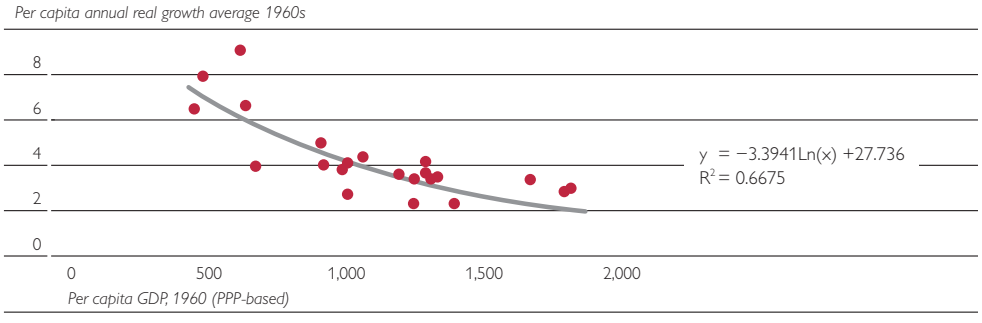
1 *We exclude Norway as its economic and fiscal performance has been mostly affected by oil price developments.*

2 *Data for additional fiscal indicators and for all individual countries are provided in a data appendix.*

3 *Each dot represents one country and thus respective variables and periods (or changes across periods) in this and the following graphs. All graphs also provide the regression line and basic statistics for a simple logarithmic or OLS regression through the observations.*

Chart 1

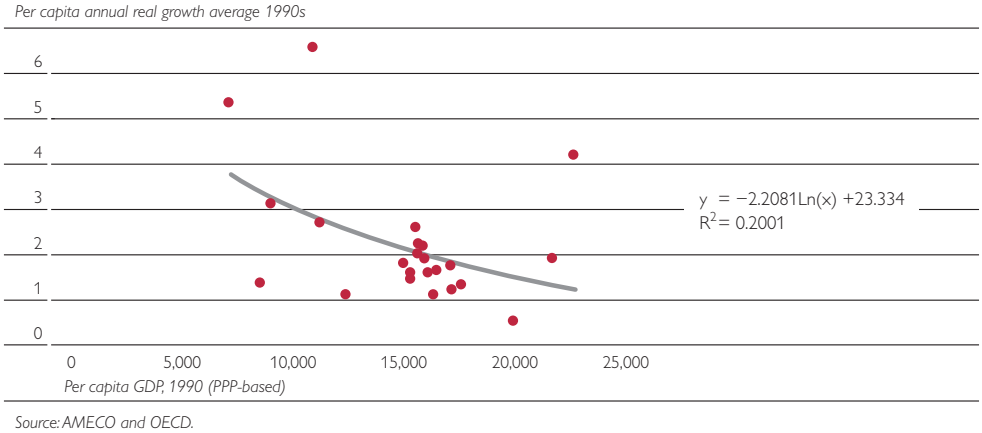
**Conditional Convergence 1960s**




Source: AMECO and OECD.

Chart 2

**Conditional Convergence 1990s**




Source: AMECO and OECD.

poorest and fastest growing economies at the time were Japan, Greece, Spain and Portugal (dots in the top left corner of chart 1) while the United States, Switzerland and Luxembourg were the richest ones (observations in the bottom right corner).

This picture changed drastically over the next 30 years. In the 1990s, average growth in the "low-growth" countries (which in the 1960s had grown at an annual rate of 4.4%) fell strongly and was a mere 1.3% compared to more than 3% in the high growth countries. The laggards of the 1990s are the non-Anglo-Saxon EU countries, especially the big three continental European countries (Italy, Germany and France), plus a few others. Moreover, the relationship between per capita growth and income level was much weaker than in the 1960s. Chart 2 represents the relationship between income levels and per capita GDP growth in the 1990s for OECD countries and suggests that further income convergence is much weaker today than 40 years ago.

Growth developments have been much more favourable (with average growth even rising in the 1990s compared to the 1980s) in a number of small catch-up economies and a selection of other countries. These are mostly countries that, throughout the period

Table 2

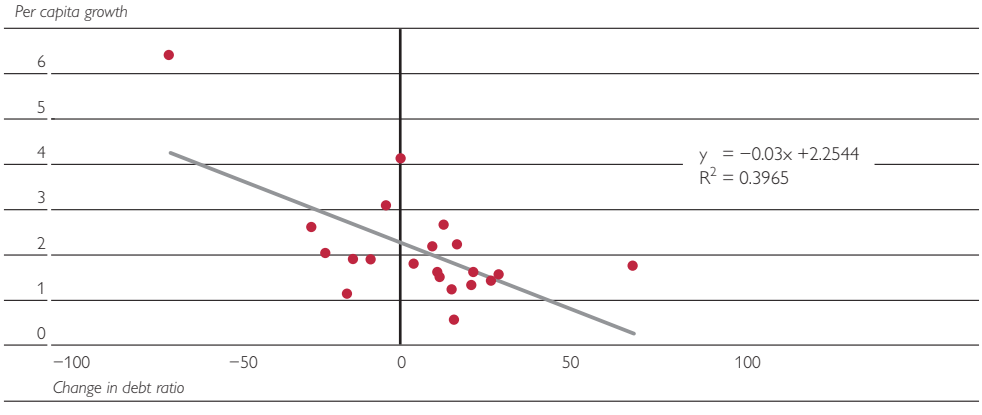
**Fiscal Deficits**

| | 1960 | 1970 | 1980 | 1990 | 2001/latest |
|---|---|---|---|---|---|
| | *% of GDP* | | | | |
| Average all countries | 0.9 | 0.8 | −3.0 | −2.3 | 1.2 |
| High-growth 1990s | −0.1 | 0.0 | −4.2 | −2.1 | 0.9 |
| Low-growth 1990s | 1.7 | 1.4 | −2.5 | −2.8 | 0.3 |
| Anglo-Saxon | −0.5 | −0.6 | −4.7 | −3.4 | 0.7 |
| Non-Anglo-Saxon EU | 0.8 | 1.2 | −3.4 | −3.0 | 0.5 |
| Other OECD | 3.9 | 0.4 | −1.4 | 0.7 | 0.7 |
| Big continental (D, F, I) | 1.0 | −0.7 | −3.9 | −4.9 | −2.4 |
| UK, US | −0.6 | 0.5 | −3.0 | −2.6 | 0.2 |

*Source: AMECO; country groups as in table 1.*

Chart 3

**Per Capita Growth 1990s Versus Change in Public Debt Ratio 1990–2000**




*Source: AMECO.*

had small governments;[1]) or countries that undertook major reforms, most notably the US, Ireland, Australia and (to a lesser extent) the UK and the Netherlands.

### 4.2 Deficits and Public Debt

Turning to the relation between fiscal variables and growth, empirical studies have stressed the potential link between growth and fiscal deficits. The evidence on this relation is not obvious for OECD countries (see table 2). There is no large difference across country groups in the deficit performance over time and in the 1990s. It is not possible from the data to conclude that poor growth in the continental "big 3" is due to the somewhat poorer fiscal balances or the other way round. Interestingly enough, the euro area grew at a higher annual rate (1.9%) in the 1995–2002 period when fiscal deficits had been constrained by the Maastricht criteria than in the 1980–1995 period when fiscal deficits were higher (1.8%).

Growth performance and public debt developments show a more interesting pattern. In 1970, public debt was highest in the countries that in the 1990s became the high-growth countries and in particular in the Anglo-Saxon countries. This picture changed strongly

1 *By small governments we refer to countries with public spending less than 40% of GDP.*

over the next three decades. High-growth countries were able to reduce public debt on average by 7% of GDP over the 1990s while low-growth countries experienced a further increase of 18% of GDP. Debt in the continental "big 3" increased by almost 50% of GDP since 1970 reaching 75% of GDP at the end of the 1990s. This ratio compares with an average of around 50% for Anglo-Saxon countries. Even though it is not possible to say much about causality from these numbers, the data show that growth and debt move in different directions as argued in Tanzi and Chalk (2000). Chart 3 plots the changes in debt ratios between 1990 and 2000 and average per-capita growth in the 1990s for the sample countries. Countries that experienced strong growth also reported debt reductions with Ireland, the observation in the top left corner of chart 3, showing the most dramatic fall in debt.

### 4.3 Total Expenditure

Growth patterns across country groups reveal some interesting relationships with public expenditure patterns. Total public expenditure is much higher and has increased much more strongly over recent decades in the low-growth than in the high-growth countries. The starting points in the 1960s were similar (see table 3). However, especially the Anglo-Saxon countries were able to stabilise their spending ratios during the 1980s and to reduce them significantly in the 1990s. Average public spending in these countries is now well below 40% of GDP making them "small-government" countries in our classification. It was reduced by important reforms in areas such as social security, privatisation, public expenditure management and budgetary controls, regulation and other areas. The UK is the only country in this group that runs the risk of leaving this group of "low spenders". Spending in non- Anglo-Saxon EU countries and in the continental "big 3" stabilised in the 1990s at close to 50% of GDP. Given that interest rates and interest payments declined significantly over the period, primary spending hardly changed in these countries.

Notable exceptions to the relatively big governments in continental Europe are Luxembourg and the Netherlands which belong to the group of high-growth countries. The Netherlands managed a major reduction in public spending ratios since the early 1980s. This reduction coincided with significant structural reforms and a revival of growth. Its growth rate increased from 1.7% in the 1980–1995 period to 2.2% in the 1995–2002 period. Lux-

Table 3

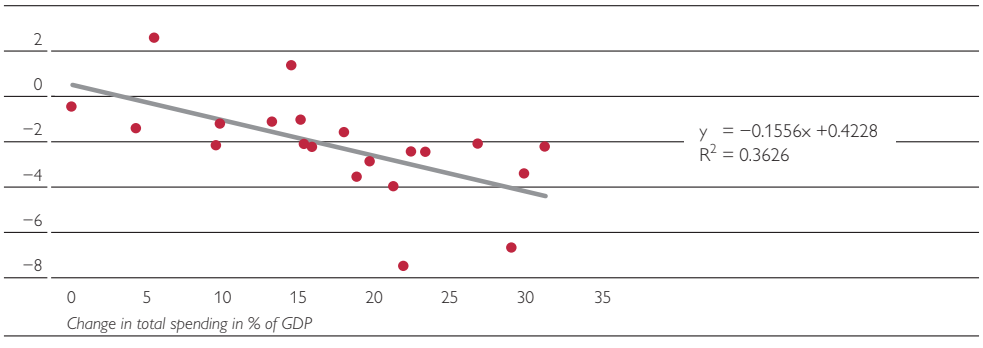
**Total Spending**

| | 1960 | 1970 | 1980 | 1990 | 2000/latest |
|---|---|---|---|---|---|
| | *% of GDP* | | | | |
| Average all countries | 26.5 | 32.3 | 40.8 | 44.0 | 42.7 |
| High-growth 1990s | 27.0 | 31.5 | 40.6 | 40.5 | 38.9 |
| Low-growth 1990s | 26.1 | 32.7 | 40.5 | 46.5 | 46.3 |
| Anglo-Saxon | 28.3 | 31.8 | 39.0 | 40.4 | 35.6 |
| Non-Anglo-Saxon EU | 27.1 | 33.2 | 45.4 | 49.2 | 48.4 |
| Other OECD | 17.2 | 19.2 | 27.2 | 30.5 | 35.3 |
| Big continental (D, F, I) | 31.3 | 36.0 | 45.5 | 49.6 | 49.3 |
| UK, US | 31.6 | 34.0 | 37.8 | 37.1 | 34.2 |

*Source: AMECO; country groups as in table 1.*

Chart 4

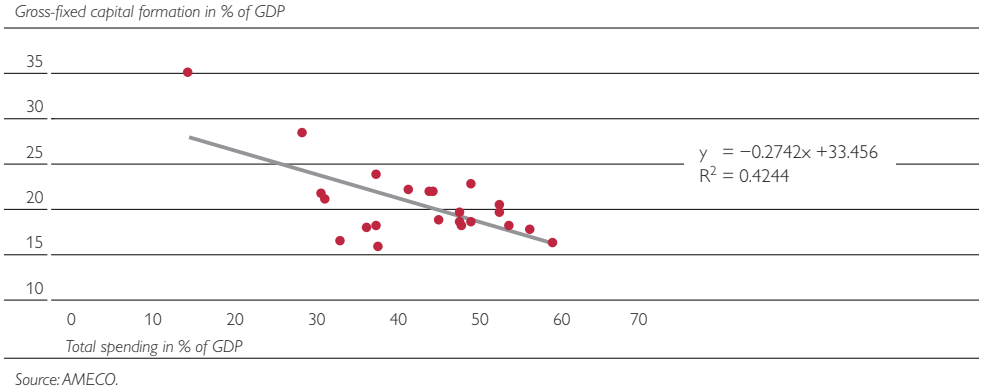
**Change in Total Spending 1960–2000 Versus Change in per Capita Growth, 1960s–1990s**




Source: AMECO.

Chart 5

**Total Spending 1990 Versus Gross-Fixed Capital Formation 1990s**




Source: AMECO.

embourg has the lowest spending ratio in the EU apart from the UK and Ireland and one of the fastest growth rates. Other countries that reduced public spending while undertaking important fiscal structural reform (Canada, Finland, Ireland, New Zealand and Sweden) have seen their growth rate accelerate.

Chart 4 illustrates the growth-spending dynamics in the very long run. It shows a strong correlation between total spending *increases* and growth declines over the past 40 years for OECD countries. Moreover, gross-fixed capital formation (one of the standard growth determinants) is strongly and negatively correlated with public spending ratios in the 1990s (see chart 5).

All this leads us to believe that reductions in public spending are favourable to growth.

### 4.4 Expenditure Composition

The differences across countries in *spending on transfers and subsidies* are most striking (see table 4). In recent years spending on this category averaged about 13% of GDP in high-growth and Anglo-Saxon countries and 17% in low-growth countries. It reached almost 20% in the continental "big 3". The long-run correlation between growth and transfers and subsidies is shown in chart 6. The chart shows that

Table 4

**Transfers and Subsidies**

| | 1960 | 1970 | 1980 | 1990 | 2000/latest |
|---|---|---|---|---|---|
| | *% of GDP* | | | | |
| Average all countries | 8.5 | 10.9 | 16.2 | 15.9 | 15.4 |
| High-growth 1990s | 7.7 | 10.6 | 16.8 | 14.0 | 13.3 |
| Low-growth 1990s | 9.0 | 10.9 | 15.5 | 17.3 | 17.3 |
| Anglo-Saxon | 6.2 | 8.4 | 12.8 | 13.1 | 13.1 |
| Non-Anglo-Saxon EU | 9.5 | 13.2 | 19.8 | 18.4 | 17.3 |
| Other OECD | 5.6 | 4.9 | 9.2 | 10.7 | 12.4 |
| Big continental (D, F, I) | 12.9 | 14.8 | 19.5 | 18.0 | 19.2 |
| UK, US | 6.5 | 8.6 | 11.6 | 11.7 | 12.4 |

*Source: AMECO and Tanzi and Schuknecht (2000); country groups as in table 1.*

Chart 6

**Change Transfers & Subsidies 1960–2000 and Change in Growth 1960s–1990s**


*Source: AMECO, Tanzi and Schuknecht (2000).*

the reduction in per capita growth between the 1960s and the 1990s is correlated with increases in spending on transfers and subsidies in the past 40 years.

Amongst other spending categories, we also observe less *spending on goods and services* in high-growth and Anglo-Saxon countries than in low-growth and non-Anglo-Saxon EU countries. Differences in the spending ratios for this category are less pronounced than for transfers and subsidies. Perhaps the reason is that the need for core spending in countries is rather similar so that differences in spending ratios may be due to how efficient the countries are in this spending.

Expenditure patterns in education and public investment are also worth discussing briefly. These are often categorised as productive expenditures and are assumed to promote growth. Nevertheless, we observe little difference across country groups over time and at present. In education, spending was slightly higher in Anglo-Saxon countries than in the other groups until about 1980. Since then, spending has converged. Public investment differs strongly across countries but not across country groups, with the exception perhaps of non-Anglo-Saxon and non-EU countries where Japan plays a significant role. Public investment is slightly higher in high-growth countries but it is also higher in the non-Anglo-Saxon EU countries than in Anglo-Saxon countries. This is perhaps an area where the efficiency of spend-

Table 5

**Total Revenue**

| | 1960 | 1970 | 1980 | 1990 | 2000/latest |
|---|---|---|---|---|---|
| | *% of GDP* | | | | |
| Average all countries | 26.9 | 32.9 | 38.8 | 41.5 | 44.5 |
| High-growth 1990s | 26.1 | 30.7 | 36.9 | 37.6 | 40.9 |
| Low-growth 1990s | 27.4 | 34.7 | 39.8 | 43.8 | 46.6 |
| Anglo-Saxon | 26.2 | 33.2 | 35.0 | 37.2 | 37.8 |
| Non-Anglo-Saxon EU | 27.8 | 34.5 | 42.1 | 45.9 | 49.1 |
| Other OECD | 21.1 | 19.1 | 26.9 | 32.0 | 36.0 |
| Big continental (D, F, I) | 32.0 | 35.2 | 41.6 | 44.7 | 47.6 |
| UK, US | 28.8 | 39.9 | 35.1 | 34.7 | 36.8 |

*Source: AMECO and Tanzi and Schuknecht (2000); country groups as in table 1.*

Table 6

**Direct Taxes and Social Security Contributions**

| | 1960 | 1970 | 1980 | 1990 | 2000/latest |
|---|---|---|---|---|---|
| | *% of GDP* | | | | |
| Average all countries | 15.0 | 17.5 | 22.7 | 23.7 | 25.5 |
| High-growth 1990s | 14.3 | 16.0 | 21.0 | 21.8 | 23.8 |
| Low-growth 1990s | 14.5 | 19.0 | 23.9 | 25.1 | 26.6 |
| Anglo-Saxon | 13.8 | 15.4 | 17.9 | 19.9 | 21.3 |
| Non-Anglo-Saxon EU | 14.9 | 19.4 | 25.8 | 28.0 | 29.4 |
| Other OECD | 13.5 | 8.7 | 15.1 | 15.8 | 18.0 |
| Big continental (D, F, I) | 17.1 | 20.1 | 26.5 | 28.7 | 29.4 |
| UK, US | 15.4 | 18.8 | 19.8 | 20.1 | 23.2 |

*Source: AMECO and Tanzi and Schuknecht. 2000. Country groups as in table 1.*

ing matters the most, given the importance of political considerations and institutional factors such as corruption and red tape (see Tanzi and Davoodi, 2000).

### 4.5 Level, Composition and Stability of Tax System

Public expenditure needs to be financed and, as mentioned above, this typically requires distortionary taxes. Total revenue patterns mirror closely those of total public expenditure (see table 5). High-growth and Anglo-Saxon countries feature much lower revenue ratios than low-growth and non-Anglo-Saxon EU countries. This reflects the strong increase in the tax burden since 1960 when revenue ratios were much lower and still fairly similar across country groups.[1])

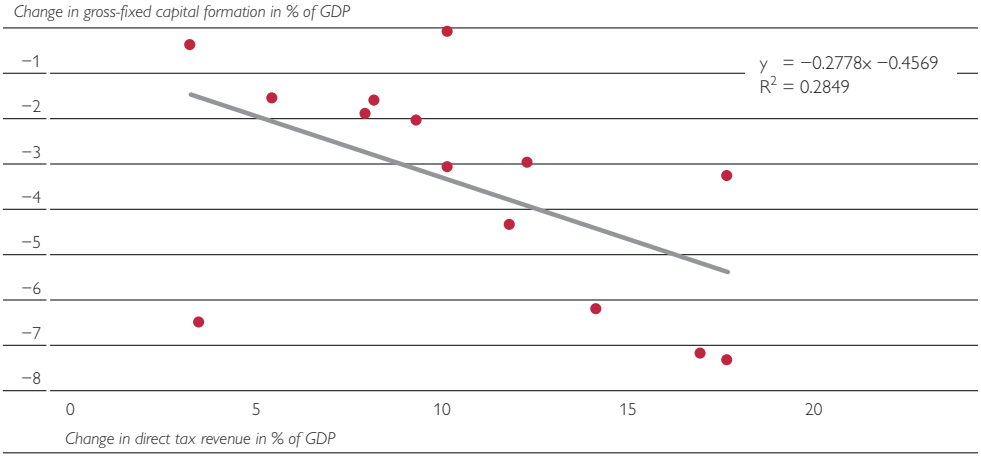
Considering the revenue composition, the negative correlation between direct taxes (including social security contributions) and growth is noteworthy (see table 6). High-growth and Anglo-Saxon countries have revenue ratios in the low 20% whereas those for low-growth and continental European countries are in the high 20% or even above 30% of GDP. Such differences in revenue ratios imply a similar pattern for marginal tax rates and, therefore, major differences in dead-weight costs and in tax wedges on labor income. OECD studies have shown that the income ranges to which marginal tax rates near 100% apply are much more prev-

1 *For surveys of tax policies and systems in OECD countries see, for example, van den Noord and Heady (2001) and Joumard (2001).*

Chart 7

**Change in Direct Taxes 1960–1990 Versus**

**Change in Capital Formation, 1960s–1990s**

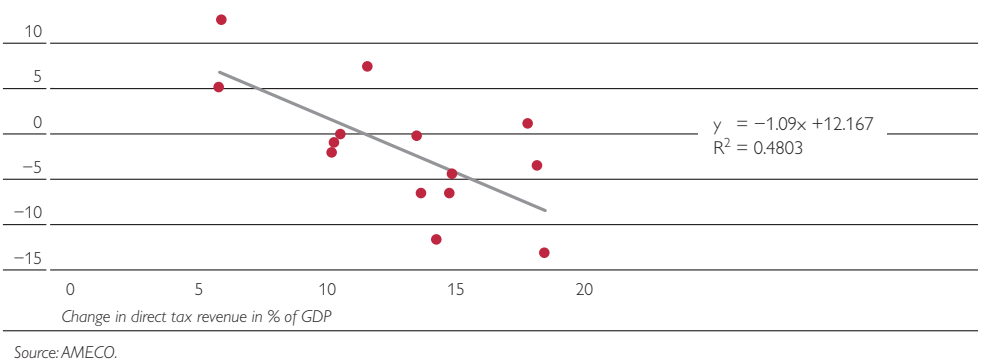



Source: AMECO, Tanzi and Schuknecht (2000).

Chart 8

**Change in Direct Taxes 1960–1990 Versus**

**Change in Employment Ratio, 1960s–1990s**




Source: AMECO.

alent in non-Anglo-Saxon EU countries. Indirect tax revenue differs much less strongly across country groups.[1])

The probable long-term disincentive effects of rising direct taxes can be illustrated by looking at their correlation with gross-fixed capital formation and with employment – two key elements of growth equations. Charts 7 and 8 show that increases in the direct tax ratio over the past 40 years are correlated with negative changes in gross-fixed capital formation and, even more strongly, in the employment ratio over the same period.

Finally, the stability of the tax system may be related to countries' growth performance. This is difficult

1 *It is nevertheless noteworthy that, despite increases in VAT rates and other indirect taxes, the indirect tax revenue ratio has not increased in many countries since about 1980 (e.g., France, Germany, Austria) and a strong lumping of countries near 15% of GDP may suggest that it is very difficult to move beyond this ratio. In fact, almost no country has succeeded in getting more than 10% of GDP in revenue from value added taxes.*

to measure as ideally it would imply an analysis of specific statutory changes in the countries' tax systems. As a proxy, we make use of the fact that structural and cyclical influences are normally the main determinants of changes in tax revenue. Cyclical influences affect real revenue but leave the revenue ratio broadly unchanged (unless the tax system is significantly progressive or regressive in its entirety). Hence, frequent fluctuations in the revenue ratio may be indicative of frequent reforms in the tax structure.

Volatility (as measured by the standard deviation of the revenue ratio between 1980 and 2000) is much higher for direct than for indirect taxes.[1]) However, it is broadly similar between high- and low-growth countries. Volatility of direct tax receipts in Anglo-Saxon countries is much lower than in non-Anglo-Saxon EU countries. The question of tax stability is probably much more linked with changes in specific aspects of taxes and particularly of income taxes. There is no statistics that captures this feature.

## 5 Concluding Remarks

In this paper, we have surveyed arguments that suggest that fiscal policy, promoted through changes in taxes and in public expenditures, could have significant effects on economic growth. Thus, it remains one of the important tools available to the government for pursuing its growth objective. However, for a variety of reasons discussed in the paper we believe that it is impossible to get very reliable empirical evidence of the impact of fiscal policy on growth. Thus, government decisions on the public finance tools must continue to be based on a priori or deductive reasoning and on arguments based on theoretical analysis.

Using fiscal data covering a period of four decades, we have shown that the quantitative relationships so obtained were generally consistent with theoretical considerations even though they could not be assumed to be proofs of those considerations. The point is that one should not ask more from empirical work than it can deliver and governments should not wait for empirical proofs to use tools that professional consensus has determined to be growth promoting. The main problem is that long-term growth is rarely the only or even the main objective of fiscal policy. ❧

## References

**Afonso, A., L. Schuknecht and V. Tanzi. 2003.** Public Sector Efficiency: An International Comparison. ECB Working Paper 03/242.

**Alexander, W. R. 1990.** Growth: Some Combined Cross-Sectional and Time – Series Evidence from OECD Countries. In: Applied Economics 22. 1197–1204.

**Bernardi, L. and P. Profeta. 2003.** Tax Systems and Tax Reforms in Europe. London: Rutledge (forthcoming).

**Cashin, P. 1995.** Government Spending, Taxes and Economic Growth. In: IMF Staff Paper 42. 237–269.

**Castles, F. G. and S. Dowrick. 1990.** The Impact of Government Spending Levels on Medium-Term Economic Growth in the OECD, 1960–85. In: Journal of Theoretical Politics 2. 173–204.

**Daveri, F. and M. Maffezzoli. 2000.** A Numerical Approach to Fiscal Policy, Unemployment and Growth in Europe. Università Bocconi, Instituto di Economia Politica, Studi e Quaderni die Economia applicata, EEA 2000. May 4.

1 *Note that the standard deviation of revenue ratios is only a very crude measure of the volatility of tax systems.*

**Daveri, F. and G. Tabellini. 2000.** Unemployment, Growth and Taxation in Industrial Countries. In: Economic Policy. April. 47–104.

**Devarajan, S., V. Swaroop and H. Zou. 1996.** The Composition of Public Expenditure and Economic Growth. In: Journal of Monetary Economics 37. 313–344.

**Dowrick, S. 1993.** Government Consumption: Its Effects on Productivity Growth and Investment. In: Gemmell, N. (ed.). The Growth of the Public Sector: Theories and International Evidence. Aldershot: Edward Elgar.

**Easterly, W. and S. Rebelo. 1993.** Fiscal Policy and Economic Growth. In: Journal of Monetary Economics 32. 417–458.

**Folster, S. and M. Henrekson. 1999.** Growth and the Public Sector: A Critique of the Critics. In: European Journal of Political Economy 15. 337–358.

**de la Fuente, A. 1997.** Fiscal Policy and Growth in the OECD. CEPR Discussion Paper 1755.

**Hiebert, P., A. Lamo, D. Romero de Avila and J. P. Vidal. 2002.** Fiscal Policies and Economic Growth in Europe. In: The Impact of Fiscal Policy. Banca d'Italia: Rome. 613–637.

**Jones, C. I. 2002.** Introduction to Economic Growth. Second Edition. New York and London: W.W. Norbu and Company, Inc.

**Joumard, I. 2001.** Tax Systems in European Union Countries. In: OECD Economics Department Working Paper 301.

**Kneller, R., M. Bleaney and N. Gemmell. 1999.** Public Policy and the Government Budget Constraint: Evidence from the OECD. In: Journal of Public Economics 74. 171–190.

**Kneller, R., M. Bleaney and N. Gemmell. 2000.** The Implications of the Comprehensive Spending Review for the Long-Run Growth Rate: A View from the Literature. In: National Institute Economic Review 171. 94–105.

**Korpi, W. 1985.** Economic Growth and the Welfare System: Leaky Bucket or Irrigation System? In: European Sociological Review 1. 97–118.

**McCallum, J. and A. Blais. 1987.** Government, Special Interest Groups and Economic Growth. In: Public Choice 54. 3–18.

**Miller, S. and F. Russek. 1997.** Fiscal Structures and Economic Growth: International Evidence. In: Economic Inquiry 35(3). 603–613.

**van den Noord, P. and C. Heady. 2001.** Surveillance of Tax Policies: A Synthesis of Findings in Economic Surveys. In: OECD Economics Department Working Paper 303.

**Nordstrom, H. 1992.** Studies in Trade Policy and Economic Growth. Stockholm University Monograph 20.

**OECD 2003.** The Sources of Economic Growth in OECD Countries. Paris: OECD.

**Persson, T. and G. Tabellini. 1994.** Is Inequality Harmful for Growth? In: American Economic Review 84. 600–621.

**Sanford, C. 2000.** Administrative and Compliance Cost of Taxation. London: Fiscal Publications.

**Tanzi, V. 2001.** The Rule of the State in the XXI Century. Mimeo. The Italian version is published in: Scienza delle Finanze e Diritto Finanziario.

**Tanzi, V. 2003.** Transazioni, Imposte, e Sviluppo Economico. Ezio Vanoni Lecture given at the University of Pavia, 16 December, 2002 (forthcoming).

**Tanzi, V. and N. Chalk. 2000.** Impact of Large Public Debt on Growth in the EU: A Discussion of Potential Channels. In: European Economy 2. 23–43.

**Tanzi, V. and H. Davoodi .** 2000. Corruption, Public Investment and Growth. In: Tanzi, V. (ed.). Policies, Institutions and the Dark Side of Economics. Cheltenham and Northampton: Edward Elgar. 154–170.

**Tanzi, V. and L. Schuknecht. 2000.** Public Spending in the 20th Century. A Global Perspective. London: Cambridge University Press.

**Tanzi, V. and H. Zee. 1997.** Fiscal Policy and Long-Run Growth. In: IMF Staff Papers 44. 2179–2209.

**Tanzi, V. and H. Zee. 2000.** Taxation and the Household Saving Rate: Evidence from OECD Countries. In: Banca Nazionale del Lavoro Quarterly Review 212. March.

**Weede, E. 1986.** Sectoral Reallocation, Distributional Coalitions and the Welfare State as Determinants of Economic Growth Rates in Industrialised Democracies. In: European Journal of Political Research 14. 501–519.

**Weede, E. 1991.** The Impact of State Power on Economic Growth Rates in OECD Countries. In: Quality and Quantity 25. 421–438.

Jon Cunliffe
Managing Director
HM Treasury, UK

# Comments on Vito Tanzi and Ludger Schuknecht, "Public Finances and Economic Growth in European Countries"

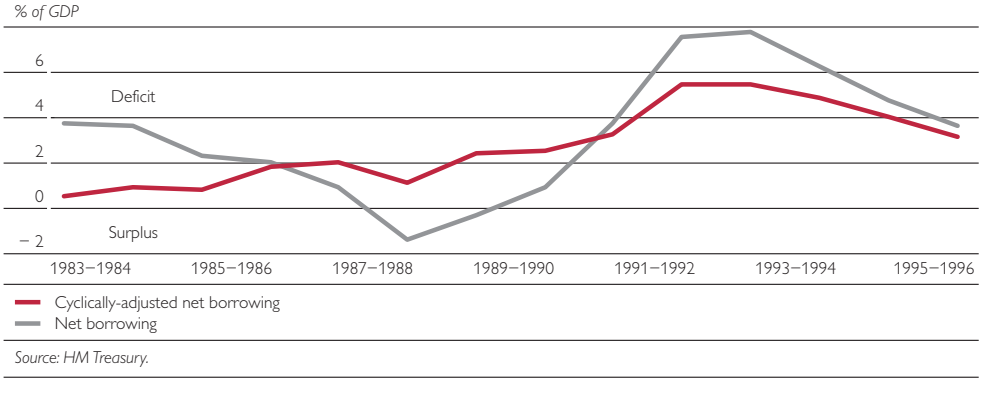
First of all, I am very grateful for the opportunity to be here and the opportunity to talk about something other than the UK's decision on the euro. It is a welcome relief. Although when I got to my room last night there was a very nice glossy book waiting for me, which said "The road from the Schilling to the euro". Being old enough to remember the Shilling in the UK, I wondered whether this was a very well produced hint. When I looked, the spelling was different. I realised that I was being oversensitive.

I have a presentation, I am afraid. I want to talk about fiscal policy reform in the UK and in doing so I'll try and pick up some of the themes that Vito Tanzi has touched on. I am not sure if I am a type one or type two reformer. I think I am a type three reformer because of some of the points I want to make around stability. I think it is certainly true that counter-cyclical or pro-cyclical fiscal policy does not have a direct effect on long-term growth. I think one of the points I want to bring out as I go through this, is macroeconomic stability does have an effect on long-term growth and macroeconomic instability through hysteresis effects and other effects can have an adverse effect on growth and macro-stability comes from the policy framework, with which everyone is familiar, which is the sort of the sexy sister of the macro-framework. But fiscal policy frameworks also matter. And with fiscal policy, and I think this was mentioned, the same issues of credibility and time consistency apply to the fiscal policy authority as to the monetary policy authority and of course debt is quite a good feedback mechanism from fiscal policy into longer-term growth issues. I wanted to touch on some of that as we go through.

What I intend to do is just to go through quickly the UK's experience before 1997, the reforms since 1997, which are the main focus, the impact of the reforms and a couple of issues for the future.

Chart 1

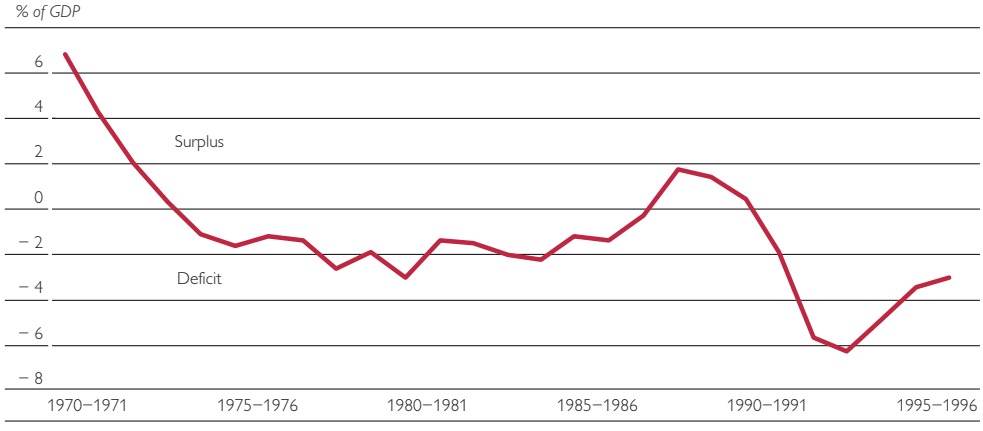
**Net Borrowing, 1983–1997**




*Source: HM Treasury.*

Chart 2

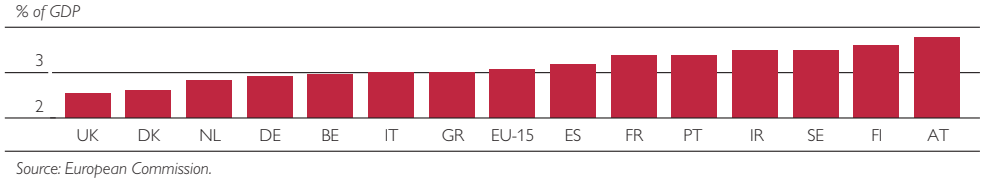
**Current Budget**




*Source: HM Treasury.*

Chart 3

**Public Investment, Average 1971–2000**




*Source: European Commission.*

The experience before 1997: a high and volatile borrowing in the UK. This goes back to 1983/4. I could have run the cycle back to the 1950s and it would not have shown a materially different picture: a volatile and peaky borrowing cycle.

The other point I just want to bring out of chart 1 is actually the relationship between the red line and the grey line. The red line is cyclically adjusted net borrowing, the grey line is absolute net borrowing. And you see there the policy error that was made in the late 1980s in the UK, when net borrowing went into surplus and the government assumed that that was a structural surplus. It did not take account of the cycle. Whereas if you look at the red line, cyclically adjusted, actually there is still a deficit. At that point fiscal policy was loosened, taxes were reduced because we thought this was a structural surplus. We did not really concentrate on the cycle. And then you see what happen further as you go into the early 1990s. We saw a rapid deterioration in the public finances as a result of that.

The main point I wanted to bring out of that part is (we have some experience) that the cycle and understanding it matters. If you get it wrong, it can have long-term effects on the public finances.

Also of the period from 1971 through: borrowing to spend rather than to invest. That is the current budget. Again, you see that kick-up, here it is in the early 1990s, into surplus but mainly over that period the current budget was in deficit while the UK was borrowing to consume.

And the counterpart of that, it has been mentioned, is public investment. I still do not know and it is difficult to

know what the right number is for public investment. This is a thirty year series: 1971 to 2000 looking at public investment as a percentage of GDP in the EU. You can see that the UK over that period has been right on the bottom, just under 1½%. Austria, I am pleased to say, has been close to a 4% mark and is at the top of the EU average. I think anyone who has used the London metro system and has used public transport in Austria will appreciate some of the differences there.

What are the lessons that we took from this experience? The first lesson I think is about sustainability and the importance of sustainability. I have not shown the picture for the debt stock but in the 1980s the net debt stock rose quite quickly to nearly 45%.

The second is the point I made, allowing for the cycle and understanding the effect of the cycle on the public finances as you make decisions, and also understanding and dealing with uncertainty in a world where economic growth varies over the cycle and the relationship between economic growth and the public finances changes from cycle to cycle and also in a world where both growth and public revenues and spending often do not turn out to be as predicted in any given year. You need a fiscal system that can allow the fiscal authority to cope with outcomes that are different to forecasts without losing credibility. The issue for the fiscal authority becomes to some extent how could it ensure fiscal credibility that people believe it will achieve its medium-term targets while still being able to respond to uncertain outcome.

The third principle that we took from that was to protect public investment, given a historically low investment in the UK and the third was the importance of clear rules and objectives. I could have shown the different formulations of fiscal policy that we had in the UK throughout the 1980s and 1990s. I think we achieved nine in all over a 14-year period. So fiscal policies and its objectives were unclear and changing over the period.

The reform since 1997: a code for fiscal stability that has been enshrined in legislation, in the Finance Act 1998. The code sets out some principles on transparency and fiscal sustainability

that fiscal policy must follow and it then requires the government to state its objectives and rules. We did not legislate the objectives and rules because governments change and governments may have different objectives and rules. The legislation simply says the government would specify what those objectives and rules are. We strengthened openness, transparency and accountability through the publication of documents but also through having the key assumptions on which the fiscal forecast and on which the budget are based audited by the independent public auditor, who reports to Parliament not to the government. Those assumptions can cover both assumptions that can go into the forecast, like the oil price or the level of equity prices, which have quite an impact on the forecast or the audit can cover assumptions that the government has made about increasing tax revenue by increasing compliance. Both sorts of assumptions can be independently audited.

The aims of fiscal policy as a medium-term aim, which is the medium-term credibility point I talked about, which is to ensure sound public finances and to ensure that tax and spending decisions impact fairly both within generations, intra-generationally I could say, and between generations, inter-generationally. The short-term objective is to allow fiscal policy to work to support monetary policy, particularly by allowing the automatic stabilisers to work fully.

As a result of that we have two firm fiscal rules, the more numerate among you will have spotted that there are three bullets there but actually it is only two fiscal rules and the third point, I think, is a complementary point that comes out of the general aims.

The first is the golden rule which it has been referred to in the UK, which is over the economic cycle the government would borrow only to invest and it will not borrow to consume. You can see the genesis of that in the picture I showed you earlier of the amount of borrowing for consumption we did over the 1980s and 1990s. But it is important to see the golden rule alongside the second rule, which is a net debt constraint for sustainable finances. So the ratio of net debt to GDP will be held over the cycle at a level and the government specified that that level is 40%. This is net debt rather than gross debt. The gross debt figure is 4% or 5% higher. But sometimes the point is made: well, if you have the golden rule, what stops you continually investing and building up a debt stock and possibly engaging in non-productive investment. There is a constraint here. And the debt constraint overrides the investment constraint because ultimately you need credibility about sound public finances.

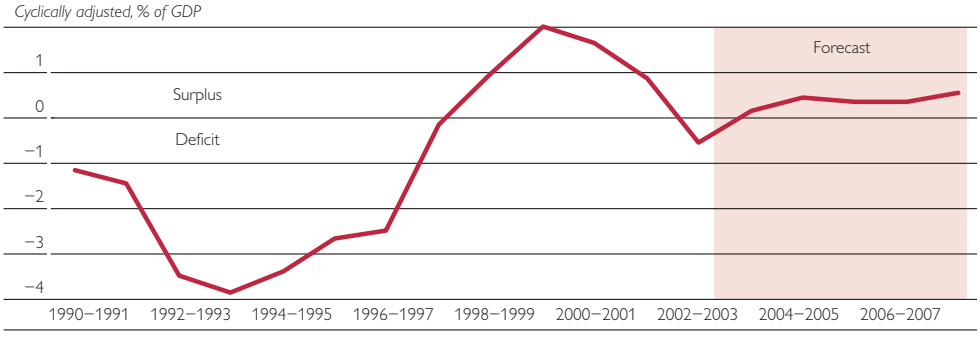
The third bullet is not a rule but is a sort of outcome, which is the aim, which is that fiscal policy should support monetary policy by allowing the automatic stabilisers to work over the cycle.

The thinking behind this is very similar to the thinking behind the UK's monetary policy framework. We call it constrained digression. It goes back to the point I made earlier. In a world in which forecasts are uncertain and you expect error and you expect shocks, you should allow the monetary policy authority flexibility to cope with that, you should not lay down policy rules that bind it to operate in a certain way but you do have to put that into a framework, so that the monetary policy authority has credibility and solves the time inconsistency problem. And the same for fiscal policy. With fiscal policy the time consistency problem is worse because people trust monetary policy authority normally more than they trust governments when it comes to tax and spending. But one has to have goals and targets that are credible in the medium term so the fiscal authority could then respond flexibly while still maintaining credibility that it will hit its medium-term targets. The best way to get credibility is by doing what you say you are going to do. Over a long period of time if you say something and then do it, you get credibility. A shorter route to that, I think particularly for governments, is to have rules and frameworks that entrench that.

Has it worked? What has happened? This is the cyclically adjusted surplus. You see the cyclically adjusted balance, you can see it is back in surplus, from about 1997 it dipped down in 2002 and has now come back up again. This forecast of the cyclically adjusted surplus is not run at the 2% level that we had in the late 1990s but to run about ½% to ¾% of GDP.

Chart 4

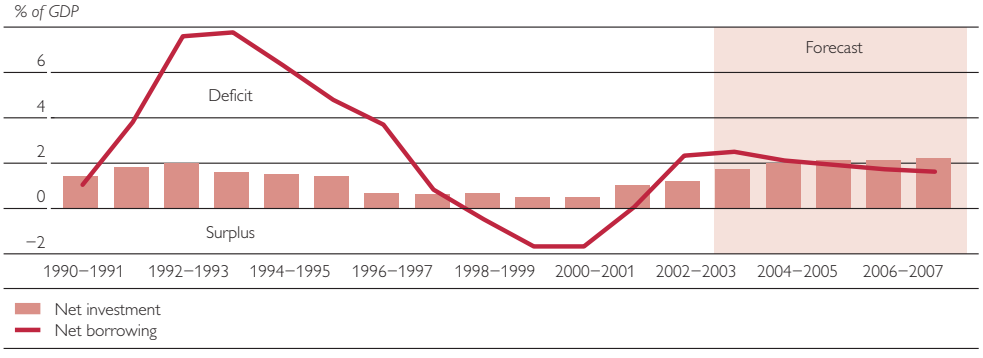
**Current Budget Back in Surplus**




Source: HM Treasury.

Chart 5

**Net Borrowing and Net Investment**



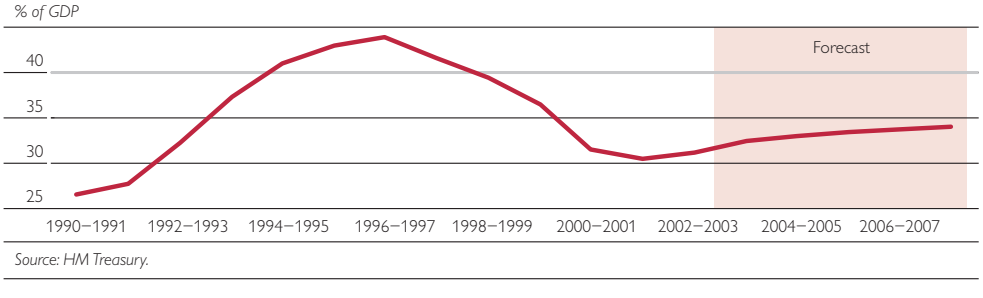

Source: HM Treasury.

Borrowing and investment: the borrowers are public investment and you can see the sort of low investment cycle. Investment is forecast to come back by the end of this period to about 2.2%. I do not how that scores on the issue: is it enough or is it too much or is it just right? We aim to get the 2.2%, which will still be below a number of European countries. Net borrowing is forecast to come below that so we will be funding some of this investment out of the current budget.

I said debt was forecast to stabilise around net debt and it stabilised just under 35% of GDP. That net borrowing figure that you see in chart 1 is actually roughly the level that you need to sta-

Chart 6

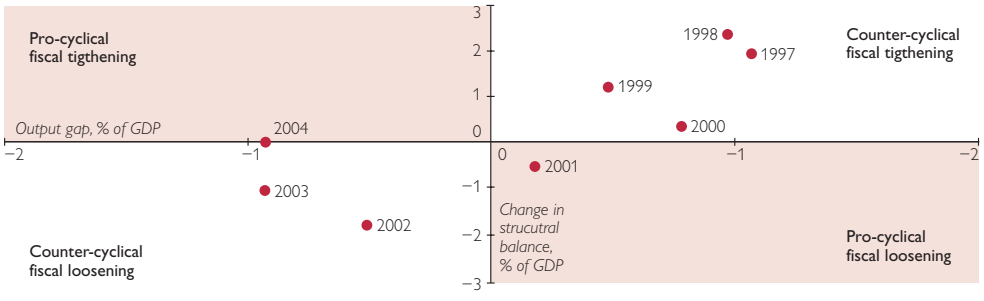
**Debt Low and Stable**




Source: HM Treasury.

Chart 7

**Change in Fiscal Stance: UK**




*Source: Commission Forecasts.*

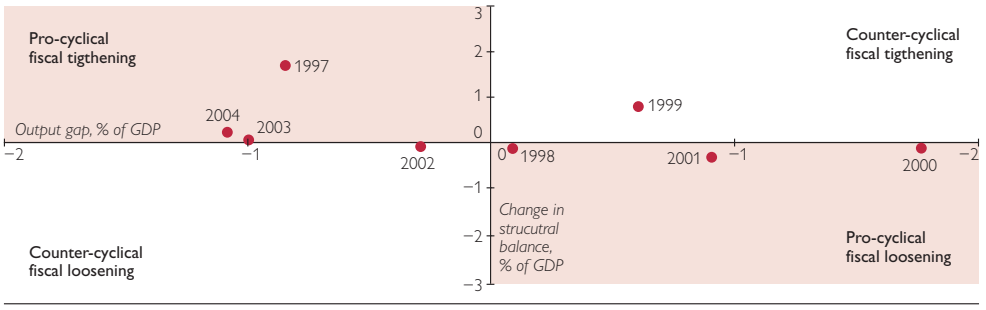
bilise the debt stock on assumptions about inflation and interest rates in the monetary policy framework.

Chart 7 just looks at what has happened, whether the UK's objective was to try and get stability and part of that objective is for fiscal policy to support monetary policy. Have we achieved that? Has fiscal policy operated in a counter-cyclical way? This is a bit of a complicated picture. I like it. It is a European Commission picture originally. But what one looks for is as you move towards the right of the picture, the output gap is getting positive and as you move to the left, the output gap is getting negative. As you move up, the fiscal policy stance is tightening and as you move down, the fiscal policy stance is loosening. What you would want to see if it is counter-cyclical is that when you are on the right of the picture, you are also on the top of the picture, in other words fiscal policies being applied counter-cyclically, being tightened when you have a positive output gap and then you want to be in the bottom left corner so that fiscal policy is loosening and then you have a negative output gap. And the performance of the UK from 1997 is quite good. We have a period 1997,1998 to 2000 when fiscal policy was tightened, by 4 percentage points over that period and then 2001, 2002 to 2003 fiscal policy is being loosened as the output gap has turned negative.

I could not resist putting in the same figure for the euro area. You forgive me. In 1997 you see a pro-cyclical fiscal

Chart 8

**Change in Fiscal Stance: Euro Area**




*Source: Commission Forecasts.*

tightening, which I would say is the sort of Maastricht hurdle. I think this was a tightening in a number of euro-area countries to meet the entry conditions for EMU, and their fiscal policy loosened in 1998. Actually since then, I would say, fiscal policy has not operated pro-cyclically or counter-cyclically. It has been pretty flat along that line. Of course in 2003 to 2004 forecasts, you might discover in 2003/2004 forecasts actually a pro-cyclical loosening but certainly as far as forecasts are concerned you could say that fiscal policy has not really played a role in supporting monetary policy over this period.

Issues for the future, taking our framework forward: first and foremost we need to get into the framework more understanding of long-term trends in public finance both on the tax and the revenue side because it is fine having a medium-term target but actually the UK, like most other countries, is subject to demographic change and long-term spending pressures. We need to understand more and bind in, through transparency, some understanding of how we are going to tackle that, we do not have an issue on the pension side. Pension expenditure of 5% to 6% of GDP will be the same in 2050 as it is now. There will not be much change. But on health spending there is an issue. And there are issues around education spending and also issues around demographics, the change of the labour force. So greater focus on long-term sustainability. And we published, alongside the pre-budget report last November, a report on long-term fiscal sustainability looking at trends to 2050, over the next 50 or so years and we will continue to do that every year and try to inform on the medium term. These are some of the things we have to understand better: how the ageing population impacts, healthcare in particular, how longer expected life spans impact on the public finances. And we have to improve our modelling but there is a big job to be done here.

On the Stability and Growth Pact; I think, the UK has supported its recent evolution to take more account of the economic cycle to avoid pro-cyclicality both ways, both on the tightening and the loosening side. The importance of long-term sustainability and the importance of debt levels, I think that came out of the earlier speech, and the role of public investment. You can see all of that being rooted in the history I described to you earlier.

I'll just show you one other picture, I think which – as I have been talking a lot about EMU recently – maybe is a picture that Jens Henriksson will talk about as well. Fiscal policy used to be the main demand management tool when we were all in Bretton Woods and monetary policy had an exchange-rate objective and that fell into disrepute in the 1960s and 1970s because of asymmetry, because

**EMU Forward Policy Agenda – Fiscal Stabilisation Policy in EMU**

If the UK were to join EMU, credible policy options include institutions for using fiscal instruments more actively:

| Issue | Solution |
|---|---|
| **Preserving sustainability: constrained discretion** | Could have symmetric stabilisation rule |
| **Transparent policy** | Would produce stabilisation report<br>Could have greater use of independent audit |
| **Timely and effective instruments** | Could consider modernisation of tax regulator |

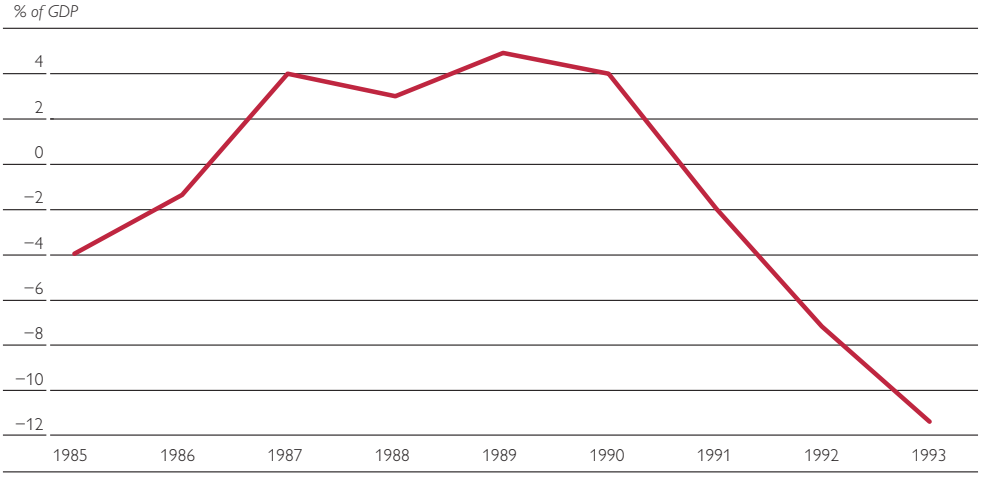
politicians found it easier to loosen rather to tighten fiscal policy and because of practical problems, lags in the spending, etc. I think for the last 20 or 30 years there has been a consensus that monetary policy is the demand management tool and fiscal fine tuning should be avoided. You should avoid using fiscal policy in a discretionary way to do this. I think some of that consensus is changing now, people think how can you apply some of the technology that has been applied to monetary policy to fiscal policy. So you can use fiscal policy more credibly for demand management. I think in a monetary union there is a lot of thinking going on as well about: well, do individual countries need to use fiscal policy more for demand management to reduce some of the inflation variability one is starting to see. I think there is a Swedish example of it. I just say that one of the features of the UK statement on the euro was a proposal if we join the euro we would look at having a third fiscal rule which would actually be a symmetric stabilisation rule, so we would expect fiscal policy to operate to stabilise the economy. We would do that in a way similar to the Bank of England framework but when the output gap was forecast to exceed a trigger level, this would not be for fine tuning, we would say if the output gap – positive or negative – exceeded 1½% or 2%, the government would have to write to Parliament to explain what fiscal action it proposed to take. And we try and offer this in a symmetric way. We issued a discussion paper on this to see whether we can refine the principles. I'll leave you there. ❧

Jens Henriksson
State Secretary
Swedish Ministry of Finance

# The Use of Fiscal Rules in Sweden

Chart 1

**Public Finances**




Source: OECD.

I will tell you about my practical experience of working as a close political adviser to the social democratic finance minister of Sweden for the past eight years.

Table 1

**Gross Debt Estimate in OECD Economic Outlook (December 1994)**

| | 2000 |
|---|---|
| | % of GPD |
| Sweden | 128.2 |

Source: OECD.

When the Social Democrats came to power in October 1994, the Swedish public deficit was above 10% of GDP. The interest rate differential vis-à-vis Germany came to 450 basis points and the unemployment rate stood at more than 8%. There were even rumors on the financial markets that the IMF would step in and take over the Swedish economy.

In short: There was a big crisis. Now this is Sweden – the former role model. At least in our own eyes, this meant that the whole political system was humiliated.

In the OECD's Economic Outlook of December 1994, the projection for Sweden was bleak. In the year 2000, public debt was expected to be 128.2% of GDP.

It was certainly an interesting time for a 27-year-old economist to start working as a political adviser and speechwriter for the incoming Minister of Finance Göran Persson.

What I am going to give you now are ten lessons I have learnt from budget consolidation in Sweden. Some of them might be typical for the political system of Sweden, but I daresay I consider most of them rather universal.

**Lesson 1: Sound public finances are a prerequisite for growth.**
I really believe in this, both in political and economic terms.

In economic terms you can interpret this statement as getting your macroeconomic fundamentals right. During the past ten years, Sweden had a floating exchange rate. With a low deficit, interest rates and inflation will be low as well.

In 1970, Sweden was one of the richest countries in the world. Now there are 14 OECD countries with higher PPP-adjusted GDP per capita than Sweden. Between 1970 and 1994 we made every possible mistake we could make and certainly did not get our macroeconomics right.

**Lesson 2: If you are in debt, you are not free.**
Let me have two different perspectives on this claim.

When a country's deficit is large, everything the government does is monitored by the financial markets. In political terms this means that the power is shifted from the open chambers of elected people's representatives to the closed rooms of financial markets in London and New York.

That is a very strong political message. The other perspective is a private one.

One day in 1994 my sister – who was then 13 years old – came to me and asked me how much she was indebted. It turned out she had read a Swedish newspaper with a picture of a newborn child and the headline "Born with a debt of 200,000 Swedish kronor."

Ricardian equivalence exists!

**Lesson 3: The one who is responsible must put his or her office at stake.**
In a deficit situation, politicians face a difficult task. Representatives are usually elected to improve the (financial) situation of voters. But when there is a deficit problem, they have to deal with questions they are not familiar with and perhaps not prepared for: Expenditure has to be cut and taxes have to be raised.

Such issues are extremely difficult to handle. That is why a successful consolidation process must have strong support from the people. As a politician you have to be able to turn the edge of the debate against those who do not want to take harsh measures.

I believe that there has to be one man or one woman who takes the lead. And that this politician must put his or her office at stake.

**Lesson 4: Set up goals and stick to them.**
One of the monetary policy lessons of the past ten years is that transparency is good and that inflation targeting is very effective.

We worked along similar lines, as we set up goals for handling the deficit:
- By 1996, public debt was to be stabilized.
- In 1997, we were to pass the 3% deficit test.
- By 1998, the public deficit should have disappeared, and so on.

Setting up goals is always very easy. But sticking to them is much harder.

In the beginning of 1996, the cyclical situation in Sweden was problematic, which meant that we expected difficulties in reaching the targets. So what did we do? Instead of blaming business cycle developments, we took new measures.

The contractionary effect of fiscal policy was then met by the expansionary effect of a confidence boost. Growth was lower in the short term, but in the long term I am sure the outcome was positive.

Being a small country in the far north, with a social democratic govern-

ment and a tax burden of over 50% of GDP, you never get the benefit of doubt from the financial markets. You have to stick to your goals.

**Lesson 5: Consolidation should be designed as a package.**

A consolidation program has to be designed as a comprehensive package; an ad hoc hodgepodge of measures will only have a limited chance of success. Presenting the consolidation measures in one package makes it clear to all interest groups that they are not the only ones asked to make sacrifices.

As a politician you can never explain why you have to cut down on pensions only. But if, at the same time, you cut down on child benefits and unemployment insurance and raise the income tax for the richest groups of the population, you are on safe ground.

When one strong interest group complains, you are in trouble. But with everybody complaining, you are not. At least if you have a four-year mandate period and you are in the beginning of it.

Even if there is a general public understanding of the seriousness of the budget situation, the burden must be distributed fairly among the different groups in society to guarantee positive and long-run acceptance of the consolidation program. This is extremely important in Sweden where electoral participation is above 90%.

**Lesson 6: Activities have to be given priority over transfers.**

When trying to consolidate public finances, there are basically three things to do: (1) cut transfers, (2) cut activities, or (3) raise taxes.

Our reasoning was that as an adult, you could always live with having had an economically poor childhood. But it is much harder to compensate for poor education or bad healthcare.

**Lesson 7: Do not leave the problems to the local authorities.**

When I mentioned the three ways of taking care of public finances, I emphasized the world "public" because there is a fourth way of taking care of state finances, and that is to shift the problem to the local authorities.

In doing so you create problems with schools, childcare, healthcare,

and so on. This is a hard lesson we had to learn, so be aware.

**Lesson 8:**
**Be honest toward your citizens.**

A consolidation process consists of two phases: doing it, and holding on to it. Even if the first phase is successful, renewed resistance will appear when the measures affect the voters' own pockets. The government must be able to say, "This is no news. We have said all along that getting public finances in order is extremely harsh and that it requires large sacrifices from everybody throughout society."

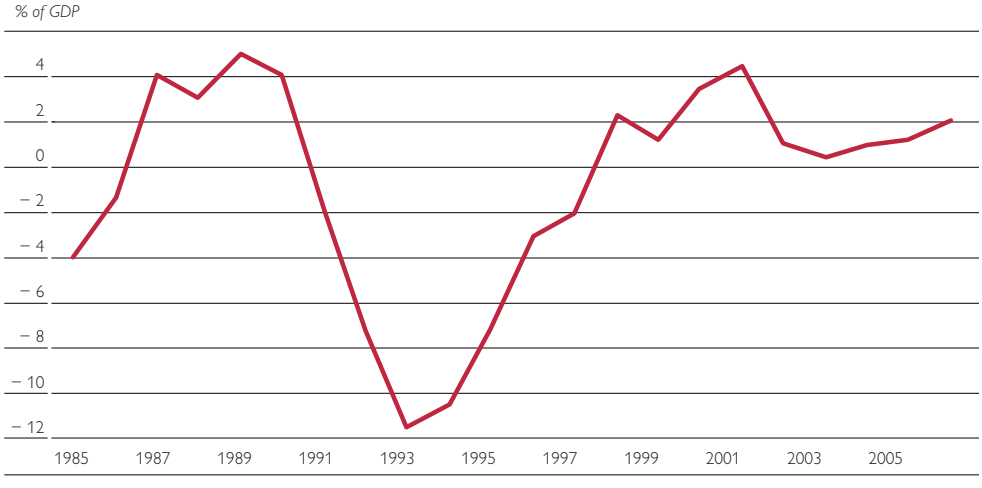
Never say that it won't hurt. Never say that it is peanuts.

**Lesson 9: Be honest toward the financial markets.**

The whole process must be as transparent as possible. Honesty toward the market means always clarifying assumptions and calculations. Never try to fool anybody by using gimmicks

Chart 2

**Public Finances**




*Source: OECD.*

Table 2

**Maastricht Debt**

| | 2000 |
|---|---|
| | % of GPD |
| Sweden | 52.9 |

*Source: OECD.*

or bookkeeping tricks. Only then can credibility be recovered, and only then can the program earn legitimacy.

Be transparent and extremely open toward capital markets. Try one budget gimmick and you may lose market confidence that could take years to regain. It is of great importance that the Minister of Finance is conservative in predicting deficits and debts. Do not use overoptimistic calculations.

**Lesson 10: Stick to it.**

When you have got this far, you have accomplished the first phase of consolidating public finances. But there is also a second phase: the phase of sticking to the program. This phase consists of monitoring public finances, taking care of institutional weaknesses and fighting inflation.

We carried out some structural reforms, of which the four most important reforms were:

– Joining the European Union;
– Reforming our pension system;
– Creating a new budget process; and
– Giving independence to our central bank.

Table 3

**Growth in Sweden, EU and OECD**

| | Sweden | EU | OECD |
|---|---|---|---|
| | % of GDP | | |
| 1995 | 4.0 | 2.2 | 2.5 |
| 1996 | 1.3 | 1.4 | 3.1 |
| 1997 | 2.4 | 2.3 | 3.5 |
| 1998 | 3.6 | 2.9 | 2.7 |
| 1999 | 4.6 | 2.8 | 3.1 |
| 2000 | 4.4 | 3.5 | 3.9 |
| 2001 | 1.1 | 1.4 | 0.8 |
| 2002 | 1.9 | 0.8 | 1.8 |
| Mean | 2.9 | 2.2 | 2.7 |

*Source: OECD.*

And what are the results of the Swedish consolidation program? Well, the public finances of Sweden are in order.

We now have a surplus goal for public finances of 2% of GDP over the business cycle. And what about Maastricht debt? In the year 2000 the public debt in Sweden was 52.9% of GDP.

So it turned out that the OECD is not always right.

Let me end by giving you the growth figures for Sweden since 1994 (see table 3). The Swedish experience leads me to the conclusion that sound public finances are a prerequisite for growth. ❧

Martti Hetemäki
Director General
Finnish Ministry of Finance

# Experience with Public Sector Reform in Finland

As far as fiscal policy is concerned, the very fine presentation by Jens Henriksson on the Swedish case describes rather well also the Finnish case. I will concentrate now on structural policy in Finland.

As Michael Mussa said, the biggest problem in structural policy is the political process. It is not that we do not know what to do, but how to get the required reforms accepted. I will list five simple arguments that we have been using in Finland to win the case for reforms.

First, at the Ministry of Finance, we have said that higher labour input or productivity is needed to get a higher standard of living. This is a very basic argument, but it is surprising how many people believe that growth and output is somehow given from outside and that it is determined independently from what we do.

Second – and again it is a very basic argument that we have used – we have emphasized that higher output is needed to pay for future pensions, healthcare, etc., which means that the sustainability of public finance is critically dependent on growth. Again, it is surprising how many people think that it is only a matter of political will that public services are provided. But I think we have managed to convince people at large that the welfare state is based on economic growth or, in other words, that at the end of the day the tax base and the size of output determine what we can finance in the public sector.

The third argument that we have used is that we need to cut taxes to get higher labour input but we can do that only if we reform also the expenditure side at the same time. Tax cuts need to be financed.

In chart 1, the horizontal axis shows the marginal tax rate on labour and the vertical axis shows the hours worked in relation to the working-age population (i.e. the utilisation rate of labour in the economy). High-tax countries have low use of labour.

Ed Prescott has written an interesting article to justify and analyse the effect of the labour tax wedge on labour input.[1]) The difference between the standards of living of some large continental EU countries and the US can be (almost) fully traced to the differences in the marginal labour tax wedges.

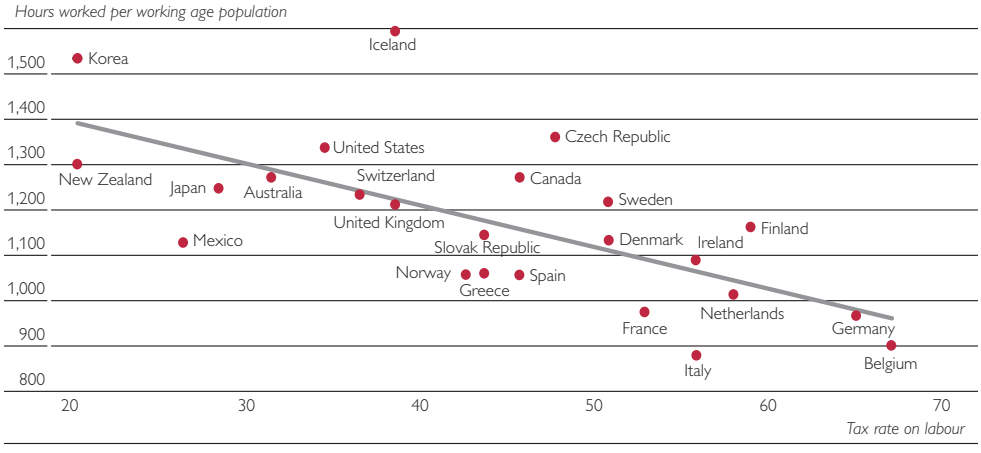
The link between taxation and output is also something that is very hard to get through. There is often the argument that high taxes are needed to pay for the welfare state. In this context, we have said that a big enough cake is needed to finance the welfare state and that the cake will be big enough only if work and productivity pay well enough.

The fourth argument that we have used is that we must get retirement age up and act now. In the past 7 or 8 years when the Minister of Finance

1 *Prescott, E. 2002. Prosperity and Depression. In: American Economic Review 92(2). 1–15.*

Chart 1

**Hours worked and Tax Rate on Labour**




*Sources: OECD: Employment Outlook 2002, tables B (emloyment rate) and F (hours worked per employee) and OECD: Taxing Wages 2000-01, table 7 (marginal tax rate on average production worker = marginal income tax rate of worker + social security contributions by worker and employer).*

and also the Prime Minister gave speeches on the economy, they usually pointed out the challenge of an ageing population. They repeated this message time and again. I think that today, Finnish people at large accepted this challenge.

Recently a major pension reform was agreed in Finland. I will mention only three elements of the reform. First, two early-retirement schemes will be abolished. Second, there will be an automatic cut in pensions according to the increase in life expectancy. That is very important for sustainability when you have a defined benefit system.

Third, benefits will be calculated on the basis of the whole lifetime income and not of the last or the best years. I understand that this is similar to what has been agreed in Austria. The difference is that in Finland there were no demonstrations before or after the agreement.

To conclude, I have three points. First, I would claim that we broadly know what kind of reforms will boost or are likely to boost growth and improve the sustainability of public finances. The required reforms are, however, politically hard to sell.

Second, a public debate about the dangers of failing to implement reforms and the benefits of reforms is needed. Otherwise we risk ending up in a situation where there are no reforms before crises. This is a real danger when things are relatively good and people are fairly wealthy. Third, today's conditions – globalisation and ageing – are very hard constraints. They emphasise the importance of forward-looking action and political leadership.

A long time ago, then Swedish Minister of Finance Kjell-Olof Feldt said that often it was politically too early to reform before it was too late for the economy. I think this holds true even more so today. ❧

Kees van Dijkhuizen
Treasurer General
Dutch Ministry of Finance

# The Use of Fiscal Rules in the Netherlands

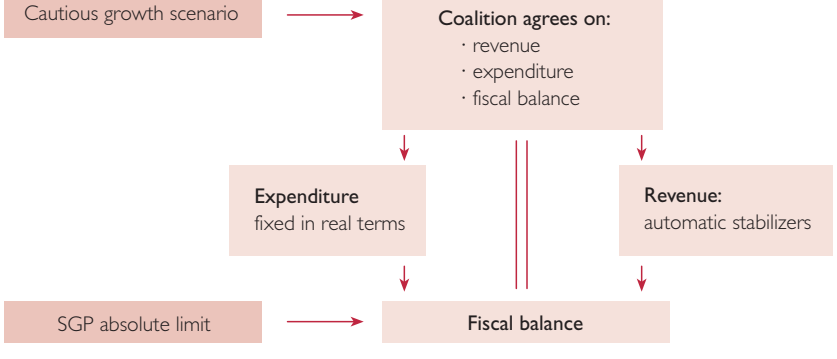
Fiscal rules are important, because they enhance budgetary discipline. In addition, fiscal rules typically have a longer time horizon and therefore stimulate the focus on medium-term or structural developments rather than cyclical fluctuations. Two years ago, at the request of the Dutch Ministry of Finance, Professor von Hagen carried out a research into the role of fiscal rules in budgetary policy.[1]) The conclusion was that countries with strong fiscal rules have achieved better results with regard to fiscal discipline, although the nature of the fiscal rules may differ with the political system and the institutional design of the budgetary process. For instance, countries with a single-party government can rely on the relative strong position of the Minister of Finance, whereas countries with coalitions should make more ex-ante agreements. In its Economic Outlook of last winter, the OECD concluded that transparency and well-designed rules can help in setting and achieving fiscal consolidation. Rules are particularly effective in cases when there is a strong incentive to comply to the target, as for instance was the case at the end of the 1990s with the entry of the Economic and Monetary Union (EMU).

The Netherlands are traditionally run by a coalition government, which means that the budgetary process is best organized when it is based on transparent and ex-ante rules. For the last 10 years, our budgetary policy has been based on three important basic principles:

- Assumption of a cautious growth scenario derived from the independent Netherlands Bureau for Economic Policy Analysis.
- At the start of a new coalition, a medium-term assessment is made

Chart 1

**Budgetary Policy in the Netherlands**




1 *Hallerberg, M., R. Strauch, and J. von Hagen. 2001. The Use and Effectiveness of Budgetary Rules and Norms in EU Member States. Report Prepared for the Dutch Ministry of Finance, July.*

of the desired level of expenditure, revenue and the fiscal balance. At that moment, parties can make their assessment of the desired level of revenue, expenditure and the fiscal balance.

– After the moment an agreement has been reached, there is a strict division between government expenditure and government revenue for the rest of the coalition period. This means that revenue windfalls or tax increases cannot be used to finance additional spending.

This set of rules has three important implications:

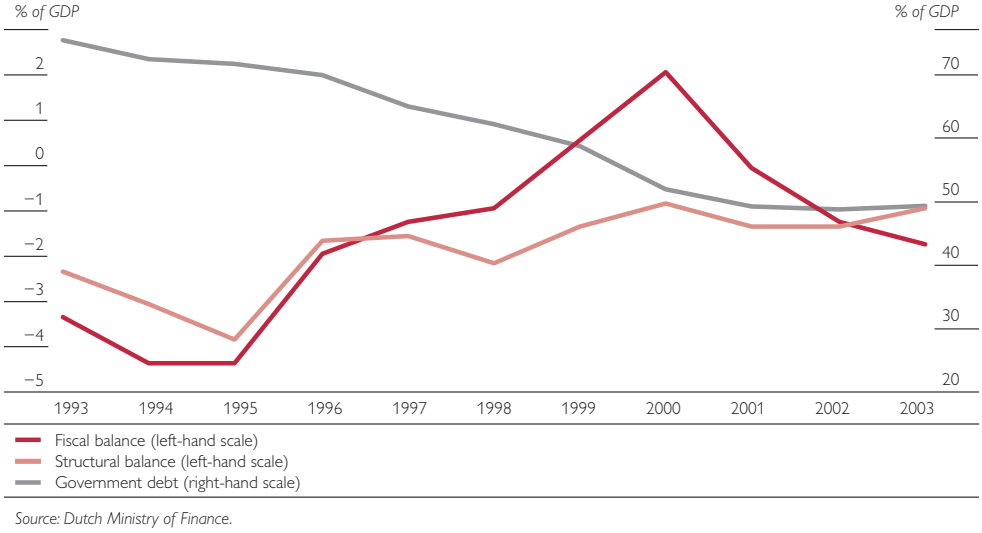
– The ex-ante agreement on the level of real expenditure and the strict division with government revenue means that the level of real government expenditure is not affected by the business cycle as far as the revenues are concerned.
– On the revenue side, automatic stabilizers are free to operate within the limits of the Stability and Growth Pact.
– While growth is based on a cautious scenario, the probability of more favourable outcomes is more likely than unexpected setbacks. Over the long run (i.e. the full business cycle), it can be expected to lead to additional improvement in the fiscal balance and debt reduction.

With the help of these fiscal rules, the Netherlands managed to make good progress with the restructuring of their public finance. Benefited by strong economic growth, the fiscal balance improved from –4.2% in 1994 and 1995 to a surplus of 1.5% in 2000 (UMTS excluded). The real virtue of the fiscal rules lies in the fact that most of the extra revenues at the end of the 1990s (which turned out to be temporary of nature) have been directed towards debt reduction. Within only a period of 8 years, the government debt ratio decreased from almost 78% to 53%.

The fiscal rules not only led to an improvement in the fiscal balance and to debt reduction, but also to a reduction in government expenditure. Because of the ex-ante agreement, the growth of total expenditure was kept under control. In combination with the strong

Chart 2

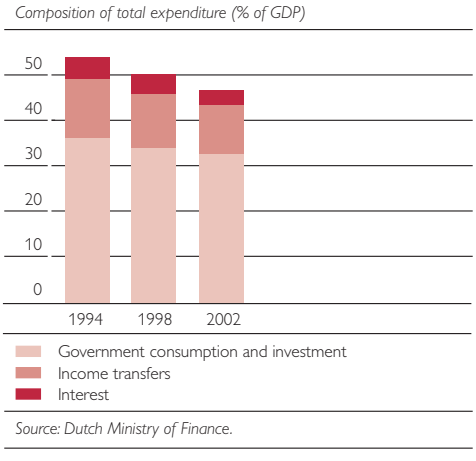
**Turn-Around in Public Finance (1)**




*Source: Dutch Ministry of Finance.*

Chart 3

**Turn-Around in Public Finance (2)**




Source: Dutch Ministry of Finance.

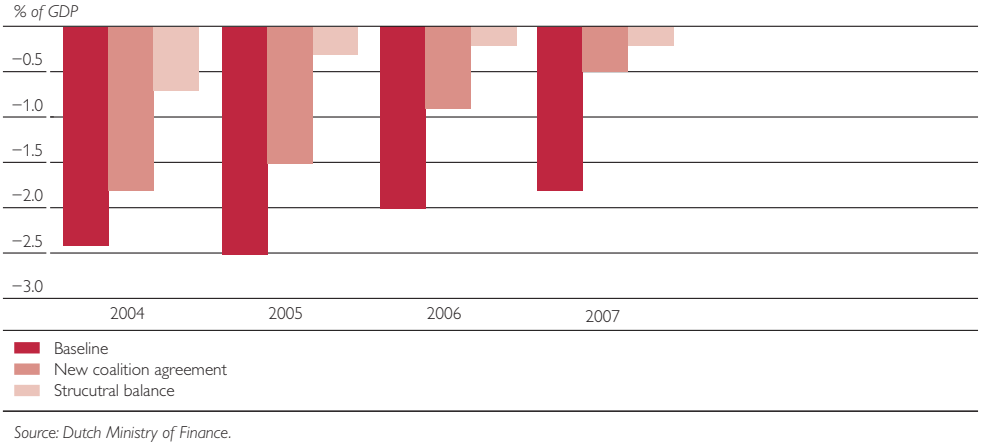
economic growth in the second half of the 1990s, this resulted in a decline of the ratio of total expenditure to GDP, which was brought back from 54% in 1994 to 47% in 2002. Part of this decline was caused by a reduction in interest payments and the decline in income transfers as a result of the favourable economic development, which created room for more productive expenditure. This is highlighted by the fact that the real growth of total consumption and investment averaged 3% in the period from 1994 to 2001.

Despite the achievement in previous years, the recent strong fall of the fiscal balance back into deficit is worrisome and requires action. The recently installed government is prepared to make strong adjustments in order to timely correct further slippage of the deficit. Within the new coalition, the same fiscal rules will continue to apply. The new coalition has agreed on a strong adjustment package which primarily consists of expenditure cutbacks of approximately 2% of GDP. With unchanged policies the budget deficit would rise to 2.5% in 2004 and improve only modestly to 1.8% in 2007. With this package the budget deficit strongly improves over the period and is brought back to 0.5% in 2007. In structural terms, the budget deficits are much lower in this period. These forecasts are based on a cautious economic growth forecast of 2% for the period 2004–2007.

Besides the discipline in public finance, fiscal rules can also contribute to economic growth. Within our framework there are several different channels. In the short run, government revenue is allowed to fluctuate with economic development, so automatic stabilizers can operate freely. In the long run, economic growth benefits from solid public finances. In addition, given

Chart 4

**New Coalition Agreement: Fiscal Balance**




Source: Dutch Ministry of Finance.

the medium-term focus of the fiscal rules, politicians are more likely to concentrate on the structural impact of their policy. Finally, the use of fiscal rules makes government policy more transparent and therefore more predictable which provides confidence to both businesses and consumers. ❧

Mario I. Blejer

Mario I. Blejer
Director
Centre for Central Banking Studies, Bank of England[1])

# Financial Stability and Economic Growth

## 1 Introduction

The purpose of this paper is to elaborate on the relationship between financial stability, or more precisely financial-sector stability, and economic development and growth. It should be pointed out, at the outset, that, at a general level, there seems to exist a quite entrenched believe among economists – a believe that is almost conventional wisdom – that financial stability certainly promotes growth and, in certain circumstances it is actually a precondition for growth. Moreover, the opposite is also regarded as a truism: financial instability is detrimental for growth and financial volatility is growth retarding.

As intuitively appealing as these statements seem to be, they are, in fact, not very well established at the analytical levels. In fact, the treatment of this specific question in the economic literature is rather scanty. There are at least three issues that make it difficult to establish a clear cut relationship between financial stability and growth:

(i) A precise *definition* of what is exactly understood for financial stability and financial instability is lacking and the concepts are used, frequently, in quite an ambiguous manner.

1 *The views expressed are those of the author and do not necessarily represent those of the Bank of England.*

(ii) There is no recognized analytical *channel of transmission* through which financial stability, or its absence, would tend to affect economic growth. Moreover, the variety of hypotheses advanced by some researchers regarding such a transmission process lack clarity and are not really consistent.

(iii) There is no *available empirical evidence* that confirms a robust and significant relationship between growth and financial stability. As a matter of fact, there is a dearth of empirical studies dealing with these issues and, therefore, it is difficult to provide convincing evidence that the relationship is indeed important (or that it even exists).

As a whole, a random search of recent economic literature would not yield much results regarding the relationship, and the causality, between financial stability and economic growth. Of course, the same search would turn out a great deal of material on financial stability and countless quotes on economic growth, but little, if anything at all, on the specific relationship between the two. Moreover, searching for monetary policy and growth, one finds hundreds of results, and the same applies to the relationship between financial *development* and growth, but regarding financial stability and economic growth, there is not very much to be quoted.

The conclusion one can reach from these casual observations is that there is a number of related relationships that are quite well documented, while other claims are just taken as an accepted axiom but need much more elaboration. Among the issues that seem to be quite well established, both analytically and empirically, we can mention:

- There is a clear distinction to be made between monetary policy and macroeconomic stability, on the one hand, and financial stability, on the other. While there is a clear relationship between them, these are issues that can, and sometime should, be analysed and dealt with separately.
- It is apparent that financial *deepening* and financial *development* are indeed associated with more rapid growth, particularly in the medium term.
- In general, financial instability would tend to slow down and be detrimental to financial development. Therefore, *indirectly*, financial instability may reduce the rate of growth by retarding financial development. This statement, however, is not universally agreed. Some analysts see low financial development as *being the cause* of financial instability, and not the consequence. In this view, low levels of financial development are the reason for both low growth *and* instability and there is no direct causality between instability and growth.

In summary, a relationship that is apparently clear to most observers, is not that well established and certainly requires some more elaboration and analysis. Four aspects of these analyses are discussed in this paper: (a) the definitions of financial stability and the sources of financial instability; (b) what do we really know about the effects of instability on growth; (c) what are the possible channels of transmission from financial instability to the real economy; and (d) the policy implications and the ways available to reduce financial instability.

## 2 Operational Definitions of Financial Stability and the Sources of Instability

The distinctions between monetary stability and financial stability are rather clear-cut and there is broad agreement about the conceptual meaning of *monetary stability*. Usually monetary stability is defined as the stability of the general price level and, in general terms, the avoidance of inflation is as regarded as a desirable objective.

There is much less consensus among specialists regarding the appropriate definition of *financial stability (and instability)*. In an extensive study on the subject, Frederick S. Mishkin (2000) defines financial instability by its effects:

"*Financial instability occurs when shocks interfere with information flows so that the financial system can no longer do its job of channelling funds to those with productive investment opportunities*". Mishkin's definition implies, therefore, that regardless of the source, financial instability is reflected in the interruption of the normal intermediation of resources through the financial markets.

A different approach is taken by Andrew Crockett (1997). He distinguishes between stability of financial *institutions* and stability of financial *markets*. Institutional stability means that financial institutions can meet continuously their contractual obligations, without interruptions and without need of assistance. On the other hand, stability of financial markets denotes the stability of market prices and implies that asset prices reflect fundamentals and do not oscillate – beyond small margins – without relation to these economic fundamentals. In terms of its possible effects on investment and economic activity, both types of instability could be potentially damaging, leading to Mishkin's result, i.e., to the interruption of normal intermediation.

With respect to the causes or factors that can result in a loss of financial stability, the literature identifies two types of sources: (i) general market and international financial trends, and (ii) intrinsic characteristic of financial markets:

(i) There are three general trends that have increased the sensitivity of financial markets and rendered the markets more prone to instability:
   - The rapid growth in the volume of financial transactions in most of the financial markets of the world
   - The increasing integration of capital markets and the acceleration of capital flows – implying more interdependency and more systemic risk
   - The increased complexity of financial instruments

(ii) Intrinsic financial market characteristics: It has been known for long time that financial markets have some features that make them more volatile than other markets. It has been observed that there is an enhanced probability (compared with other relevant markets) that normal flexibility and ordinary adjustments could rapidly degenerate into volatility and crises. The reasons generally advanced to explain this phenomenon relate to three specific market failures that are particularly prevalent in financial markets: asymmetric information; moral hazard; and perverse selection. The fact that this "trio" is more ubiquitous in financial than in other markets and the observation that each one of these distortions has the potential of affecting growth may lend some analytical support to the conventional wisdom view that financial instability and economic growth are negatively correlated.

## 3 Does Financial Instability Indeed Affect Growth?

There is a substantial body of clearly established empirical evidence regarding the importance of the *level* of financial development as a factor stimulating economic growth. The existence of a relationship of this nature was already claimed by Schumpeter, who argued that financial intermediation, by mobilizing savings, evaluating projects, managing risk, and monitoring performance is an essential element for technological innovation and therefore for economic development. Many writers elaborated and built on these relationships. The most well known and most widely cited is, probably, Ronald I. McKinnon (1973) who also provides empirical evidence.

More recently, a comprehensive study by Robert G. King and Ross Levine (1993) presents rich empirical evidence (based on a sample of 80 countries) that higher levels of financial development are significantly correlated with capital accumulation and with faster current and future growth (measured by per capita levels of income). The variables that King and Levine use to measure financial development are: the ratio of liquid liabilities to GDP, the importance of commercial banks versus the central bank in allocating credit and the funding of private firms vis-à-vis credit to the government and the public sector. In fact they find that their financial indicators are more robust explanations for economic growth than a large variety of alternative economic indicators.

While there is, therefore, a robust body of evidence corroborating the positive effects of financial deepening on economic growth, the state of affairs is completely different regarding the impact of financial instability. There is little, if any, solid econometric or parametric evidence that relates specific measures of financial instability or financial volatility to economic growth. Some empirical studies have attempted to correlate uncertainty, both in general terms and more specifically related to financial markets, with economic growth but the results have not been significant (see for example, Lensink, Bo and Sterken, 2003). A possible explanation for this lack of an observable correlation is that uncertainty may affect growth through two offsetting effects. On the one hand, uncertainty may increase the level of precautionary savings. However, at the same time, it may distort the overall allocation and reduce the total productivity of savings (in the limit, as uncertainty rises, people may place their savings in totally non-productive but safe types of assets, such as gold or jewellery).

Whereas systematic evidence regarding the impact of financial instability on growth is not available, a significant amount of "observational" evidence has been accumulated over the years from surveying the consequences of *extreme cases* of financial instability, i.e., from assessing the costs of financial crises. Such costs have been staggering and some examples are useful for illustration. The 1995 Mexican crisis resulted in a 12% contraction in industrial output. During the same year, and as consequence of the contagion from the "Tequila" effect, the Argentine GDP fell 7% below trend while the deep financial crises of 2001–2002 caused a further GDP collapse of more than 12%. In the early 1980s, Chile suffered a prolonged recession following a banking crisis that led to a reduction of growth from 8% a year, before the crisis, to no more than 1% over the next five years. Equally, financial crises in Scandinavian countries resulted in con-

siderable losses of output. Finland, for example, experienced a reversal in its growth performance from about 4% expansion before the crisis to a contraction of more than 4% in the following year.[1])

These costs are certainly exceedingly high, but they relate to extreme circumstances, to full blown financial crises and cannot be easily and directly extrapolated to more normal circumstances. As mentioned above, regarding the effects on growth of intermediate and incremental cases of financial instability, there is no rigorous quantitative validation available. Even so, however, it would be worthwhile to analyze, in some detail, the various potential channels through which factors that impair financial stability may eventually have detrimental effects on economic activity and affect negatively the potential for sustained growth.

## 4 Channels of Transmission from Financial Instability to Economic Activity and the Rate of Growth

The most traditionally accepted channel through which financial instability could affect the rate of growth of the economy is through its disturbing impact on the level of financial intermediation and financial depth. It is also indeed clear that significant degrees of instability slow down and disrupt financial development. There are, however, other mechanisms through which financial instability – defined as above, i.e., institutional and market/price instability – could impinge negatively on the rate of growth.[2])

There are three main channels through which institutional instability may have negative consequences for economic growth:

(i) Financial instability at the institutional level may lead to a deterioration in consumer and business confidence regarding the ability of financial institutions to honour its commitments. These, in turn, may result in disintermediation and would discourage the mobilisation and the allocation of savings through the financial system.

(ii) Another consequence of institutional instability is the possibility that a substantial number of banks and other financial intermediaries may collapse and fold during periods of stress. By ruining long-standing business relationships, financial instability would have a negative informational impact on the system. Financial intermediaries tend to develop specialized knowledge about their clients thus enhancing their ability to monitor firms, reducing the cost of borrowing and increasing allocation efficiency. Financial instability and crises would tend to lead, therefore, to a direct loss of information production in financial markets. This not only hurts current growth but also affects future growth due to the lags involved in accumulating new information.

1 *A possible exception is the US experience. Its savings and loans debacle did not seem to have had a noticeable effect on growth performance.*

2 *See Crockett (1997).*

(iii) Institutional instability also affects the organization of the financial sector. A direct consequence would be the deterioration of the payment system, increasing costs of transaction and distorting resource allocation.

With respect to *market instability*, in the sense of sustained price volatility, its main harmful consequences arise from the enhance generation of uncertainty. This could affect growth through, at least, five distinctive channels:

(i) The most traditional effect is, of course, the erosion of savers' and investors' confidence and the drop in overall credibility. The most immediate consequence is an increase in real interest rates, discouraging investment and provoking a downturn in economic activity.

(ii) Higher interest rates, by strengthening adverse selection, would also increase the misallocation of available loanable funds. If market rates are increased significantly following higher market uncertainty, there is a higher probability that lenders will lend to bad credit risks, those with the riskiest projects. Moreover, given this problem, the volume of credit is bound to contract, leading to lower investment and lower growth.

(iii) Market uncertainty also reduces the willingness to enter into long-term debt contracts since they become more risky. As a result, a larger proportion of private (and even public) debt tends to become of shorter duration reducing the scope of projects that can be financed.

(iv) A market that is particularly vulnerable to instability is the foreign exchange market. Instability tends to lead to a rose in the tendency to denominate debt contracts in foreign exchange. This, in turn, increases rigidities, eliminates potential efficient investments from the credit market, and increases speculative activities. Moreover, foreign exchange market uncertainty also tends to push up interest rates with the consequences described above.

(v) Volatility in financial asset prices adds significant difficulties to the formulation of macroeconomic policies. Unstable asset prices influence all the channels of transmission of monetary policy: the interest rate, the exchange rate, and the wealth channels. In balance, it makes shifts in policies more sharp and makes it more difficult to predict their outcome, polluting the investment environment and reducing investment in productive assets.

## 5 Policy Implications and Ways of Reducing Financial Instability

Even in the absence of convincing empirical evidence, it is quite clear that, given its potential impact on economic growth, financial stability should be fostered by public policy. There are, at least, three principles that provide analytical support to such intervention. First, financial stability is a public good: its consumers do not reduce the ability of others of benefiting from it. Second, as mentioned above, financial systems are subject to market failure (asymmetric information, moral hazard, and perverse selection). And third, financial instability has negative externalities. Problems in individual institutions or individual asset classes are bound, with certainty, to have negative spillover effects over other institutions and asset classes, thus generalising particular problems into systemic crises.

The recommended interventions to preserve stability divide, following Crockett's analysis, into actions to

strengthen institutional stability and policies to prevent instability in crucial market prices.

There are three, not mutually exclusive, approaches to preserve institutional stability. In the first place, one can fully rely on market forces and let these forces to be the guarantor of stability. Market forces strengthen discipline and enhance stability and public policy should be concerned with improving the functioning of markets, eliminating the potential distortions.

But, in many occasions, it may be necessary to reinforce the signalling and informational roles of the markets by providing (or fostering the development) of formal safety nets. The most prevalent forms of such safety nets are the establishment of deposit insurance schemes, and the provision of lender of last resort facilities. While these, and other similar, mechanisms could endow the markets with tools that would prevent spurious bouts of instability (and prevent isolated trouble from becoming systemic) they could result in enhanced problems of moral hazard and perverse incentives. Clearly, an optimal balance exists but it should be carefully crafted. The third approach to enhance institutional stability is based on regulation. Clearly, the informational characteristics of financial markets make it a classical case for regulatory intervention. Prudential and supervisory regulation tend to improve the functioning of the market but there is a need to avoid a regulatory overkilling that asphyxiates market development. Moreover, given the fast pace of technological change in the financial industry, regulations need to be constantly updated to prevent their obsolescence.

Regarding market stability, the discussion centers on policies to strengthen the stability of key asset prices. The most obvious suggestion has been the need to improve transparency and predictability of macroeconomic policies and, in particular, stability of the aggregate price stability – i.e., inflation control. But emphasis has also been put on contingency regulation or the use of "circuit breakers". These are procedures designed to stop trading or to induce some other type of restrain, when price variation reaches "unacceptable" levels. Of course, these procedures could limit specific losses but may result in very intrusive actions that could undermine both confidence and the actual ability of the market to reach equilibrium. Equally questionable, although sometimes advisable, is the idea of direct public intervention in key financial markets. The discussion here relates to the issue of asset price bubbles and the role of public institution in dealing with these matters. There is a vast literature on the issue but the general view emerging is that direct intervention to prevent or deflate asset bubbles should be the exception rather than the rule.

Within a policy context, one could pose the question whether there could be "too much financial stability", i.e., financial stability that stifles economic growth. I believe that the answer is "yes", particularly if stability is confused with rigidity. Market prices should fluctuate when economic conditions change and financial institutions should be allowed to evolve and some to disappear if they become insolvent and unviable. What is necessary is to have flexibility of market prices and structures but prevent extreme movements that generate uncertainty. Equally, there should be public support to correct market failures and counterbalance systemic risk. But exaggerated support leads to misallocations, inefficiencies, and moral hazard. It is necessary, there-

fore, to find the middle ground in this trade off, but this is more an art than a science. The only apparent rule is to accompany the market instead of counter its tendencies. ❧

## References

**Crockett, A. 1997.** Why Is Financial Stability a Goal of Public Policy? In: Maintaining Financial Stability in a Global Economy. Symposium sponsored by the Federal Reserve Bank of Kansas City. Jackson Hole, Wyoming: Federal Reserve Bank of Kansas City. 7–36.

**King, R. G. and R. Levine. 1993.** Finance and Growth: Schumpeter Might Be Right. In: Quarterly Journal of Economics 108. 717–737.

**Lensink, R., H. Bo and E. Sterken. 2003.** Does Uncertainty Affect Economic Growth? An Empirical Analysis. University of Groningen, Faculty of Economics.

**McKinnon, R. I. 1973.** Money and Capital in Economic Development. Washington D.C.: The Brooking Institution.

**Mishkin, F. S. 2000.** Financial Stability and the Macroeconomy. National Bureau of Economic Research. May.

Manfred J. M. Neumann

Manfred J. M. Neumann
Professor
University of Bonn

# Comments on Mario I. Blejer, "Financial Stability and Economic Growth"

Mario Blejer has provided us with a wide-ranging discussion of a variety of aspects of financial system stability or instability and its repercussions for economic growth. It is a fascinating topic and I cannot agree more with Blejer when he states that our profession does not know much about the interdependencies between financial system stability and economic growth.

It can be taken as a fact that the long-run development of economies is closely interrelated with the development of their financial systems. The financial system, intermediaries and markets, serves to allocate the savings of households – if it is efficient – to the most productive uses in the economy. Most financial arrangements trade on the future, hence are shaped by the expectations of market participants about the future rates of return and the probability of repayment. By allocating the savings the financial system distributes the risks of production and trade among the investors who are

troubled by uncertainty and asymmetric information. It is not at all clear how a financial system should be designed to serve these purposes optimally. The grand idea of Arrow-Debreu of a system of complete markets – where for each random event in the future a contingent contract can be written and traded today – is just an elegant theoretical construct, an ideal that does not help much in deciding on the optimal design of financial institutions that are indispensable under uncertainty.

As regards the impact of financial market stability on economic growth it is easier to treat the topic from the negative angle by asking what does financial instability do to economic growth. And here we are on safe ground by recalling with Blejer the impressively large losses of output in the aftermath of full blown financial crises, notably combined currency and banking crises. Argentina's recent loss of about 12% of its output, for example, is tremendous. But total costs are even higher if one takes the lost potential for innovation into consideration.

It seems to me that any attempt at providing a definition of financial stability by pointing to the consequences of financial instability does not yield much insight, given that we are interested in the proper functioning of the financial system.

I prefer to call a financial system a stable one

(i) if it shows sufficient capacity for the absorption of adverse shocks, such as detrimental real demand shocks, negative productivity shocks or sudden changes in preferences; and
(ii) if it functions such that it does not become a source of its own of serious uncertainty or risk.

If one accepts this notion, then one has difficulty with Mario Blejer's interpretation on the sources of financial instability. He conjectures that the proneness of financial markets to instability has been increased by the following trends of the last decade:

(i) a rising volume of financial transactions;
(ii) a rising complexity of financial instruments; and
(iii) an increasing integration of financial markets.

I just don't see why those trends necessarily lead to more financial instability. The very fact that the supply of financial services grows much faster today and that a greater variety of financial instruments is established grosso modo can be taken as evidence that the financial systems have become more efficient than they used to be in the past in arbitraging profit opportunities and redistributing the risks to be carried. Similarly, a rising integration of capital markets creates a more refined net of transmission, provides financial deepening and permits more flexibility at lower transaction costs. Probably the most important aspect is the distribution (or exchange) of risk. The larger the financial sector and the greater the variety of financial instruments, the more diversification of risks is available, the wider will be the distribution of specific risks among investors, hence the smaller is the portion of risk that each of them has to carry.

Consider, for example, the more recent impressive development of the derivatives markets. These markets are a partial answer to the theoretical

challenge of a system of complete markets. It is noteworthy that according to BIS figures about 75% to 80% of the contracts are traded between financial intermediaries. By improving the allocation of risks among the members of the financial system these markets strengthen rather than impede the system's stability.

Blejer paints an impressive picture of how institutional instability and market instability (i.e. excess volatility of asset prices) negatively affect economic growth. He points to the danger of disintermediation when banks and other intermediaries fail to honour their commitments and interest rates rise in shrinking securities markets because required risk premia are bid up. One might add that a bursting bubble in equity or house prices, for example, reduces consumption by cutting into the wealth of households. And there is more to scare us.

But it seems to me when dealing with the topic of financial instability it is important that we avoid to take an assumption for granted which is hidden in many contributions to the subject. The assumption is that the intermediation industry and the securities markets are inherently unstable. Are they really? Do we have overwhelming evidence in support of this claim? True, during the 19th century bank panics have not been rare. Thus it is safe to predict that a system of wild-cat banking will not survive but break down when the solvency of one or a few institutions comes into doubt. But this is a far cry from today's banking systems that are regulated by government, monitored by banking supervision, receive liquidity from the lender of last resort and are bound into deposit insurance schemes. True, time and again we will be confronted with failure at the micro level and there always is the danger of spillover. But if the banking supervision works properly, if the link between the riskyness of loans and capital requirements is strengthened, and if stress tests that take macroeconomic scenarios into account become the rule, I do not see why the banking system should create a serious financial crisis, regardless of the procyclical nature of the financial accelerator.

Similarly, I put to doubt the notion that the securities markets are a source of its own of financial instability. While it is a fact that the volatility of share prices exceeds the volatility of the stream of dividends and that there is herding behaviour, we have no convincing evidence that asset price bubbles spring up from nothing. A unique exception is the famous, utterly irrational speculation on tulips in the Netherlands in 1636.

In sum, I take the position that it is not the financial system as such that creates financial instability or even crises. It may well be that I overstate the case, but this serves to draw your attention to the source of financial crises. The role of misperceived public policies is – I am afraid – bypassed by Blejer. It seems to me that the dominant source of all major financial crises is ill-designed macro policies, assisted in some cases by poor or even lacking supervision of intermediaries and markets. All currency and banking crises that we have experienced during the past two decades were caused by excessive sovereign borrowing, by overly expansionary monetary policy or a combination of both and in some cases the financial crises were aggravated by the insistence on keeping the fixed exchange rate at an untenable level.

The recently coined term of a "bubble economy" highlights the fact that the emergence of larger asset price bubbles is the probably most important threat

to financial stability, to the viability of intermediation and consequently to economic growth. The lesson we have learned is that once a large bubble bursts it may take many years if not a decade until the economy gets back to normal. Japan is the unavoidable point of reference. While there is some discussion among central bankers on what a central bank might be able to do in order to deflate a bubble without inducing adverse side effects, I see close to none recognition by central bankers that overly expansionary monetary policy is catalectic to bubbles, i.e. prepares the ground for a bubble to spring up and take off.

As an aside, it should be a matter of reflection, if not of concern, that, for example in Germany, where the economy is in stagnation and where the prospects for a significant change to the better are not bright, share prices have nevertheless risen meanwhile by more than 50% within a few months time. Similarly, share prices have risen strongly everywhere in Europe and, notably, in the US. Doesn't this reflect the fact that the European Central Bank as well as the Fed flood the economies with liquidity in the desperate hope of achieving this way a stronger recovery?

It is true that it is difficult to differentiate between a bubble that will burst and a lasting shift in the relative price of capital that reflects the prospect of a strong upward-shift in productivity induced by technological innovation. But given that prudence requires us to focus on avoiding large mistakes rather than trying to fine-tune the economy (i.e. to avoid small mistakes), it seems that central banks are well advised to spend more resources on studying the bubble phenomenon. To be sure, I am not pleading for adding to the price stability objective an asset price target or for direct intervention in a key asset market. But it seems to me that a forward looking monetary policy that takes the potential danger of becoming a source on its own of instability into account would try to avoid large swings. ❧

Klaus Liebscher

Klaus Liebscher
Governor
Oesterreichische Nationalbank

# Concluding Remarks

Over the past two days, many fruitful ideas have been presented and discussed referring to the topic "Fostering Economic Growth in Europe." Let me briefly summarize the major findings and conclusions, as I see them.

– The European Union (EU) is currently at an important crossroads. The ongoing wave of enlargement has made the need for institutional and legal reform acute. The proposal for a new EU constitution addresses the right issues. More effective EU decision-making processes are needed to support a more complete implementation of the Single Market. Also, the proposed strengthened Community monitoring procedures of Member States' economic policies point in the right direction. The point was made that the Stability and Growth Pact is a core element of Economic and Monetary Union (EMU) and can, indeed, be regarded as an element of political union, which is often deemed a necessary complement to EMU. But, as was also emphasized, the Pact needs to be fully implemented in practice.
– Monetary stability is a key condition for sustainable growth. The Eurosystem's approach to aim for low positive inflation rates is in line with the bulk of theoretical and empirical

findings on the optimal rate of inflation. Perceived differences between the Eurosystem's and the Fed's monetary policies reflect different economic structures in the two monetary areas. As was emphasized, structural reforms increase an economy's flexibility: the associated higher productivity growth improves the short-term trade-offs faced by monetary policy, thus enhancing its room for maneuver.

– The basic message that I got from *session 1* was that there is no single main determinant of growth and that a number of favorable conditions need to be in place together for dynamic growth to develop. However, there appears to be a general consensus that investment in human capital and R&D furthers growth. Information technology is by itself no miracle cure; it requires flexible labor markets to reap its full benefits. It cannot be excluded that Europe is yet to see the productivity and growth benefits from the ICT revolution. In the context of human capital formation the issue was also raised how income distribution and growth interact. As it turned out, these interactions are far more complex than thought so far.
– Labor market issues were extensively discussed. It was quite forcefully argued that the priority should be raising employment and participation rates and that the problem is mainly structural in nature. The EU has made substantial progress over the past ten years. The labor market reforms undertaken so far have already generated jobs in substantial numbers. For most countries, these reforms are estimated to have noticably reduced the structural rate of unemployment. The reforms are already paying off in terms of higher growth than would otherwise have been achieved. However, the progress made so far varies sharply across EU Member States. The Nordic countries were frequently quoted as benchmark cases of successful reform, while other countries – among them the largest EU countries – still lag behind. It was also pointed out that a lot remains yet to be done and that the more difficult parts of the reforms are in many countries still to be tackled. Raising the retirement age was seen as the single most important element to enhance future potential growth through an increase in labor supply, while at the same time ensuring the sustainability of government finances in the face of ageing populations.
– *Session 3* offered views from industry. The main message, as I see it, was the importance of maintaining and enhancing Europe's competitiveness. Inter alia, it was argued that making the setting up of a business easier and more attractive is of prime importance. A more investment friendly climate which facilitates change and is open to modernization was seen to be of prime importance. A brain drain in highly qualified natural sciences and engineering professions was suggested as a potential bottleneck for investment. Not only the

quantity but also the quality of investment projects needs to be considered when, for example, evaluating public investment projects.

– *Session 4* included an interesting discussion on the role of fiscal policy and public sector reform. The main paper presented found no relationship between fiscal deficits and growth but a strong negative relationship between growth and public debt. Similarly, countries that let the level of spending – mostly in transfer payments – grow were the same that experienced lower growth. Interestingly, the paper did not find any relationship between spending for public investment and for public education on the one hand and growth on the other. Growth in tax levels was associated with falling growth rates.

In its Economic Outlook of last winter, the OECD concluded that transparency and well-designed rules can help in setting and achieving fiscal consolidation. The case study of the Netherlands that introduced fiscal rules 10 years ago, showed that the fiscal rules not only led to an improvement in the fiscal balance and to debt reduction, but also to a reduction in government expenditure. Furthermore, besides the discipline in public finance, fiscal rules can also contribute to economic growth through several channels. In the short run, government revenue is allowed to fluctuate with economic development, so automatic stabilizers can operate freely. In the long run, economic growth benefits from solid public finances. In addition, given the medium-term focus of the fiscal rules, politicians are more likely to concentrate on the structural impact of their policy. Finally, the use of fiscal rules makes government policy more transparent and therefore more predictable, which provides confidence to both businesses and consumers.

– A central message from *session 5* was that developed financial markets and financial stability are both important for growth. We should further work on establishing fully integrated and globally competitive financial markets in Europe. This also includes important regulatory and institutional issues. The quality of financial regulation and supervision pays off in the form of a well-functioning system and helps prevent financial crises. The various bodies for close coordination among national supervisors and the progress made in establishing the Basel II framework – as I would like to emphasise despite the doubts raised by some speakers – are important steps in that direction.

Overall, I think, we face a major issue of reform implementation in Europe. As evidenced by various official documents and ongoing official and institutionalized monitoring processes, there appears to be a very far-reaching consensus in European policy circles on the necessary reforms. But the actual implementation of reform measures chronically lags behind our ambitions. As has been evidenced vividly over the past months in a number of countries in the context of, for instance, pension reform, implementing growth enhancing reforms often turns out to be politically very difficult. The challenge is, as was pointed out, to convince the public and the various interest groups of reforms which may be unpleasant in the short run but are necessary and beneficial in the long run.

I think that we have successfully pursued our objective of enhancing the understanding of the driving factors for growth in Europe. Let me adjourn this conference by thanking all who participated; especially our speakers, our discussants and very much our panelists. Furthermore, I would like to specifically thank those who helped to prepare this conference – with my special thanks going to Mr. Hochreiter and Mr. Mooslechner, for the, if I may say so, contributions and organization of the scientific part of this conference, as well as the organizers, Mrs. Winter and others, who did a great job ensuring that everything worked out perfectly. Last but not least, I would like to extend a very warm thank-you particularly to the many participants who joined our conference from abroad.

As the final item on our agenda, we have lunch to look forward to, and the contribution of a very distinguished luncheon speaker, Mr. Levy, namely his insights about "Why Does the U.S. Grow Faster than the EU?" ❧


Die Förderung des
Wirtschaftswachstums

Mickey D. Levy

Mickey D. Levy
Chief Economist
Bank of America

# Why Does the U.S. Grow Faster than the EU? Pro-Growth Suggestions for Closing Gap

Since the early 1980s, U.S. economic growth has substantially exceeded EU growth, and the differential has widened since the early 1990s. This sustained outperformance by the U.S. has reversed the earlier trend of European convergence of GDP/capita with the U.S. Looking forward, standard estimates of potential growth in the U.S. are significantly higher than those for the EU – perhaps 3% to 3.25% compared to 2% to 2.25% – and Germany's potential growth is below 2%. If sustained, the cumulative impacts of these differences on economic performance, job creation and standards of living are startling.

Why the gap? The reasons are primarily fundamental: U.S. economic performance has benefited from generally sound underlying policies and fundamentals that support healthy growth, and also provide resilience to external shocks. Consider its following characteristics:

- Efficient production processes and highly flexible labor markets
- Low inflation and inflationary expectations

– Sustained strong productivity gains and low unit labor costs
– Healthy labor force growth and rising hours worked
– Efficient and innovative capital markets and highly capitalized banking system
– Relatively low tax and regulatory burdens
– Healthy population growth augmented by favorable in-migration trends

Economic policies and performance in EU nations differ significantly from these U.S. characteristics. In today's remarks, I will discuss some of the differences. Two observations are clear. Firstly, and optimistically, adoption of pro-growth economic policies by EU nations would raise potential growth and performance, and history suggests that the pattern of convergence is relatively rapid. Secondly, the U.S. is far from perfect: the EU can learn from some of the U.S.'s past and current misguided policies; in fact, several developments presently unfolding in the U.S. will constrain its productivity and potential growth. In addition, I will comment briefly on how several aspects of the Stability and Growth Pact provide ineffective guides for fiscal policy, and recommend changes that would enhance economic stability and growth.

Unlike many issues in public policy that involve conflicting research results and opinion, I find it instructive that an impressive array of research and anecdotal evidence provide consistent and convincing reasons why economic growth in Europe has persistently lagged behind the U.S. With little disagreement, academic research and analysis conducted at such institutions as the EC, OECD, ECB, IMF, the U.S.'s National Bureau of Economic Research and Federal Reserve System concur that economic growth benefits from lower taxes and low and stable inflation, and it is harmed by profligate government spending, burdensome taxes and regulations that raise the costs of production, inhibit labor supply and otherwise distort labor mobility, and dull entrepreneurship and risk taking. The clear message is that good policies are rewarded by faster growth and higher standards of living, while misguided policies – even well-intended ones – are damaging.

## An Assessment of U.S. Economic Policies and Performance

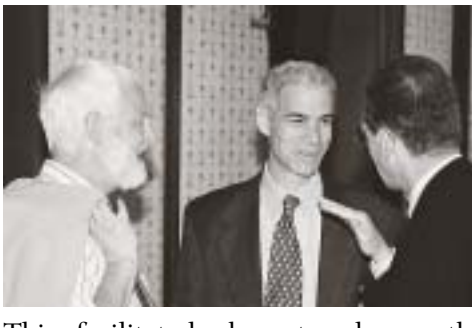
U.S. economic performance in the 1970s was horrible: bordered by recessions in 1970 and 1980–1982 and punctuated by a steep contraction mid-decade, volatile performance was characterized by rising unemployment, weak productivity and soaring unit labor costs, declining international competitiveness and falling real corporate profits. Certainly, the two oil price shocks contributed negatively, but the dismal performance was attributable primarily to misguided economic policies. Erratic monetary policy generated dramatic volatility in the economy and accelerating excess demand that resulted in high and volatile inflation. Fiscal policy involved very high marginal tax rates – 70% on the highest income bracket – which, combined with rising inflation, imposed higher taxes on capital. Mounting regulatory burdens raised the costs of labor and production. U.S. economic policymakers lacked credibility. Amid rising inflation and interest rates, selected banking regulations distorted the financial intermediation process and inhibited the efficiency of capital markets. Toward decade-end, real interest rates were negative and the

real exchange rate was falling rapidly. In the private sector, the peak in union participation and power contributed to rising unit labor costs in absolute terms and relative to other industrialized nations. U.S. businesses had begun to transfer jobs and production overseas, and citizens lamented the "hollowing out" of American industry.

Reflecting these policies and trends, consensus estimates of future potential growth were approximately 2%, similar to current estimates of potential growth in the EU. The 1980 U.S. Presidential election pitted those who favored only minor changes versus advocates of more radical reform, including calls for sharp cuts in taxes and spending, lower government regulations, and aggressive actions to reduce inflation. The electorate voted for regime change and radical reform.

A significant shift toward pro-growth economic policies in the 1980s and 1990s established the foundation for the dramatic economic improvement. A shift in monetary policy generated a nearly continuous decline in inflation to the point where inflationary expectations now are sufficiently close to zero that they no longer distort economic behavior. As inflation has declined and the Federal Reserve has gained credibility, the volatility of inflation has diminished. In fiscal policy, marginal tax rates were slashed in 1981 and again in 1986, and significant distorting provisions were removed from the tax code. The easing tax burdens on capital through legislated changes and lower inflation raised expected rates of return on investment. Tax cuts enacted in 2001, 2002 and 2003 have reduced the top marginal income tax rate to 35%, lowered business taxes and provided tax relief on dividends and capital gains.

In the 1990s, fiscal restraint on domestic spending combined with the sharp decline in defense spending as part of the post-Cold War peace dividend sharply reduced government spending as a percentage of GDP and temporarily generated cash flow budget surpluses. The government debt/GDP ratio fell sharply. Importantly, with the reduction of government purchases/GDP, the portion of national resources directly absorbed by the federal government declined.



This facilitated above-trend growth in private consumption and investment, and stronger productivity gains. The robust economic growth and surging equity markets also were major contributors to the fiscal surpluses.

Other economic policies have enhanced U.S. performance. Selectively reduced regulatory burdens have lowered the costs and sped up the introduction of new technologies and innovations into commerce (i.e., broad financial deregulation, energy and trucking deregulation, recent improvements in the drug approval process are but a few examples). Removing Social Security's "earnings test" reduced the tax on earnings of older workers and has raised their labor force participation rates. Welfare reform enacted in 1995 provided both financial incentives and government support to transition welfare recipients into the workforce. Implementation of the North American Free Trade Agreement (NAFTA) in 1994 lowered barriers to trade between

the U.S., Mexico and Canada and enhanced international trade. Immigration laws facilitated a continued stream of in-migration, which has added to the growth, diversity and skills of the U.S. labor force. In the 1990s, growth in the labor force contributed significantly to economic growth: employment rose 20%, or 1.8% annualized, and hours worked rose even faster (2.1% annualized).

The flexibility and efficiency of production processes and labor markets contribute significantly to economic growth and help mitigate the impacts of negative shocks. Labor flexibility is enhanced by relatively modest government inhibitions and costs imposed on firing employees, changing job functions within companies or relocating workers. Labor mobility is very high across industries as well as geographically across states, which reduces the duration of unemployment. This flexibility allows businesses to quickly adjust labor inputs and operating costs to unexpected declines in product demand.

This flexibility encourages technological innovation and business investment. Not surprisingly, empirical studies show that in the U.S. capital spending and innovations complement employment gains. As IMF and OECD studies note, U.S. production processes are characterized by "employment-friendly capital deepening and growth in multi-factor productivity."[1]) In contrast, empirical research suggests that in core Europe nations, capital is substituted for labor, as businesses respond to a host of tax and regulatory burdens that raise the relative costs of labor.

The extraordinary efficiency and flexibility of U.S. capital markets and its financial structures facilitate productivity and economic growth. Through a wide array of capital-raising vehicles, the capital markets efficiently allocate saving into investment opportunities, encourage research and technological advance, and speed up the implementation of new innovations into commerce. In a recent study, the EC found that financial development and integration provide significant benefits to the economy, particularly to small and medium-sized businesses.[2]) Importantly, in the U.S., small and medium-sized firms are the largest source of job creation and growth.

Myriad different financial instruments and derivative markets improve risk management at financial institutions and allow an efficient redistribution of risk. To be sure, such capital market efficiencies may accentuate the costs of misjudgments and mistakes; the recent collapse of technology stocks inflicted painful losses on investors that had unrealistically high expected rates of return on investment. But the benefits far outweigh the costs: the positive contributions to productivity and economic growth stemming from U.S. capital markets should not be underestimated.

Several institutional characteristics in American business raise efficiency and contribute positively to productivity. Isolated abuses of stock options by U.S. corporate executives often get headlines, but the use of option and stock-based compensation creates positive incentives. Professor Martin Feldstein identifies the relatively heavy reliance on compensation incentives (stock and options) and the overwhelming emphasis in the U.S. on enhancing stockholder value as factors that en-

1 *See Garibaldi and Mauro (1999), Nicoletti and Scarpetta (2003), and Nicoletti et al. (2000).*

2 *See Giannetti et al. (2002).*

courage risk taking, accelerate the adoption of new technologies, and contribute positively to production efficiencies and productivity. In contrast, he notes European businesses' lesser reliance on incentive options dull risk taking and entrepreneurship, while managers' attempts to achieve "satisfactory performance for all of the 'stakeholders,' including all employees, consumers and the government may play a large role in explaining why the adoption of IT has occurred at a substantially slower pace in Europe than in the United States."[1])

## Recent U.S. Economic Performance

Following the 2001 recession, which was mild as measured by the slight decline in real GDP but significantly more severe in terms of declining production, inventories, capital spending and profits, the U.S. recovery has been slow by historic standards. Real GDP has grown 2.7% annualized since the 2001Q4 recession trough, considerably slower than most prior recoveries, employment and hours worked have failed to rebound from their recession trough levels, and the unemployment rate has drifted up. Business investment has rebounded very modestly and unevenly. Labor productivity gains have remained strong, supporting rising real wages, and profits have rebounded soundly, but they remain below their prior expansion peak.

Despite aggressive monetary and fiscal stimulus, the pace of recovery has been inhibited by several factors, including the adjustment of business investment to the excess capital stock created in the 1990s, the dampening impact on consumption of the decline in wealth, the constraint on export growth stemming from global economic weakness, and uncertainties related to the 2002 corporate accounting scandals and, more recently, the Iraq War. Following the investment boom in the late-1990s, declines in capital spending reduced business fixed investment as a percentage of GDP. Healthy growth in investment in information processing equipment and software, including telecommunications equipment, has resumed, suggesting that in selected sectors, the capital stock adjustment process has ended. However, business investment in transportation equipment and in structures continues to fall sharply, suggesting excess capacity in selected sectors will continue to dampen near-term growth in capital spending.

While consumer spending has benefited from sustained increases in real disposable income and low interest rates, the growing perception that the substantial declines in wealth since mid-2000 are permanent has weighed heavily on consumer spending. Consumer spending growth will get a boost from the recently enacted tax cuts in the Jobs and Growth Tax Act of 2003. U.S. exports have rebounded very slowly from their recession declines, despite the sharp fall in the U.S. dollar. Export growth is expected to accelerate in lagged response to the weaker currency.

These inhibiting factors are expected to dissipate, and economic growth is expected to pick up. Real GDP is projected to grow approximately 2.75% annualized in the second half of 2003 and over 3% in 2004. This would be accompanied by sustained healthy increases in profits, and moderate job creation but a lingering high unemployment rate. Inflation is pro-

1 *See Feldstein (2003).*

jected to remain low; with nominal spending growth remaining above productive capacity, current concerns about deflation are overstated. In financial markets, real interest rates are expected to rise with improving economic performance and the stock market.

## Factors that May Diminish U.S. Potential Growth

If sustained, several fiscal trends in the U.S. – rising federal outlays for defense and national security and rising state and municipal spending and taxes – would constrain long-run productivity gains and potential growth. Following over a decade during which federal defense spending fell in real terms and federal government purchases shrank as a share of GDP, government outlays for defense and national security are rising sharply. In the short run, with nominal spending accelerating modestly in response to monetary and fiscal stimulus, the rising government purchases add to GDP, but in the longer run, the rising absorption of national resources by the government will crowd out private consumption and investment. All things equal, this will lower private productivity and potential growth. This leaves aside crucial questions about whether the absence of this additional spending for defense and security would leave the U.S. economy vulnerable to far greater disruption and productivity loss. In this sense, the policy is not a misallocation of resources but instead the necessary national response to heightened security risks, themselves the cause of the lower potential growth path.

A more disturbing trend of significantly higher spending and taxes has unfolded at the state and municipal levels. Whereas federal policymakers held the line on spending as tax receipts soared during the late-1990s boom, which resulted in budget surpluses, many state and local government officials used the rapid growth in tax receipts for short-term political gain, and put in place expensive new spending programs. Now, faced with laws that require balanced (projected) operating budgets, many states and municipalities are raising taxes. In some situations, like New York and California, the increases may be dramatic. While the U.S. federal, state and local spending and tax shares on average are far lower than in Europe, recent trends, if sustained, would reduce U.S. potential GDP growth by roughly 1/4 percentage point annualized, with substantial cumulative effects.

## An Assessment of European Economic Policies and Performance

An analogous assessment of the characteristics and policies that underlie core economies in Europe reveals key factors that undermine performance. Many of these characteristics are readily changeable, so the prospects for future performance hinge critically on whether policymakers (and ultimately the populations they serve) choose to implement pro-growth reforms.

In the 1980s, average annual economic growth in the EU-15 was 2.5%, nearly 1 percentage point lower than the U.S., and its 2.2% average annual growth in the 1990s was 1.4 percentage points lower than the U.S. In both decades, growth rates varied widely within Europe. In Germany, France and Italy, growth was decidedly below the EU-15 average, and their negative gap to the U.S. widened throughout the 1990s and has persisted so far this decade. During the 1980s, the unemployment rate averaged approximately 8.9% in

Europe compared to 7.3% in the U.S. In the 1990s, the gap widened, as European unemployment averaged 9.4% and the U.S. averaged 5.8%. Moreover, the duration of unemployment is significantly higher in Europe.

In recent years, real European GDP/capita growth has kept pace with the U.S., but this provides a limited and misleading assessment of Europe's performance. U.S. population growth has been consistently higher than Europe's, reflecting higher natural increases, driven primarily by significantly robust birth rates, and higher net in-migration. This population growth differential, which has contributed to a narrowing of relative GDP/capita ratios, reflects favorable policies and standards of living (actual and expected) in the U.S. relative to Europe. Although far from perfect, U.S. immigration laws are less restrictive than in most European nations. In addition, immigrants into the U.S. seem to be more readily integrated into society and the workforce than in Europe, contributing positively by gaining skills and earning relatively higher wages, attaining higher standards of living, and paying taxes. These differences, reflected in endogenous growth models, have significant implications for labor force growth, pension budgets, and economic performance in general.

A recent OECD study disaggregates the components of GDP growth and attributes much of Europe's shortfall to the differential in hours worked (employment adjusted for average hours worked), while core European labor productivity, capital deepening and total factor productivity have generally kept pace with the U.S., with the exception of the late-1990s U.S. economic boom.[1])

The inference that the economic growth differential may be explained by European workers' simple desire to enjoy leisure and work less than the seemingly industrious American workers is misleading. Instead, every indication suggests that the work-leisure tradeoff and the way labor and capital are used in production processes are driven primarily by financial incentives created by tax, regulatory and macroeconomic policies. Moreover, the policies and institutions that constrain and

distort hiring and firing decisions don't just affect labor markets; they heavily influence business production processes, investment plans and technological innovation. Tax and regulatory policies that raise the relative costs of labor lead to a substitution of capital for labor, but to the extent they raise the costs of introducing new products, innovations or production processes, they reduce efficiency and growth.

A host of inhibiting policies and factors underlie Europe's slower employment gains, higher unemployment, fewer hours worked and general labor market rigidities. Among the standouts: onerous tax burdens, employment protection laws and legal regulations with respect to hiring and firing, minimum wages and employees' compensation rights and the level and duration of unemployment benefits all combine to reduce the demand for labor and limit its supply. Heavy union-

1 *See Nicoletti and Scarpetta (2003).*

ization and other regulations accentuate these impacts.

From an American viewpoint, taxes in Europe seem particularly burdensome. In the U.S., the highest marginal tax rate on individual income has been reduced dramatically, from 70% in 1980 to 35% currently, with the recent enactment of the Bush Administration's 2003 tax reform legislation. Lower and middle-income households are provided significant credits, exemptions and deductions to increase their take home pay; Social Security taxes are onerous (15.3% of wages up to a limit), but refundable earned income tax credits dramatically ease the burden for low-income workers.

On average, in most European nations, total taxes on labor are over 50%, significantly higher than in the U.S. The extraordinarily wide wedge between real labor costs to European employers and take home pay to workers is a major depressant. European workers choose to work less not because they are lazy compared to their American counterparts, rather because high taxes discourage their work effort; European businesses respond to the same disincentives by limiting labor inputs. An array of empirical studies find a strong inverse correlation between taxes on the one hand and employment, real GDP growth and real GDP/capita on the other.[1]) Importantly, these results explain labor patterns and differences in economic performance among European nations as well as Europe's slow growth relative to the U.S. They also explain differences across U.S. states, where labor mobility is very high.

In the U.S., unemployment compensation typically lasts for 26 weeks (it tends to be extended and enhanced during recession), and there are a wide array of "workers rights," but in general they tend to generate significantly fewer distortions on business decisions to hire and fire than in Europe. Europe's unemployment benefits, more generous and of longer duration, contribute to labor immobility and its longer duration of unemployment. The problem of aging populations faces both Europe and the U.S., but more generous pension and unemployment benefits and earlier retirement laws in Europe are widely recognized as primary factors that encourage earlier job separation and reduce labor force participation among older people.[2]) In the U.S., the recent elimination of Social Security's earnings test has encouraged higher labor force participation among older people. In Europe, specific labor regulations have led to increasing reliance on part-time workers, which adds to total employment but "crowds out" full-time workers and reduces hours worked. In both Europe and the U.S., reliance on part-time workers has increased in recent years. In the U.S., the trend has functioned as a way for employers to tailor hours worked to product demand, and further increase productivity growth. In Europe, it is having similar effects but in large measure still represents a somewhat distorted response to the large web of labor regulations applying to full-time employees.

Actual labor market performance reflects these policy differences. During the 1980s and 1990s, average annual employment growth in core Europe was 1.5% less than the U.S. and the negative gap in aggregate hours worked was even larger. One study of

1 *See for example Bassanini and Scarpetta (2001), and Heitger (2000).*

2 *See OECD (2003).*

potential growth and output gaps notes that in 2000, hours worked per person employed was 17.6% higher in the U.S. than in Europe.[1]) That differential has widened significantly since 1981, as average hours in Europe have declined sharply while they have risen modestly in the U.S.

Certainly, recent reforms in selected European nations have reduced the relative costs of labor and generated positive results; the EC reports that there has been significant progress in many areas of the Lisbon Strategy, and since 1996, 12 million new jobs have been created in Europe.[2]) Yet the EC report notes that reforms have not been comprehensive and labor market improvement has been uneven; in particular, the labor force participation rates of older workers remain low.

## Stability and Growth Pact

The EU's Stability and Growth Pact, intended to foster stability and growth through fiscal responsibility and low and stable inflation, may actually harm European economic performance. In particular, its deficit criterion is misguided: it does not provide a proper guideline for the promotion of fiscal responsibility and may result in fiscal policies that are neither stabilizing nor conducive to growth. Resulting policies and economic conditions may also strain the monetary union and the smooth functioning of the ECB's monetary policy. Corrective measures are required.

Certainly, the Pact's requirement to limit budget deficits to 3% of GDP has contributed to lower deficits in EU-12 nations. But the Pact has not lead to any material reduction in government spending or taxes. Moreover, it may lead nations to enact anti-growth fiscal policies. I question whether a single deficit measure can adequately capture the general intent of "fiscal responsibility." This presents a major problem: empirical research shows a clear inverse correlation between government spending and economic growth, and between taxes and growth, but no clear correlation between deficits and economic growth. Yet budget deficits are the key operative in the Stability and Growth Pact.

The U.S. budget deficit is approaching 4% of GDP. Budget deficits in several core European nations, including Germany and France, are similar. But in the U.S., total federal spending is less than 20% of GDP and total spending for federal, state and local governments is approximately 35%, while in European nations, on average, general government spending is approximately 47.5%. Surely, simple budget imbalances alone do not capture the economic implications of the government's spending and tax regimes. The significantly larger shares of government spending and taxes in Europe constrain growth compared to the U.S.

Current circumstances illustrate how the Pact may be destabilizing. Consider 2 EU nations that need to reduce their deficits from 4% of GDP to 3% to meet the Pact's deficit criterion. One cuts social spending by 1% of GDP and

1 *See Denis et al. (2002).*

2 *See European Commission (2003).*

the other raises taxes by 1%. While both meet the letter and intent of the Pact, are both policies equally fiscally responsible, with similar economic outcomes? No: the tax-hiking-nation will lag economically, while the spending-reduction nation will outperform.

The potentially destabilizing implications of the Stability and Growth Pact for the ECB's monetary policy and the monetary union should not be overlooked. To the extent the Pact constrains potential growth in Europe, the ECB's flexibility to meet its inflation target is constrained. Moreover, it heightens the ECB's already difficult, if not impossible, task of smoothing aggregate demand and maintaining a low variance of inflation across EU nations that impose different spending, tax and regulatory policies and have widely different economic characteristics and potential growth. In the case described above, expected economic performance and rates of return will tend to rise in the nation that cuts spending compared to the higher tax nation; this significantly strains the smooth functioning of the single currency and single central bank monetary regime.

Relying on a deficit/GDP ratio to guide fiscal policy – or to coordinate fiscal polices across nations – is allowing the tail to wag the dog: deficits are merely the difference between spending and taxes; focusing on these residuals has its place, but it is usually a distraction from the underlying spending and tax structures, their economic impacts, and the key fiscal policy choices that are implicit. The impacts of deficits per se – or cyclically-adjusted deficits – on economic performance, interest rates and a host of other indicators are largely ambiguous. In contrast, the shares of the economy represented by public expenditure and taxation, the way the spending and tax programs absorb and allocate national resources, and the incentives and disincentives imposed on household and business decisions, are far more important to economic performance. U.S. fiscal policy also tends to be driven by concerns and misperceptions about deficits, but the general view of the role of government and the private economy in the U.S. favors a smaller public sector than in Europe.

## Suggested Pro-Growth Policies

Europe's persistent underperformance in the last several decades highlights the sharpening tradeoff between its welfare and income maintenance programs on the one hand and economic growth on the other. European policymakers must choose: maintain welfare and income redistribution, or pursue stronger economic growth and job creation. Slow growing core European nations may come under additional pressure to reform as newly-inducted EU nations join selected small European nations such as Ireland and Portugal as attractive destinations of jobs, production and capital. With inflation low and ECB monetary policy accommodative, I expect any transition costs of the fiscal reform I recommend would be trivial relative to the substantial benefits of faster economic growth.

In recent years, selected reforms in product, service and capital markets have been achieved, and the EC has noted progress in line with the Lisbon Strategy. Obviously, further reform of regulations that distort labor, product and service markets are required.

On the fiscal policy front, if European nations are truly serious about lifting economic growth and standards of living, significant cuts in government

spending and taxes are required. The goals should be shrinking the scope of governments, narrowing the tax wedge between businesses' costs of labor and workers' take home pay, and lessening distortions to business and household decisions. Pension reform is imperative to reduce spending and the governments' mounting unfunded liabilities, and to reduce incentives to retire early. Importantly, while it may be necessary to phase in certain spending cuts and pension reform, tax cuts, including sharp cuts in marginal rates, are preferred immediately. This, obviously, is inconsistent with the deficit cap imposed by the Stability and Growth Pact.

The Pact should be altered as it pertains to fiscal policy. The deficit cap should be modified to reflect economic conditions; a full employment (or high-employment) budget deficit cap would be appropriate. But a more radical modification is necessary to create a guideline for policymakers to reduce the fiscal scope of governments, move toward the type of fiscal responsibility that was intended in the Maastricht Treaty, and reduce high taxes that reduce economic growth and job creation. This requires adding several new criteria to the Stability and Growth Pact: placing caps on government spending and taxes. Measured as a percentage of GDP, these caps should be set well below the current average spending and taxes in EU nations, and they should be phased in over a number of years, similar to the criteria established in the Maastricht Treaty. Because large spending cuts, particularly involving pension reform, must be implemented over time for purposes of fairness and to allow older people to adjust, near-term tax cuts would temporarily widen budget deficits. The Pact's deficit caps should be modified (temporarily loosened) with enactment of pro-growth tax cuts.

I am very aware of the technical details that would need to be ironed out, and the severe political opposition to pension reform and fiscal restraint. Selected EU nations face very high debt-to-GDP ratios, and even temporary increases in deficits may be perceived as negative. Moreover, maintaining the credibility of the Stability and Growth Pact is important. However, the Pact's central focus on deficits, which provided an important guideline in the 1990s, has lost its value and places the Pact's credibility at stake. Incremental tinkering and creative budgeting to meet the Pact's deficit objective have not enhanced economic growth materially or reduced debt-to-GDP ratios in troubled EU nations. Policy reform that lifts economic growth is the best way to reduce deficits and debt.

In the U.S. in the 1990s, a series of "deficit reduction" laws and Congressional budget procedures linked to deficit reduction resulted in spending cuts and tax increases (but no Social Security or Medicare reform). However, U.S. federal spending and taxes as a percentage of GDP were far lower than in Europe, and European fiscal and budgetary policies require more draconian restraints. This is particularly true in light of the economic and budgetary consequences of Europe's unfavorable demographics.

Such changes would allow each nation's automatic fiscal stabilizers to operate without obstruction, and would provide broad guidelines for fiscal responsibility. Controversial, yes, but they would force policymakers to make the difficult fiscal decisions that they can now avoid under the existing Stability and Growth Pact. ❧

## References

**Bassanini, A. and S. Scarpetta. 2001.** The Driving Forces of Economic Growth: Panel Data Evidence for the OECD Countries. OECD Economic Studies 33.

**Denis, D., K. McMorrow and W. Röger. 2002.** Production Function Approach to Calculating Potential Growth and Output Gaps – Estimates for the EU Member States and the U.S. European Commission, Economic Paper 176. September.

**European Commission. 2003.** Choosing to Grow: Knowledge, Innovation and Jobs in a Cohesive Society. Report to Spring European Council, March 21.

**Feldstein, M. 2003.** Why Is Productivity Growing Faster? National Bureau of Economic Research, Working Paper 9530. February.

**Garibaldi, P. and P. Mauro. 1999.** Deconstructing Job Creation. IMF Working Paper. Washington, DC: International Monetary Fund. August.

**Giannetti, M., L. Guiso, T. Jappelli, M. Padula and M. Pagano. 2002.** Financial Market Integration, Corporate Financing and Economic Growth. European Commission. November.

**Heitger, B. 2000.** Unemployment and Labor Market Rigidities in OECD Countries. The Impact of Taxes. Kiel Institute of World Economics, Working Paper 985. May.

**Nicoletti, G. and S. Scarpetta. 2003.** Regulation, Productivity and Growth: OECD Evidence. OECD, Economics Department Working Paper 347. January.

**Nicoletti, G., S. Scarpetta and O. Boyland. 2000.** Summary Indicators of Product Market Regulation with an Extension to Employment Protection Legislation. OECD, Economics Department Working Paper 226. April.

**Organisation for Economic Co-operation and Development – OECD. 2003.** The Policy Agenda for Growth. OECD.

# Franz-Weninger-Stipendien
# Franz Weninger Award

## Überreichung der Franz-Weninger-Stipendien der Oesterreichischen Nationalbank

Herr *Gouverneur Dr. Liebscher* überreichte am 13. Juni 2003 im Rahmen der 31. Volkswirtschaftlichen Tagung der Oesterreichischen Nationalbank (OeNB) die Franz-Weninger-Stipendien an drei Preisträger. Das Franz-Weninger-Stipendium wird von der OeNB jedes Jahr für hervorragende Dissertationen und Diplomarbeiten auf dem Gebiet der Geldtheorie und Geldpolitik vergeben und erinnert an den vor sieben Jahren tödlich verunglückten Leiter der Volkswirtschaftlichen Abteilung der OeNB. Die Stipendien werden vom Direktorium der OeNB auf Vorschlag einer Fachjury vergeben.

Die Franz-Weninger-Stipendien des Jahres 2003 wurden folgenden Personen zuerkannt:

– **Dr. Elisabeth Springler** für die Dissertation „Beschäftigungseffekte durch Finanzmarktliberalisierung? Griechenland als ‚critical case study'"
– **Mag. Patrick J. Butler** für die Diplomarbeit „The Accuracy of Analyst Forecasts: IPOs at the Neue Markt in Frankfurt"
– **Mag. Wolfgang Schwarzbauer** für die Diplomarbeit „Stock Markets and Real Economic Activity"

# Die Vortragenden
# Speakers

## Karl Aiginger

**Date of Birth**

October 23, 1948

**Present Positions**

- Senior Research Fellow, Deputy Director at the Austrian Institute of Economic Research (WIFO)
- Professor of Economics at the University of Linz
- Research Fellow European Forum, Stanford Univesity
- Editor of the Journal of Industry, Competition and Trade (JICT), jointly with André Sapir

**Professional Experience**

- Economist at the Austrian Institute of Economic Research (as of 1970)
- Managing Editor of Empirica – Austrian Economic Papers (1975–1992)
- Visiting Scholar at Stanford University (1982)
- Deputy Director of the Austrian Institute of Economic Research (1984–1987)
- Visiting Professor at MIT, Boston, USA (1991)
- Professor at the University of Linz (as of 1992)
- Deputy Director of the Austrian Institute of Economic Research (1996–1998)
- Professor at GSB and IIS, Stanford University (June–December 2002)

**Research Interests**

- Industrial economics and industrial policy
- Industry studies, clusters, small business
- Competitiveness, economic performance of countries
- Theory of uncertainty, expectations business cycle
- Comparative economic policy strategies

**Education**

- Economics at the University of Vienna (1966–1974)
- Purdue University, Indiana, USA (1978)

**Other Activities**

- Expert for European Commission, Austrian Government
- Lectures at the University of Vienna, Vienna University of Economics and Business, University of Hunan (China), Webster University
- On the Editorial Board or Steering Committee of: International Journal of Industrial Organization, EMPIRICA – Austrian Economic Papers, EARIE – European Association for Research on Industrial Economics, NÖG-Austrian Economic Association
- Referee for: Economic Journal, European Economic Review, Journal of Industrial Economics, Small Business Economics, Journal of Economics, Journal of Empirical Economics, International Journal of Industrial Organization
- Supervisory board of OIAG (holding company of industrial firms) (1993–2000)

**Selected Publications**

- A Three Tier Strategy for Successful European Countries in the Nineties. WIFO Working Paper 205. 2003
- Do American and European Industrial Economists Differ? In: Review of Industrial Organization. (With M. McCabe, D.C. Mueller and Ch. Weiss). 2002
- The New European Model of the Reformed Welfare State (NEM-RWS). European Forum Working Paper 2. Stanford University. December 5, 2002
- Growth Difference Between Europe and the US in the Nineties: Causes and Likelihood of Persistence. European Forum Working Paper 1. Stanford University. November 15, 2002
- Competitive Economic Performance: The European View. Conference on

Transatlantic Perspectives on US-EU Economic Relations: Convergence, Conflict & Cooperation. Harvard University, April. (With M. Landesmann). WIFO Working Paper 179. June 2002

## Hannes Androsch

**Date of Birth**

April 18, 1938

**Present Position**

– Industrialist (as of 1994)

**Professional Experience**

– Secretary, then consultant for economic issues for the Social Democratic parliamentary party (1963–1967)
– Tax consultant (1966)
– Member of Parliament (1967)
– Certified auditor and tax consultant (1968)
– Deputy State Commissioner at the Zentralsparkasse (until 1970)
– Austrian Minister of Finance (1970–1981)
– Member of the National Executive Committee of the Social Democratic Party (SPÖ) (1972–1983)
– Member of the SPÖ Party Presidium and Deputy Party Chairman of the SPÖ (1974–1981)
– Vice-Chancellor (1976–1981)
– Chairman of the OECD at minister level (1979)
– Chairman of the Interim Committee of the International Monetary Fund (1980)
– General Director of the Creditanstalt-Bankverein (1981–1988)
– Consultant at the World Bank (1988–1989)
– Founding of AIC Androsch International Management Consulting GmbH (1989)

**Education**

– College of International Trade, Vienna; Degree in Business Administration (1959)
– Ph.D. in Economics (1968)

**Other Activities**

– Supervisory Board Positions
  – AT & S Austria Technologie & Systemtechnik AG
  – FACC Fischer Advanced Composite Components AG
  – HTP High Tech Plastics AG
  – Innovest Finanzdienstleistungs AG
  – nCoTec Ventures Limited
  – Österreichische Philips Industrie GmbH
  – Österreichische Salinen AG
– Member of the Advisory Board of Montanuniversität Leoben
– Hannes-Androsch-Foundation (Austrian Academy of Sciences)

**Selected Publications**

Author of numerous articles in newspapers and magazines

– Die politische Ökonomie der österreichischen Währung: Ein Überblick über die österreichische Währungspolitik von 1760–1984 vor dem Hintergrund der internationalen Entwicklung. Vienna: Orac. 1985
– Warum Österreich so ist, wie es ist. Eine Synthese aus Widersprüchen. Vienna: Kremayr & Scheriau/Orac. 2003

## Mario I. Blejer

**Date of Birth**

June 11, 1948

**Present Position**

– Adviser on Financial Stability to the Governor of the Bank of England and Director of the Bank's Centre for Central Banking Studies

**Professional Experience**

– Governor of the Central Bank of Argentina (2002)
– Central Bank of Argentina, Deputy Governor (2001)
– International Monetary Fund, Senior Adviser (1980–2001)
– The Hebrew University of Jerusalem, Department of Economics, Walter Rathenau Professor of Economics (1996–1999)

– New York University, Graduate School of Business, Associate Professor of Economics and International Business (1983–1984)
– The Hebrew University of Jerusalem, Department of Economics, Lecturer (1977–1981)
– Boston University, Department of Economics, Assistant Professor (1976)
– Center for Latin American Monetary Studies (CEMLA), Mexico City, Mexico, Senior Researcher (1975)

**Research Interests**

– Fiscal policies
– International macroeconomic issues
– Economic and financial reforms

**Education**

– B.A. cum laude, Economics and Jewish History, Hebrew University (1970)
– M.A. cum laude, Economics, Hebrew University (1972)
– M.A., Economics, University of Chicago (1973)
– Ph.D. Economics, University of Chicago (1975)

**Other Activities**

– Referee of numerous international journals

**Selected Publications**

– Financial Policies in Emerging Markets. (Edited with M. Šreb). MIT Press. 2002
– Transition: The First Decade. (Edited with M. Šreb). MIT Press. 2002
– Inflation Targeting in Practice: Strategic and Operational Issues and Application to Emerging Market Economies. (Edited with A. Leone et al.). Washington, D.C.: International Monetary Fund. 2000
– Major Issues in Central Banking, Monetary Policies, and Implications for Transition Economies. (Edited with M. Šreb). Kluwer Academic Publishers. 1999
– Balance of Payments, Exchange Rate, and Competiveness in Transition Economies. (Edited with M. Šreb). Kluwer Academic Publishers. 1999.

## Jean-Philippe Cotis

**Date of Birth**

September 24, 1957

**Present Position**

– Chief Economist and Head of the Economics Department at the OECD in Paris

**Professional Experience**

– Director of the Economics Department at the French Ministry of Economy, Finance and Industry (as of 1997)
– Economic Adviser to the Minister (1993–1994)
– Economist at the IMF (1986–1988)

**Research Interests**

– Labor markets
– Macroeconomic policies
– Taxation

**Education**

– Graduation from the Ecole Supérieure des Sciences Economiques et Commerciales (ESSEC) and the Ecole Nationale d'Administration (ENA)

**Other Activities**

– Chair of the Economic Policy Committee of the European Union (2001–2002) and of OECD's Working Party No. 1
– Various teaching assignments, including the Ecole Nationale d'Administration, ESSEC, Ecole des Mines and Harvard (Kennedy School of Government)

**Selected Publications**

– Are Automatic Stabilizers Still Effective? The French Case in the Nineties. In: Hairault, J.-O., P.-Y. Henin and F. Portier (eds.). Business Cycles and Macroeconomic Stability: Should We Rebuild Built-In Stabilizers? Boston, Dordrecht and London: Kluwer Academic. 1997. 255–280
– Le partage de la valeur ajoutee: Quelques enseignements tires du paradoxe franco-americain. (Explain-

ing Past Changes in the Wage Share: Some Lessons from the Franco-American Paradox. With English summary.) (With E. Rignols). In: Revue-de-l'OFCE 0(65). April 1998. 291–344
- Le chomage d'equilibre en France: Une evaluation. (Equilibrium Unemployment in France: An Assessment. With English summary.) (With R. Meary, N. Sobczak). In: Revue-Economique 49(3). May 1998. 921–935
- Croissance tendancielle, croissance potentielle et Output Gap: Les analyses de la direction de la prevision. (Trend Growth, Potential Growth and the Output Gap: Analyses by the Direction de la Prevision. With English summary.) (With H. Joly). In: Economie-Internationale 0(69). 1st Trimester 1997. 191–207

## Nicholas F. R. Crafts

**Date of Birth**

March 9, 1949

**Present Position**

- Professor of Economic History, London School of Economics (as of 1995)

**Professional Experience**

- Lecturer in Economic History, University of Exeter (1971–1972)
- Lecturer in Economics, University of Warwick (1972–1977, on leave 1974–1976)
- Visiting Assistant Professor of Economics, University of California, Berkeley (1974–1976)
- CUF Lecturer in Economics, University of Oxford and Fellow in Economics, University College, Oxford (1977–1986, on leave 1982–1983)
- Visiting Professor of Economics, Stanford University (1982–1983)
- Professor of Economic History, University of Leeds (1987–1988)
- Professor of Economic History, University of Warwick (1988–1995)

**Research Interests**

- European economic growth
- The Industrial Revolution
- Historical data on British economy

**Education**

- Trinity College, Cambridge; First Class Honours, Economics Tripos, parts I & II; Wrenbury Scholarship for best degree in economics at Cambridge in 1970

**Other Activities**

- Editor, Economic History Review (as of 1999)
- Research Fellow, Centre for Economic Policy Research (as of 1985)
- Elected Fellow of the British Academy (1992)
- Honorary Professor, University of Warwick (as of 1995)
- Founding Academician, Academy of Learned Societies for the Social Sciences (1999)

**Selected Publications**

- Long-Term Growth Prospects in Transition Economies: A Reappraisal, Structural Change and Economic Dynamics. (With K. Kaiser). Forthcoming
- Sectoral Output Trends and Cycles in Victorian Britain, Economic Modelling. (With T. C. Mills). Forthcoming
- Economic Growth. In: Mokyr, J. (ed.). Oxford Encyclopedia of Economic History. Oxford University Press. Forthcoming
- The Conservative Governments' Economic Record: An End of Term Report. London: IEA, 1998
- Britain's Relative Economic Performance, 1870–1999. London: IEA. 2002

## Jon Cunliffe

**Date of Birth**

June 2, 1953

**Present Positions**

- Managing Director, Macroeconomic Policy and International Finance, H. M. Treasury

– Member of the Treasury Management Board

**Professional Experience**

– Managing Director of the Treasury's Finance, Regulation and Industry Directorate
– Joined the civil service in 1980 (Departments of Environment and Transport)

**Research Interests**

– EU and international finance issues
– Management of the Government's debt and reserves
– Leading the Treasury's work on operational independence of the Bank of England
– European Monetary Union
– International financial system

**Education**

– Manchester University

**Other Activities**

– Treasury representative on the Monetary Policy Committee of the Bank of England
– U.K. Government's representative on the EU's Economic and Finance Committee
– Member of the OECD's WP-3 Committee

## Kees van Dijkhuizen

**Date of Birth**

November 18, 1955

**Present Position**

– Treasurer General, Ministry of Finance (as of mid-2000)

**Professional Experience**

– Director General of the Budget, Ministry of Finance (1999–2000)
– Director Inspectorate of the Budget, also Deputy Director General of the Budget, Ministry of Finance (1997–1999)
– General Economic Policy Department, Ministry of Economic Affairs (1985–1996; as of 1992 Director)
– Budget Affairs Directorate, Ministry of Finance (1981–1984)

**Education**

– Economics, Amsterdam

**Other Activities**

– Member of the Economic and Financial Committee of the European Union
– Chairman of the Financial Services Committee of the European Union
– Alternate Governor of the IMF
– Deputy member of the Group of Ten
– Member of WP-3 of the OECD

## Bernhard Felderer

**Date of Birth**

March 21, 1941

**Present Positions**

– Director of the Institute for Advanced Studies, Vienna (as of 1991)
– Professor of Economics at the University of Cologne, Germany (as of 1995)

**Professional Experience**

– Research Assistant of Prof. Fritz Machlup at Princeton University, New York, USA (1966–1967)
– Visiting Professor at the University of North Carolina, Chapel Hill, USA (1967–1968)
– Assistant Professor at the University of Karlsruhe, Germany (1968–1974)
– Professor of Economics at the University of Cologne, Germany (1974–1990)
– 6-month appointment of the Soviet Academy of Sciences, consulting and teaching, mainly in Novosibirsk and Moscow (1977)
– Director of the Economics Seminar at the Faculty of Economics and Social Sciences at the University of Cologne, Germany (1987–1990)
– Professor of Economics at the University of Bochum, Germany (1991–1995)

**Research Interests**

– Macroeconomic theory
– Economic policy
– Economics of population
– Theory of distribution
– Theory of economic growth

**Education**
- Studies in Law and Economics at the University of Vienna (1959–1964)
- Studies in Economics at the Faculté de Droit et Sciences Economiques of the University of Paris (1964–1966)
- Doctoral degree, Vienna (1964)
- Habilitation, Karlsruhe / Germany (1973)

**Other Activities**
- Member of the General Council of the Oesterreichische Nationalbank
- During the years in Germany consulting activities for the German Government and individual companies
- Consulting in different European countries in transition: Ukraine, Rumania, Slovakia, Russia (as of 1991)
- Participation in Hearings of the German and Austrian Parliament as an expert
- Frequent advices for the Austrian Government and the Austrian Social Partners on a large variety of economic policy issues

**Selected Publications**
- Wirtschaftliche Entwicklung bei schrumpfender Bevölkerung. Berlin–Heidelberg–New York–Tokyo: Springer-Verlag. 1983
- Makroökonomik und Neue Makroökonomik. Heidelberger Taschenbücher. (With S. Homburg) Berlin etc.: Springer-Verlag. 1984 (1st edition), 1985 (2nd edition), 1987 (3rd edition), 1989 (4th edition), 1991 (5th edition), 1994 (6th edition), 1999 (7th edition), 2003 (8th extensively reworked edition)
- Bevölkerung und Wirtschaftsentwicklung. (With M. Sauga). Frankfurt: Campus-Verlag. 1988
- Public Pension Economics, Supplementary Issue of the Journal of Economics (Zeitschrift für Nationalökonomie), 10 refereed articles including a survey of the editor. Vienna-New York. 1993
- Forschungsfinanzierung in Europa. Trends – Modelle. (With D. F. J. Campbell). Vienna: Manzsche Verlags- und Universitätsbuchhandlung. 1994

## Karl-Heinz Grasser

**Date of Birth**
January 2, 1969

**Present Position**
- Federal Minister of Finance (as of 2000)

**Professional Experience**
- Speaker for Tourism and European Integration in the parliamentary group of the Freedom Party (1992)
- Secretary General of the Austrian Freedom Party (1993)
- Managing Director of the Freedom Party's educational centre (1993)
- Second Deputy Governor of the Province of Carinthia (1994)
- Vice President for Human Resources and Public Relations at Magna Europa (1998)
- In addition, Managing Director of Sport Management International (SMI) which belongs to the Magna Group (1999)
- Up to the end of 1999: Member of the Managing Board of the Sir Karl Popper Foundation, still a member

**Education**
- Master degree in Applied Business Administration (1992)

**Other Activities**
- Austrian Governor at international organizations:
  - World Bank Group
  - Asian Development Bank
  - Inter-American Development Bank
  - Inter-American Investment Corporation
  - African Development Bank
  - African Development Fund
  - European Bank for Reconstruction and Development
  - European Investment Bank

## Jens Henriksson

**Date of Birth**

January 11, 1967

**Present Position**

- State Secretary at the Ministry of Finance, Economic Policy (as of 2002)

**Professional Experience**

- Editorial writer at the daily newspaper Arbetet (1993–1994)
- Political Adviser to the Minister of Finance, Göran Persson (1994–1996)
- Political Adviser to the Minister of Finance, Erik Åsbrink (1996–1998)
- Chief Political Adviser to the Minister of Finance, Erik Åsbrink (1998–1999)
- Chief Economic Adviser to the Minister of Finance, Bosse Ringholm (1999–2002)

**Education**

- Master of Science in electrical engineering and control theory, Lund Institute of Technology (1988–1992)
- Bachelor of Science in business and economics, University of Lund (1990–1993)
- Graduate studies in economics at University of California San Diego, USA (1993–1994)
- Graduate studies in economics at Stockholm School of Economics (as of 1998)

**Other Activities**

- Secretary in the Joint Economic Council of the Social Democrats and the Trade Union (1995–1999)
- Chairman of the Joint Economic Council of the Social Democrats and the Trade Union (as of 1999)

## Martti Hetemäki

**Date of Birth**

September 14, 1956

**Present Positions**

- Permanent Under-Secretary of State, Ministry of Finance
- Head of the Economics Department, Ministry of Finance

**Professional Experience**

- Ministry of Finance (as of 1982)
  - Economist
  - Head of Economic Policy Unit
  - Director General, Head of the Economics Department

**Education**

- Bachelor of Science in economics, University of Hull, U.K. (1980)
- Visiting graduate student, London School of Economics and Political Science (October 1985–March 1986)
- Licentiate in Political Science (economics and statistics), University of Helsinki (1987)
- Doctor in Political Science (economics), University of Helsinki (1991)

**Other Activities**

- Chairman of the Incomes Policy Information Committee and several working groups
- Permanent expert on the Ministerial Economic Policy Committee of the Finnish Government
- Alternate Member of the Monetary Committee (1995)
- Alternate Member of the Economic and Financial Committee of the EU (1999)
- Chairman of the OECD High Level Ad Hoc Group on Sustainable Development (2001)

**Selected Publications**

- KESSU IV. An Econometric model of the Finnish economy. (With E.-L. Kaski). Ministry of Finance. 1992
- Tax Policy, Unemployment Benefits and Structural Unemployment. In: Policies Towards Full Employment. OECD Proceedings. Washington, D.C. and Paris: OECD. 2000, 87–111

## Mickey D. Levy

**Date of Birth**

February 21, 1950

**Present Position**

- Chief Economist for Bank of America

**Professional Experience**
- Conducted research at the American Enterprise Institute and the Congressional Budget Office

**Research Interests**
- Federal Reserve and monetary policy
- Fiscal and budget policies
- Economic and credit conditions
- Banking industry

**Education**
- M.P.P., University of California, Berkeley
- Ph.D., University of Maryland
- B.A., University of California

**Other Activities**
- Member, Shadow Open Market Committee
- Member, Panel of Academic Advisors, Federal Reserve Bank of New York

**Selected Publications**
- Don't Mix Monetary and Fiscal Policies. The Cato Institute's 18th Annual Monetary Conference cosponsored by The Economist, October 2000. Reprinted in: Wirtschaftspolitische Blätter 4. 2001
- The Federal Reserve's Announcements. Federal Reserve Bank of Philadelphia Policy Forum. November 2001
- Slaying the NAIRU Myth. In: Jobs and Capital. The Milken Institute, Vol VI, No. 3. Summer 1997
- Budget Surpluses and the End of Fiscal Restraint. Shadow Open Market Committee. November 2000
- Federal Reserve Policy and Financial Market Performance During Presidential Election Years: Myths and Reality. Bank of America, Economic and Financial Perspectives. January 2000

## Klaus Liebscher

**Date of Birth**
July 12, 1939

**Present Positions**
- Governor of the Oesterreichische Nationalbank (as of September 1998)
- Member of both the Governing Council and the General Council of the European Central Bank (as of June 1998)
- Represents the OeNB at the Bank for International Settlements Governors' Meeting (as of June 1995)
- Austria's Governor to the International Monetary Fund (as of June 1995)

**Professional Experience**
- Raiffeisen Zentralbank Österreich AG (1968–1995)
  - Member of the Executive Board (1980–1995)
  - Chief Executive Officer and Chairman of the Board (1988–1995)
- President of the Vienna Stock Exchange Council (1990–1995)
- Member of the supervisory boards of several banks and other corporations in Austria and abroad (1980–1995)
- Member of the General Council of the Oesterreichische Nationalbank (1988–1998)
- President of the Oesterreichische Nationalbank (1995–1998)

**Education**
- Law degree (Dr. iur.) from the University of Vienna

**Selected Publications**
Author of numerous publications and articles in the areas of monetary policy and economics

## Robert A. Mundell

**Date of Birth**
October 24, 1932

**Present Position**
- Professor of Economics at Columbia University, New York

**Professional Experience**
- Taught at the University of British Columbia, the Stanford University and the Bologna Center of the School of Advanced International Studies of the Johns Hopkins University, Italy
- International Monetary Fund (joined in 1961)

– Professor of Economics at the University of Chicago and Editor of the Journal of Political Economy (1966–1971)
– Summer Professor of International Economics at the Graduate Institute of International Studies in Geneva, Switzerland
– Columbia University (as of 1974)

**Research Interests**

– Economic theory of international economics
– Transition economies
– Theory of the monetary and fiscal policy mix
– Theory of inflation and interest
– Supply-side economics

**Education**

– University of British Columbia
– University of Washington
– London School of Economics
– M.I.T. (Ph.D. in 1956)

**Other Activities**

– Nobel Memorial Prize in Economic Science (1999)
– Adviser to a number of international agencies and organizations including the United Nations, the IMF, the World Bank, the Government of Canada, several governments in Latin America and Europe, the Federal Reserve Board and the U.S. Treasury
– Consultant to the Monetary Committee of the European Economic Commission (1970)
– Member of the nine consultants to the Commission that prepared a report in Brussels on European monetary integration (1972–1973)
– Member of the Bellagio-Princeton study group on International Monetary Reform (1964–1978)
– Chairman of the Santa Colomba Conferences on International Monetary Reform (1971–1987)

**Selected Publications**

Author of numerous works and articles on economic theory of international economics

– The International Monetary System: Conflict and Reform. Montreal: Private Planning Association of Canada. 1965
– Man and Economics. New York: McGraw-Hill. 1968
– International Economics. New York: Macmillan. 1968
– Monetary Theory: Interest, Inflation and Growth in the World Economy. Pacific Palisades, CA: Goodyear. 1971
– The Euro as a Stabilizer in the International Monetary System. (Edited with A. Clesse). 2000

## Michael Mussa

**Date of Birth**

April 15, 1944

**Present Position**

– Senior Fellow at the Institute for International Economics (IIE)

**Professional Experience**

– Economic Counselor and Director of the Department of Research at the International Monetary Fund from 1991–2001
– Member of the U.S. Council of Economic Advisers – President Ronald Reagan (August 1986–September 1988)
– Member of the faculty of the Graduate School of Business of the University of Chicago (1976–1991)
– Member of the department of Economics at the University of Rochester (1971–1976)

**Research Interests**

– International economics
– Macroeconomics
– Monetary economics
– Municipal finance

**Education**

– B.A. in Mathematics and Economics, UCLA (1996)
– M.A. and Ph.D., University of Chicago (1974)

**Selected Publications**

- Argentina and the Fund: From Triumph to Tragedy. July 2002
- Global Economic Prospects: Through the Fog of Uncertainty. In: Policy Briefs 2. 2003
- Global Economic Prospects. In: Policy Briefs 9. 2002
- Prospects for the World Economy: From Global Recession to Global Recovery. In: Policy Briefs 2. 2002
- The Euro Versus the Dollar: Not a Zero Sum Game. In: Journal of Policy Modeling. July 2002

## Manfred J. M. Neumann

**Date of Birth**

December 15, 1940

**Present Position**

- Professor of Economics at the Institute for International Economics, University of Bonn (as of 1981)

**Professional Experience**

- Professor of Monetary Economics, Free University of Berlin (1973–1981)
- Researcher, University of Konstanz (1969–1972)
- Economist, Deutsche Bundesbank (1967–1969)

**Research Interests**

- Monetary macroeconomics

**Education**

- Dr.rer.pol. University of Marburg (1966)

**Other Activities**

- Editorial board member:
  - Journal of International Money and Finance, Empirica-Austrian Journal of Economics, Open Economies Review, Journal of Economics
- President, International Atlantic Economic Society (2001–2002)
- Academic Advisory Council of the Federal Ministry of Economic (as of 1992; 1996–2000 Chairman)
- Research Advisory Council of the Deutsche Bundesbank (as of 2000)

**Selected Publications**

- Steuergesetzgebung: Standortbestimmung aus ökonomischer Sicht. In: Kirchhof, P. and M. J. M. Neumann (ed.). Freiheit, Gleichheit, Effizienz. Bad Homburg. 2001. 23–33
- Does Inflation Targeting Matter? (With J. von Hagen). In: Federal Reserve Bank of St. Louis Review 84(4). 2002. 127–148
- Transparency in Monetary Policy. In: Atlantic Economic Journal 30(4). 2002. 353–364
- The Political Economy of Inflation, Labour Market Distortions, and Central Bank Independence. (With B. Herrendorf). In: Economic Journal 113(484). 2003. 43–64

## Lucas Papademos

**Date of Birth**

October 11, 1947

**Present Position**

- Vice-President of the European Central Bank (as of 2002)

**Professional Experience**

- Lecturer of Economics, Columbia University, New York (1975–1977)
- Assistant and Associate Professor of Economics, Columbia University, New York (1977–1984)
- Senior Economist, Federal Reserve Bank of Boston (1980)
- Professor of Economics, University of Athens (as of 1988)
- Economic Counsellor (Chief Economist), Bank of Greece (1985–1993)
- Head of the Economic Research Department, Bank of Greece (1988–1993)
- Deputy Governor, Bank of Greece (1993–1994)
- Governor, Bank of Greece (1994–2002)

**Research Interests**

- Stagflation and monetary policy
- Structure of financial markets
- Economic policies in the EU

**Education**
- Bachelor of Science in Physics, M.I.T. (1970)
- Master of Science in Electrical Engineering, M.I.T. (1972)
- Doctor of Philosophy (Ph.D.) in Economics, M.I.T. (1977)

**Other Activities**
- Member of the Governing Council of the European Central Bank (as of January 2001)
- Member of the Trilateral Commission (as of 1998)
- Chairman of the Advisory Board of the Hellenic Observatory at the European Institute, London School of Economics (as of 1998)

**Selected Publications**

Author of numerous articles and essays, including:
- From the Drachma to the Euro. In: Economic Bulletin 15. Bank of Greece. July 2000. 7–14
- Why Price Stability? In: Herrero, A. G. et al. (eds.). Why Price Stability? Proceedings of the First ECB Central Banking Conference. Frankfurt am Main: European Central Bank. November 2000
- The Euro, the Greek Economy and the Banking System. In: Bulletin of the Hellenic Banking Association 24. 2001. 5–13
- The Greek Economy: Performance and Policy Challenges. In: Bryant, R. C. et al. (eds.). Greece's Economic Performance and Prospects. Bank of Greece and the Brookings Institution. 2001

## Karl Pichelmann

**Date of Birth**

April 15, 1956

**Present Positions**
- Research Adviser, European Commission, Directorate General for Economic and Financial Affairs (as of 1998)
- Associate Professor, Institut d'Etudes Européennes, Université Libre de Bruxelles (as of 2000)

**Professional Experience**
- Staff Member of the Department of Economics, Institute for Advanced Studies, Vienna, (1979–1998)
- Lecturer, Vienna University of Economics and Business Administration (1988–1998)

**Research Interests**
- Macroeconomics and the labor market

**Education**
- Habilitation, University of Economics, Vienna (1997)
- Doktor rer.soc.oec., University of Vienna (1983)

**Selected Publications**
- Structural Reforms in Labour and Product Markets and Macroeconomic Performance in the EU. (With W. Roeger). In: Solow, R. M. (ed.). Proceedings of the International Economic Association Conference 2002. Vol. I. Forthcoming
- EU Enlargement, Migration and the Labor Market. A Tentative Assessment. In: Addison, J. T. and P. Welfens (eds.). Labor Markets and Social Security. Issues and Policy Options in the US and Europe. 2nd Edition. Springer-Verlag. 2003
- Wage Discipline in EMU. A Feature of the Early Years. Only? In: Buti, M. and A. Sapir (eds.). EMU and Economic Policy in Europe. The Challenge of the Early Years. Edward Elgar. 2002
- Monitoring Wage Developments in EMU. In: Empirica 28. 2001. 353–373
- Unemployment in Europe. (Edited with M. Landesmann). Confederation of European Economic Associations Conference Volumes. Macmillan Press Ltd. 2000

## Klaus P. Regling

**Date of Birth**

October 3, 1950

**Present Position**

– Director-General for Economic and Financial Affairs, European Commission (as of July 2001)

**Professional Experience**

– International Monetary Fund, Washington (1975–1980)
– German Bankers' Association, Cologne (1980–1981)
– German Ministry of Finance (1981–1985)
– International Monetary Fund, Washington and Jakarta (1985–1991)
– German Ministry of Finance (1991–1998; from 1995 Director-General for European and International Financial Relations)
– Managing Director, Moore Capital Strategy Group, London (1999–2001)

**Education**

– University of Hamburg, Bachelor's degree in Economics (1971)
– University of Regensburg, Master's degree in Economics (1975)

**Other Activities**

– Member of the Economic and Financial Committee
– Alternate Governor of the EBRD
– Member of the Board of the European Investment Bank

## Wolfgang Schüssel

**Date of Birth**

June 7, 1945

**Present Position**

– Federal Chancellor as of February 4, 2000

**Professional Experience**

– Secretary of the Parliamentary Caucus of the Austrian Peoples Party (ÖVP) (1968–1975)
– Secretary general of the Austrian Business Federation, one of the three branches of the Austrian People's Party (1975–1991)
– Minister for Economic Affairs in the Austrian Federal Government; (coalition government formed by the Social Democratic Party of Austria and the Austrian People's Party) (1989–1995)
– Minister for Foreign Affairs and Vice-Chancellor with the fourth and the fifth Federal Government Cabinet formed by Chancellor Franz Vranitzky and with the first Government Cabinet of Chancellor Viktor Klima) (1995–2000)

**Education**

– Law Studies at the University of Vienna (Dr. jur.)

**Other Activities**

– Elected Chairman of the Austrian People's Party at the 30th Party Congress (1995)
– President Julius Raab Foundation

**Selected Publications**

– Mehr Privat – weniger Staat. (With J. Hawlik). 1983
– Staat laß nach. (With J. Hawlik). 1985
– Ideen die geh'n. Mitarbeiterbeteiligung. 1985
– Das rot-weiß-rote Weltkugelbuch. (With A. Komarek). 1998
– Im Namen der Zukunft. 1999

## Vito Tanzi

**Date of Birth**

November 29, 1935

**Present Position**

– Senior Consultant at the Inter-American Development Bank, Washington, D.C. (as of July 2003)

**Professional Experience**

– Professor of Economics, American University and George Washington University, Washington, D.C. (1967–1976)
– Head of Tax Policy Division, International Monetary Fund (1974–1981)
– Director of Fiscal Affairs Department, IMF (1981–2000)

- Senior Associate, Carnegie Endowment for International Peace (December 2000–June 2001)
- Consultant to World Bank, United Nation, Stanford Research Institute, Organization of American States
- Undersecretary for Economy and Finance, Italian Government (June 2001–June 2003)

**Research Interests**

- Public finance
- Macroeconomics

**Education**

- B.A. in economics, George Washington University, Washington, D.C. (1959)
- M.A. in economics, George Washington University (1961)
- M.A. in economics, Harvard University, Cambridge, Mass. (1963)
- Ph.D. in economics, Harvard (1966)

**Other Activities**

- President of the International Institute of Public Finance (1990–1994)

**Selected Publications**

- Policies, Institutions, and the Dark Side of Economics. Edward Elgar. 2000
- Public Spending in the 20th Century. Cambridge University Press. 2000
- Income Distribution and High Quality Growth. MIT Press. 1998
- Economic Policy and Equity. IMF. 1999
- Managing Fiscal Decentralization. Routledge. 2002

## Josef Taus

**Date of Birth**

February 8, 1933

**Present Position**

- Member of the Supervisory Board of Management Trust Holding AG (since 1999)

**Professional Experience**

- Contributed to the publications of, and served as adviser to, the Austrian Institute of Economic Research (WIFO) (1956–1958)
- Girozentrale and Bank der Österreichischen Sparkassen AG (1958–1975; as of 1968 Chief Executive Officer)
- Member of Parliament (1975–1991)
- Leader of the Austrian People's Party (ÖVP) (1975–1979)
- Managing Director of CONSTANTIA Industrieverwaltungsges.m.b.H. (1979–1985)
- Member of the Executive Board of CONSTANTIA Industrieholding AG (1986–1989)
- President of the Federal Association of Austrian Savings Banks (1989–1991)
- Member of the Executive Board of Management Trust Holding AG (1989–1999)

**Education**

- Dr. iur. (1955)

## Norbert Zimmermann

**Date of Birth**

April 14, 1947

**Present Position**

- Co-owner and Chairman of Berndorf Aktiengesellschaft (as of 1988)

**Professional Experience**

- IBM Vienna, Systems Engineer and Sales Representative (1971–1974)
- Spar Österreichische Warenhandels AG, Controller, managing the Finance Department of the Spar Head Office in Upper Austria (1974–1978)
- Böhm Ges.m.b.H., CEO, responsible for organisation, personnel and marketing (1978–1986)
- Berndorf Metallwaren Ges.m.b.H., CEO, (1986)

**Research Interests**

- Demographic development
- Future working habits
- Generation conflict

**Education**
- Vienna University of Economics and Business Administration
- Traineeships in Great Britain and USA

**Selected Publications**
- Zukunftssicherung für Familienunternehmen. Vienna: Ueberreuter
- Menschen am Werk. Unternehmensgeschichte. Berndorf AG

## Josef Zweimüller

**Date of Birth**
February 11, 1959

**Present Position**
- Professor of Economics, University of Zurich (as of 1997)

**Professional Experience**
- Research Associate University of Linz (1985–1988)
- Assistant Professor, University of Linz (1988–1996)
- Assistant Professor, Institute for Advanced Studies, Vienna (1995–1997)
- Associate Professor, University of Linz (1996–1997)

**Research Interests**
- Labor economics
- Income distribution
- Economic growth

**Education**
- Master of Economics, University of Linz
- Ph.D. in Economics, University of Linz
- Postdoctoral Fellow, University of California Berkeley, and Visiting Scholar, Stanford University
- Habilitation, University of Linz

**Other Activities**
- Member Kuratorium, Deutsches Institut für Wirtschaftsforschung (DIW) (as of 2002)
- Member Scientific Board, Rheinisch-Westfälisches Institut für Wirtschaftsforschung (RWI) (as of 2002)
- Member Kommission für Konjunkturfragen, seco, Bern (2000–2002)
- Member Editorial Board, Nordic Journal of Political Economy (as of 1995)
- Member Editorial Board, Applied Economics Quarterly (as of 2002)

**Selected Publications**
- Benefit Entitlement and the Labor Market: Evidence from a Large-Scale Policy Change. (With R. Lalive). In: Agell, J., M. Keene and A. Weichenrieder (eds.). Labor Market Institutions and Public Policy 2003. MIT Press. Forthcoming
- Job Creation and Job Destruction in a Regulated Labor Market: The Case of Austria. (With A. Stiglbauer, F. Stahl, and R. Winter-Ebmer). In: Empirica 30. 2003. 127–148
- Learning for Employment, Innovating for Growth. (With J. Falkinger). In: Journal of Institutional and Theoretical Economics 156. 2000. 455–472
- Schumpeterian Entrepreneurs Meet Engel's Law: The Impact of Inequality on Innovation-Driven Growth. In: Journal of Economic Growth 5. 2000. 185–206
- Inequality, Redistribution, and Economic Growth. In: Empirica 27. 2000. 1–20

***Publisher and editor:***

*Oesterreichische Nationalbank*

*Otto-Wagner-Platz 3, A 1090 Vienna*

***Editor in chief:***

*Günther Thonabauer, Secretariat of the Governing Board and Public Relations*

***Edited by:***

***Scientific coordination:***

*Eduard Hochreiter, Economic Studies Division*

***Editorial processing:***

*Alexander Dallinger, Economic Analysis Division*

***Design:***

*Peter Buchegger, Secretariat of the Governing Board and Public Relations*

***Layout and typesetting:***

*Erika Gruber, Printing Office*

***Photographs:***

*Foto Knoll*

***Paper:***

*Salzer Demeter, 100% woodpulp paper, bleached without chlorine,*
*acid-free, without optical whiteners*

***Printing and production:***

*Oesterreichische Nationalbank, Printing Office*

***Published and produced at:***

*Otto-Wagner-Platz 3, A 1090 Vienna*

***Inquiries:***

*Oesterreichische Nationalbank, Secretariat of the Governing Board and Public Relations*
*Otto-Wagner-Platz 3, A 1090 Vienna*
*Postal address: P. O. Box 61, A 1011 Vienna*
*Telephone: (+43-1) 404 20, ext. 6666*
*Fax: (+43-1) 404 20, ext. 6696*

***Orders:***

*Oesterreichische Nationalbank, Documentation Management and Communications Services*
*Otto-Wagner-Platz 3, A 1090 Vienna*
*Postal address: P. O. Box 61, A 1011 Vienna*
*Telephone: (+43-1) 404 20, ext. 2345*
*Fax: (+43-1) 404 20, ext. 2398*
*E-mail: oenb.publikationen@oenb.at*

***Internet:***

*http://www.oenb.at*

***DVR 0031577***

***Vienna 2003***