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Labour Market Tax Policy in the EMU

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Contents

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Together with other members of the European Union, France and Germany are about to embark on an unprecedented cooperative venture. To be successful, Economic and Monetary Union will require a very high degree of mutual understanding among the policymakers of the participating countries. It will also require upgrading the dialogue between those who contribute to shaping the policy debates on both sides of the Rhine.

France and Germany have a long tradition of high-level dialogue and cooperation in the framework of bilateral and European institutions. But the dialogue between their civil societies does not match this spirit of cooperation. Economists and those involved in practical economic policy makink from both countries in particular rarely talk to each other to find out why they may have differing visions of the functioning of Economic and Monetary Union and of the associated challenges, and even more rarely try to narrow the divergence of their views. This lack of dialogue contributes to keeping alive entrenched prejudices on the other country`s supposedly hidden policy agenda.

Yet, an Economic and Monetary Union in which policy debates with a bearing on European policy choices remain confined within national boundaries would be prone to instability, because disagreements about policies would tend to end up in disputes between countries. It is, therefore, of utmost importance to foster the emergence of a genuine *European* professional discussion on major economic policy issues.

The purpose of the *Deutsch-Französisches Wirtschaftspolitisches Forum/ Forum économique franco-allemand* is to contribute to this discussion through the organisation of a series of informal meetings between French and German economists.

The Forum assembles professional economists from academia, business and the public sector. As a non-partisan institution, the Forum brings together participants from all strands of thinking about economic policy with the aim of stimulating fruitful debate. Each meeting is devoted to one or two major policy issues: employment, exchange rate policies, the organisation of economic policy in Economic and Monetary Union, its relations with non-participating countries, and the immediate policy challenges on the eve of monetary union, to name just a few. The Forum commissions papers to provide an informed basis for the discussion, but the focus will be on debate and the exchange of views, starting with reactions from discussants whose role will be to present alternative views and to frame the key issues for the debate.

The proceedings of each meeting are published in working paper format. With the present brochure, we present papers of the discussion from the Forum's third meeting on July 6-7, 1998. We hope that this will be a useful input into an emerging public debate on Europe's economic policies in our two countries and beyond.

Jürgen von Hagen
Jean Pisani-Ferry

EMU and the Labour Market - A Speculative Assessment

Karl-Heinz Paqué[1]
Otto von Guericke University Magdeburg

Introduction

The transition from the European Monetary System (EMS) to the European Monetary Union (EMU) is a big historical event. For economists, big historical events are extremely hard to assess. This is so for two reasons: First, big historical events are rare, and rare events have few if any precedents that could be used as empirical standards of comparison to make reasonably accurate predictions about the likely effects and consequences of the historical change under consideration. Second, big historical events are revolutionary in the sense that they may change many fundamentals of life so that it becomes difficult to set up a counterfactual scenario which can serve as a reasonable yardstick for history's 'normal' path. Hence much of what an economist can say about big historical events is a theoretically based and empirically enriched speculation. This is how this (non-technical) paper should be understood.

I will subdivide my speculation on EMU and the labour market into three parts. In Part 1, I summarise the mainstream view of what challenges there are for European labour markets, independent of whether we will live in an EMS- or an EMU-environment. I shall argue that these are major challenges of real wage flexibility that call for reforms of the welfare state and of national labour market institutions. In Part 2, I shall ask what the transition from EMS to EMU, i.e. from a system of fixed, but occasionally adjustable parities to a common currency adds to this agenda. In Part 3, I shall present a prototype labour market reform agenda for a continental European country that is a member of EMU.

1. The Need for Real Wage Flexibility

Among mainstream economists, there is by now a broad consensus about the major structural characteristics of labour markets in most EU-countries.[2] In particular, there is agreement

- that real wages are less flexible in EU-countries than in the United States, and that this holds both for the level and the structure of real wages,

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[1] Professor of International Economics, Department of Economics and Management,
Otto von Guericke University Magdeburg, Postbox 4120, D-39016 Magdeburg.
Tel: ++49-391-67-18804, Fax: ++49-391-67-11177

[2] By the term 'mainstream', we denote the broad array of analyses of the macro- and microeconomics of European labour markets that has emerged in the last 15 years and which may be delineated by the following well-known publications: Layard/Nickell/Jackman (1991), Bean (1994), the OECD-job study (1994) and the annual issues of the OECD-Employment Outlook. A good summary of the consensual view is presented by Vinals/Jimeno (1996), pp. 26-35.

- that this real wage rigidity is largely responsible for the persistence of high unemployment since the two major recessions and supply side shocks in the mid 1970s and early 1980s – in contrast to the United States where the rise in unemployment has only been temporary and the labour market has by and large returned to the natural rate of unemployment that prevailed in the 1960s, and

- that the structural characteristics of the labour markets in EU-countries make it likely that any further recession and/or supply side shock of major dimension will again push up unemployment to still higher threshold levels.

There is also a broad consensus that the reasons for the observed rigidity of real wages are to be found in three institutional features of the prototype of a European labour market:

- a welfare state and/or a system of unemployment insurance which allows unemployed persons to remain in a state of extensive search over longer periods of time and which tends to fix the reservation wage at a relatively high level, thus preventing the emergence and growth of a low-wage service sector, which played a major part in the return to full employment of the United States;

- collective bargaining systems where unions and employers associations conclude wage agreements that do not put sufficient weight on the market interests of unemployed outsiders because the union side negotiates on behalf of employed insiders alone and the employers' side follows efficiency wage considerations, which under certain conditions call for upward wage adjustments to raise productivity of the employed insiders;

- labour market regulation, including statutory minimum wages above the market equilibrium rate, that prevents innovative and flexible forms of employment from emerging – and thus suppresses outsider competition and supports the cartel of collective agreements.

This largely consensual diagnosis leads right to the conclusion that there are plenty of items on the policy agenda of EU-nations for the next few years, all pointing towards the aim of achieving greater labour market flexibility. The major political question will be whether governments, unions and employers as well as the population at large will be ready to allow for more elements of flexibility in labour market adjustments, possibly at the expense of traditional notions of equality and social justice. In some countries like Germany, this calls for a reform of constitutional dimensions because it comes down to restructuring a welfare state which has been the successful backbone of industrial society for a long time, but has proved unable to deal with some irreversible trends towards wage differentiation as they can be observed in countries with more flexible labour markets, notably the United States and Britain. I will return to the reform agenda towards the end of this paper.[3]

[3]See OECD, Employment Outlook 1993, 1996 and 1998.

This reform agenda, which is dictated by **real** wage rigidity and an unacceptably high **natural** rate of unemployment over longer periods of time, has by itself little to do with the EMU-project. The reason is simple: there are no well-defined channels through which monetary policy and exchange rate realignments could be expected to have a sustained long-run effect on **any** institutional characteristic of a labour market and thus on real wage rigidity. To be sure, standard macroeconomic theory - as, e.g., collected in a standard modern textbook of a neo-Keynesian economist (Mankiw 1997) – does not contain any relevant propositions in this respect.

Going beyond standard theory, there is only one plausible structural variable that might serve as a candidate for establishing a link between EMU and the institutional characteristics of the labour market: **transparency**.[4] A common currency makes it easier to make international comparisons between wages and prices in different countries that are members of EMU; it may thus raise competitive pressures, and this may induce institutional changes.

There are two reasons why one should expect this effect to remain moderate or even negligible. First, in the modern information age, it looks rather far-fetched to assume that economic agents within the current EMS have any difficulties in converting foreign wages and prices into their own currency (provided they have a pocket calculator). Hence the marginal gain of transparency is likely to remain small, certainly for professionals engaged in foreign trade transactions or in collective bargaining, but probably also for people at large. Second, even if there will be significantly more transparency, it remains unclear what it will imply for national labour market institutions: competitive pressures become more visible, but so do aspiration levels of living standards, and while the pressures may foster efficiency and labour cost flexibility, the high aspiration levels may do the reverse. Without a rigorous model that specifies how collective bargaining and labour market institutions are influenced by outside (e.g. international) information, all this remains pure speculation.

In this context, it is sometimes argued that German unification and its macroeconomic consequences for the eastern part of the united country could be taken as a frightening example of what complete transparency leads to in an economic union with free movements of goods and services as well as capital and labour.[5] This argument is mistaken because the extent of institutional integration has been incomparably larger in the case of German unification than it will be in EMU for the foreseeable future. Apart from some minor attempts to supplement the European common market by a so-called 'social dimension' – mainly encompassing some common minimum standards of workers' right (etc) - there has been no institutional integration of the prospective EMU-member countries, at least with respect to the core matters of labour market regulation and practice such as collective wage bargaining, worker

[4] I leave out the reduced transactions costs of a common currency, which are doubtless an allocative gain in real terms for all countries that participate in EMU. In my view, they can hardly deliver a strong case for a link between EMU and the institutional characteristics of the labour market.

[5] Often, the argument is not explicitly made, but implicitly couched in a specific interpretation of the terms of German unification that holds the currency union itself responsible for the sharp cost push in eastern Germany after 1990 – and not the wage agreements concluded in collective bargaining at that time. To be consistent, this argument has to assume that, other things having remained equal, real wage increases in eastern Germany would have been more moderate, had there still existed a separate eastern German currency. And this could only have been the case if the relevant economic agents in the East had suffered from some sort of (inner-German) money illusion due to a lack of transparency.

participation and minimum wage legislation.[6] As progress towards forming a political union have more less grounded to a halt in recent years[7], there is no indication why the currency union should necessarily lead to a major effort at institutional integration.

2. More Need for Nominal Flexibility?

Once EMU is established, it will be the Frankfurt-based European Central Bank (ECB) that determines monetary policy. There is wide agreement that, by statutory law, the ECB enjoys a degree of political independence which is probably the maximum one might realistically imagine for a central bank. In particular,

- the ECB is obliged by law to pursue one overriding aim: price stability;
- the ECB is called upon to support general economic policy in the EU only to the extent that price stability is not endangered;
- the ECB must not grant any credit facilities to EMU-member countries so that a monetary alimentation of government deficits is impossible;
- the members of the ECB-board of directors, including the ECB-president, cannot be dismissed by political decision.

There is strong econometric evidence that the degree of political independence of a central bank is positively linked to the degree of price stability achieved in national economies over longer periods of time.[8] Hence, from a constitutional perspective, everything points towards a highly stability-oriented framework of monetary policy, maybe a future record of price stability in the range of what the Bundesbank achieved in the 1980s and 1990s. It remains to be seen whether the ECB will really develop a 'stability culture' comparable to the one of the Bundesbank. This will crucially depend on the ECB's behaviour in those infrequent, but important instants of economic history when the pressure of the political establishment and public opinion becomes particularly strong and evident. In fact, the Bundesbank did regularly withstand this pressure and thus built up the necessary 'confidence capital' in the public that made it one of the most respected federal institutions in the country (together with the constitutional court!).[9]

Once EMU is fully established, there will be just one money in the countries that participate in the project, the EURO. Whatever its stability credentials for the whole of the currency union[10], there will be

[6] Comparative institutional studies – e.g., Hartog/Theeuwes (1993) and Dohse/Krieger-Boden (1998) – show the full range of diversity of institutional details in the labour market regulations of the prospective EMU-member countries.

[7] Von Hagen (1998) and Dohse/Krieger-Boden (1998). Note, however, that the Amsterdam-treaty of 1997 explicitly assigns the competence for a suranational employment policy to the EU.

[8] Demopoulos/Katsimbris/Miller (1987), Cukierman (1992), Alesina/Summers (1993).

[9] See Giersch/Paqué/Schmieding (1994).

[10] On the pros and cons of different inflation targets that are close to price stability, see Paqué (1997).

no option anymore for any individual government to adjust the nominal parity of its currency, as is still possible in a fixed exchange rate system like the EMS. This means that any country that joins EMU gives up the option to adjust its price level and its nominal wage level vis-à-vis all other EMU-countries in one big stroke, through a devaluation or a revaluation of its currency.

There is consensus among economists that the option of adjusting parities is essentially a short- and medium-run policy instrument: In the long run, one can reasonably expect all nominal wages and prices to be flexible enough to return an economy to its 'natural' level of economic activity and employment (which, of course, may be deemed to be too low due to real wage rigidities as argued above in Part 1). However, in the short- and medium run, there is ample empirical evidence that, in virtually all advanced industrial countries, nominal wages and prices are rigid so that nominal parity changes do have substantial output and employment effects, though no permanent ones.

In terms of the potential macroeconomic costs of a currency union, it is the case of a foregone devaluation that is widely considered to be the most serious issue, simply because, in times of chronically high unemployment, a short- and medium-run slack of labour demand can be expected to have more damaging consequences in economic and political terms than, say, a temporary boom phase of lower than natural unemployment. Given nominal rigidities in prices and wages, a devaluation is called for whenever a country is hit by an adverse asymmetric supply or demand shock, i.e. a shock that does not hit other member countries of EMU to the same macroeconomic extent.

How likely are individual EMU-countries to slide into a situation where a devaluation vis-à-vis other members would be required but impossible? This depends

- on the extent to which other external macroeconomic stabilisation instruments are available to counter the output and/or employment effects or
- on the likelihood that an asymmetric shock happens at all.

On the first count, there is agreement among mainstream economists that EMU-prospects are bleak. On theoretical grounds, two stabilisation instruments come to mind: (i) international mobility of labour and (ii) international countercyclical fiscal transfers. As to international mobility between prospective EMU-countries, all available empirical evidence shows that – compared to the interregional labour mobility within the United States as a reasonably working curency union – the international labour mobility within the European Union is very low. To be sure, even the mobility *within* the much smaller nation states of Europe compares unfavourably with the United States.[11] As there is hardly any prospect of change in this respect in the foreseeable future, one should not expect labour mobility to make any significant contribution to alleviating the employment effects of asymmetric shocks within EMU.

On the second count, things look hardly better, again compared to the United States. While economically backward regions within the European Union are permanently supported through various

[11] See Blanchard/Katz (1992) and Eichengreen (1990).

channels, the relevant funds have a focus on economic development and not on equilibrating the output and employment effects of asymmetric macroeconomic shocks. In any case, the funds are by far not large enough to have any significant macroeconomic effect that might be remotely comparable to the strong regional equilibrating mechanisms that work through an integrated tax system within a single country like the United States where econometric estimates show that any region-specific, i.e. asymmetric decline of output and real income, is to roughly one third compensated by a decline of tax revenue at the federal level.[12] Nothing resembling this degree of countercyclical redistribution between countries is to be expected in the foreseeable future within the European Union.[13]

To conclude: whenever there is a powerful negative, asymmetric shock hitting output and employment in an EMU-country, there will hardly be any mechanism available that might serve as a valuable substitute for a currency devaluation to counter the shock effect in the short and medium run.[14] Hence the relevant question becomes: how likely is such an event at all?

Empirical studies that econometrically analyse the history of European countries in the relevant past – notably the 1970s and 1980s – obtain conflicting results. Some older studies[15] come to the conclusion that asymmetric shocks are more common between countries within the EU as a whole than between states within the United States. On the other hand, they also typically find a subgroup of countries in the EU – usually called 'Core Europe' and denoting central European countries including and around West Germany and France – to form a regional cluster which is just as symmetric as the United States, thus pointing towards a 'Core Europe' as a sensible geographical unit for a currency union.[16]

A more recent study[17], which looks directly at the intertemporal variation of national unemployment rates over the period 1971-93, finds strong evidence that a large part of this variation is due to *symmetrical* shocks, with 'innovations' of the EU-wide unemployment rate accounting for 60 per cent of all national variations after one year of adjustment, 70 per cent after two years and as much as 83 per cent after four years, which may be taken as a good benchmark time span to mark the medium term. Although the methodology used in this study does raise some important questions[18], the major results are not implausible: after all, the stylised facts of unemployment history in the last two decades point towards roughly parallel movements and variations among EU-countries, with the two major negative events – the deep recessions plus major supply side shocks in 1973/75 and 1981/83 – running their merciless course through basically all labour markets of EU-countries, possibly with the

[12] See Sala-i-Martin/Fabra (1992).

[13] Von Hagen/Hammond (1997) have developed a model that is specifically addressed to elaborating international transfers between EMU-Countries (to be financed by a common fund), which help to counter the macroeconomic effects of asymmetric shocks. They show that, within this model, the mode of calculating the relevant transfer is either impractically difficult (due to the complex time series analysis that is required) or, if drastically simplified, prone to have large margins of error.

[14] The same conclusion has recently be drawn by Salvatore (1997) and Mc Kinnon (1997).

[15]E.g. Bayoumi/Eichengreen (1993). See also the summary interpretation of the evidence by Vinals (1996).

[16]See also De Grauwe (1997).

[17]Vinals/Jimeno (1996).

[18]See Paqué (1997), p. 140.

exception of Luxembourg. Hence, given the limited mileage that econometric studies of this kind can have at all, the results are certainly not out of line with intuition.

Sure enough, the mileage of these studies is limited. In particular, the econometrics leaves the question widely open whether the series of major devaluations in the early 1980s - in the aftermath of the second big recession plus supply side shock - did not help the relevant countries to soften a cyclical landing that would have involved much more dramatic output losses if not supplemented by well-timed parity changes. In fact, case studies of the devaluation experiences of Belgium, Denmark, the Netherlands and France in the early 1980s[19] suggest that this was the case. They indicate that all four countries – and in particular the three smaller ones – were able to carry through a harsh and in the end successful macroeconomic stabilisation programme, with the devaluation substantially reducing the employment losses and thus making the programme politically acceptable. Similar cases can be made for Spain and Italy. All these programmes were necessary to correct major policy errors which had been committed in earlier times.

With some courageous simplification, one may draw a general lesson from these realignment experiences within the EMS - in contrast to the vast number of devaluations at other times that were not successful (think, e.g., of Britain in the 1960s). This lesson should read as follows: a devaluation can be a valuable and important tool to supplement internal price and wage flexibility if it is accompanied by a credible stabilisation programme that signals a radical break with prior malpractice. Constituent elements of this credibility are the extent of political commitment, the degree of international constraints that enforce the stabilisation, and not least the historical (in)frequency with which the policy option is chosen. In this sense, a devaluation is an important instrument for the rare event to shift macroeconomic gears towards stabilisation.

To sum up the evidence: econometric analysis of the European unemployment record in the last two decades yields the (not implausible) result that symmetric shocks where the rule rather the exception. However, this does not mean that currency realignments have been worthless as stabilisation instruments in major cases of macroeconomic emergencies.

The question remains what we can learn from this conclusion for the future. Again we are back on a highly speculative level because we cannot know whether the macroeconomic disturbances and policy errors will be comparable to those in the past.

- As to the need for devaluations, one might argue that these were (indeed welcome) corrections of major previous policy errors of the 1970s, but that such errors are not likely to emerge in the EMU-future precisely because the common currency prevents them to happen in the first place: after all, the common currency stiffens the external constraint and tends to keep internal spending at bay, precisely because all economic agents anticipate that there is no safety valve in case of emergency. In this view, the remarkably smooth working of the Gold Standard in the late 19th and early 20th century[20] may be a better model to portray the likely future of EMU than what has

[19] De Grauwe/Vanhaverbeke (1990), Sachs/Wyplosz (1986).

[20] Bloomfield (1959), Eichengreen (1985).

happened in the early 1980s. And so may the more recent history of the EMS since the second half of the 1980s, where the imposed discipline of the stability–oriented Bundesbank led to an unprecedented convergence towards low price inflation in EMS-member countries, with the major realignment in 1992 being mostly due to the fiscal consequences of a unique historical event in the lead country (German unification!), and not to a lack of macroeconomic discipline in the rest of the EMS.

- As to the shock symmetry, one might argue[21] that it is precisely the integration of European markets that leads to a more pronounced asymmetry of shocks because industrial locations for the production of traded goods will increasingly form sectoral and regional clusters to take advantage of internal and external economies of scale, as is traditionally the case in the United States. It would then be particularly important to preserve appropriate macroeconomic degrees of freedom, in view of the fact that the European Union is far away from the degree of labour mobility and fiscal integration that the United States enjoy.

My personal judgement is that the first of these two arguments is well-taken while the second is likely to overdo the parallel between the United States and the EU. After all, the geographical allocation of economic activity is a complex historical process, which contains many elements of hysteresis that cannot easily be wiped out even by integration in a common market coupled with a currency union. E.g., it appears to be highly unlikely that the European car industry will ever reach the same extent of regional concentration as it has in the United States simply because differences in national tastes and skills (say, Swedish solidity versus Italian style) will keep non-central locations alive and work against the maximal exploitation of economies of scale. Similar stories may be told for many other industrial branches, which have historically grown out of the typically European diversity of tastes and engineering skills and which form the quantitative backbone of the ever growing volume and share of intra-industry trade that has been characteristic of EU-trade creation since the beginning of the whole EU-project in the late 1950s.[22] If this trend continues – and there are no indications to the contrary -, it is likely that ever more dense networks of intra-industrial divisions of labour across national borders work towards more symmetry of macroeconomic shocks, and not less. But, again, conjectures like these are highly speculative.

What do we conclude from all this? Does EMU add a new dimension to the flexibility requirements of labour markets? My answer is a qualified 'yes' – in the sense that a world of ever fixed nominal exchange rates makes the flexibility of labour markets an even more pressing issue. Whether this new dimension means a new qualitative step in the urgency of reforms may be open to doubt – first, because reforms are urgently needed anyway, and second because the likelihood of powerful asymmetric shocks hitting individual EMU-member countries may not be high in the years to come, and the forgone option of devaluing one's currency not always a particularly promising choice at that. But be that as it may: another macroeconomic emergency door will be closed for ever, and this points

[21] Krugman (1991, 1993).

[22] See Giersch/Paqué/Schmieding (1994).

– if anything – to an even more comprehensive reform agenda for the labour market, including steps towards more nominal flexibility in the short- and medium run.

3. A Tentative Reform Agenda

When historians, say, in the middle of the 21st century will look back over the political, economic and social agenda of most EU-countries towards the end of the 20th century, they will probably not distinguish very carefully which single item on this agenda was due to which single specific historical event or development. All in all, the close of the 20th century will appear as a time

- with major structural weaknesses emerging in traditional institutions of industrial society, from the extensive welfare state over pay-as-you-go pension schemes to tight labour market regulation;
- with an irreversible opening of European economies to international competition in all branches of tradable goods and services, including a trend towards the deregulation of formerly protected and mostly public service monopolies;
- with a common European currency replacing national monies and thus closing the door to the use of traditional instruments that national governments and central banks used for the purpose of macroeconomic stabilisation.

Notwithstanding the protests of professional economists (like myself), who stress the conceptual separateness of these items, the general historian will recognise a deep link between them: with the heyday of industrial society in a national framework coming to an end, a wide-ranging package of reforms is required to allow for a smooth transition to a more competitive environment.
For the European labour markets, this means: if a return to full employment should not remain a utopian aim, a broad array of microeconomic reforms should be adopted – all aimed at systematically lowering the barriers to labour market entry and thus mitigate the pervasive insider/outsider-problem, and at the same time furthering any type of speedy adjustment to changing macroeconomic circumstances. Clearly, each European country will have to set up its own reform package, with nation-specific priorities and details that depend on where the country stands in terms of its institutional peculiarities, and what it has achieved already. In this sense, these are still genuine national tasks, and so are the difficult ethical and political choices that will have to be made in the course of these reforms. However, some common elements will probably re-emerge in all national labour market reforms, namely moves towards

- more flexible labour costs in the broadest sense, i.e. in nominal and in real terms, in level as well as structure, over time and across workers[23];

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[23] Note that the differentiation across workers may not follow anymore the traditional pattern as fixed in collective agreements, which is usually linked to formal skills and responsibilities. In modern divisions of labour on the plant level, purely subjective criteria like flexibility and talent to work in teams may become ever more important. See the formal model by Lindbeck/Snower (1996).

- more flexibility in working conditions, including less rigid forms of old age and health insurance and of working time arrangements;
- less comprehensive legal frameworks of job protection that serves insider interests and raises barriers to entry;
- a structure of income taxation and unemployment support that rewards individual work effort as well all variants of mobility, e.g. sectoral, occupational and regional;
- more education to flexibly acquire new skills in a working environment where life-long job tenure becomes the exception rather than the rule.

These are not particularly original proposals. In essence, they have been advanced before, notably by the OECD in its 1994-Jobs Study, which may be another indication for the high degree of policy consensus among economists in this field.

Note that the EU itself cannot really contribute much to working down this reform agenda as most items on it fall in the realm of national competence. In fact, it looks as if – for the time being - the EU should better renounce on any grand schemes of institutional integration until the nation states have done their homework of urgent structural reforms. In doing so, they will gradually make themselves 'fitter' for whatever comes next in terms of European challenge – well after common market and common money.

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Tax Competition in the European Monetary Union: Present and Prospects[24]

Jacques LE CACHEUX
Professor, Université de Pau et des Pays de l'Adour[25]
Director, Economic Research Department , OFCE, Paris

Abstract

Tax competition arises as soon as economic and financial openness is sufficient for tax bases to migrate across jurisdictional boundaries. Whereas the completion of the Single European Market had raised fears that it may lead to enhanced tax competition amongst national governments of member states, the evidence suggests that it has been limited to some aspects of national taxation, such as taxes on income and capital gains from individuals' financial asset holdings. However, with the full monetary integration in the European Union, it is likely that competition will strengthen, which may lead to more severe tax competition, in particular on business taxation in order to attract firms or provide existing ones with a competitive advantage.

Microeconomic analyses of tax competition amongst local governments within federations or unitary states tend to conclude that such a competition is inefficient, leading to under-provision of local public goods; it also reduces the returns to immobile factors and increases tax pressure on such factors. In strategic settings, it may be shown to induce waste of public resources and windfall gains on newly installed firms.

Given relative degrees of mobility, the instruments of tax competition in Europe are essentially taxes on incomes from capital, at the firm's and at the owner's levels, as well as possibly taxes that bear on firms' production costs. Although the evidence is not conclusive, there seems to be a potential for that competition to attract businesses if they become more mobile within the EU economy.

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[25] Faculté de droit, de sciences économiques et de gestion, avenue du Doyen Poplawski – 64000 PAU – FRANCE.
e-mail : lecacheux@ofce.sciences-po.fr

Introduction

In the late 80s, the perspective of the Single European Market had raised fears that tax competition amongst member states might become fiercer with the disappearance of national boundaries and obstacles to the mobility of goods, services and capital. Under the leadership of the European Commission, some efforts had then been made to harmonize indirect taxation, whereas competition had prevailed with respect to capital income taxation, leading to a marked decline in tax pressure on such incomes.

The completion of monetary union in Europe has constituted the major endeavor of the past decade; due in particular to the necessity for applicants to comply with the so-called Maastricht criteria, especially those concerning public finance, national governments in the European Union (EU) have had to focus on budget consolidation policies and, in many countries, this has led to implement a mix of cuts in public expenditures and tax hikes in order to meet the 3%-of-GDP limit on public deficits. In this context, the need to harmonize national taxation, that had been advocated by the European Commission in the late 80s on the eve of the Single Market completion, has not been felt compelling and national tax structures, that were significantly different, have actually not tended to converge overall. But as monetary unification is in reach, the potential dangers — or advantages — of tax competition are being debated again and some efforts at harmonizing some taxes are again on the EU agenda, with proposals by the EU Commissioner for the Single Market, Mario Monti, and some national governments, in the field of business taxation, interest income taxation, etc.

This paper attempts to give an overview — in many respects preliminary and incomplete — of tax competition issues within the EU, adopting a broad definition of taxation — the OECD one, including compulsory social contributions. The first section summarizes some of the conclusions of the literature on tax competition amongst local governments in an economically and monetarily integrated area — i.e. within national, federal or unitary, economies —, as well as the implications of the macroeconomics of fiscal policy coordination problems in a monetary area. The second section briefly reviews the major instruments national governments may use for tax competition. In the third section, some evidence on the extent of tax competition within the EU is presented, with special attention dedicated to the field of business taxation. Finally, the fourth section offers some concluding remarks, many of which are in the form of question marks.

1. *Incentives for governments to enter tax competition*

The move to monetary union in the EU may, to some extent, be compared to the completion of the Single Market: it is likely to strengthen market integration, which has indeed been one of the major arguments in favor of EMU (European Commission, 1990). It is actually likely to have more powerful effects on the various markets than the simple dismantling of national border controls and legal obstacles to mobility: in markets for goods and services, expressing all prices in the same unit will make differences more visible, while the disappearance of exchange rate changes will make their evolution less erratic, thus facilitating arbitrage activities; in financial markets, transparency and the absence of exchange risk will also enhance integration; and the same reasoning applies to firm location decisions, i.e. cost conditions in the various locations. All this will mean enhanced competition in the various markets and increased mobility of the various goods, services and factors.

In such an environment of integrated markets, national governments may be tempted to enter tax competition in order to attract business on the national soil. Thus, the incentives for tax competition depend upon international mobility of goods, services, capital and businesses, which determine the sensitiveness of the tax base to international differentials in taxation. Two strands of the literature may be mobilized to analyze tax competition: one is the extensive body of research that has developed in federal states — and more recently in decentralized unitary states — about competition amongst local governments; the other, more scant, is the macroeconomic analysis of taxation and fiscal policy in the open economy.

1.1. Tax competition amongst local governments in an economically integrated area

In the context of «fiscal federalism» (Oates, 1972), i.e. a system of multilevel, decentralized governments controlling some tax instruments within a monetary area and perfectly integrated markets, there will likely be tax competition amongst local governments, the outcome of which depends on the degree of mobility of the various factors and on the tax instruments that may be used. In such analyses, it is assumed that governments provide local public goods that benefit households.

When individuals can move freely amongst jurisdictions, at no cost, and local governments use lump-sum taxation on individuals to finance local public goods, the famous Tiebout (1956) assumption of «voting with one's feet» leads to the conclusion that competition amongst a large number of small local governments in the provision of local public goods will yield an optimal allocation of resources: tax payers are then in a position to shop around and choose the bundle of public goods and taxation that best corresponds to their preferences. Decentralization with lump-sum taxation thus mimics the purely competitive market for private goods. This conclusion, however, only holds under very restrictive assumptions: free and costless mobility, lump-sum taxation of individuals, no increasing returns in the production of public goods, etc. In addition, if preferences for public goods are correlated with incomes, the Tiebout mechanism will lead to a spatial segregation according to income levels. In practice, of course, lump-sum taxation of individuals of individuals is nowhere practiced[26], and most other assumptions are equally questionable, so that this optimality result is of limited relevance, at least in the context of the EU[27].

Most analyses of tax competition amongst local governments are carried with the assumptions that individuals are residentially immobile and the local authorities use tax instruments that generate distorsions, i.e. proportional or progressive taxation on transactions or incomes. In the case of indirect

[26] A recent exception is the attempt made in the UK under the Thatcher government to introduce exactly this financing for local authorities, with the so-called «Poll tax», or «Community charge», the local jurisdictions being effectively treated as «clubs». As is well known, the system proved so unpopular that the UK government had to step back on the reform.

[27] However, tax and social competition amongst member states is sometimes regarded as being one of the potential dangers in the EU. We will get back to this point later.

taxation (sales tax or VAT), Mintz and Tulkens (1986) show that tax competition is not optimal and generates trade diversion.

The case of capital income taxation is more interesting, in that it seems more relevant for the EU context and allows to exhibit a number of allocation and distributional aspects of tax competition. In a perfectly integrated capital market, the local taxation of income from capital — a tax on firms' profits, i.e. taxing capital income according to the source, or origin, principle[28] — affects the spatial allocation of capital: all other things equal, it will move from the jurisdiction where the tax rate is higher to that where the rate is lower. Due to decreasing factor returns, this movement will stop at the point where net-of-tax rates of return are equalized.

Several implications of such tax competition are worth mentioning. First, with a large number of small jurisdictions, tax competition on income from capital will lead to under-provision of local public goods: this arises because of the positive externality, or spillover effect, that a local government inflicts on all others when taxing capital income. It may be shown that this sub-optimality result becomes less severe when the number of jurisdictions is reduced (Madiès, 1997a). Second, part of the incidence of the tax is borne by immobile factors in the jurisdiction: labor income will be lower in the jurisdiction with a higher tax rate; land prices will also be negatively affected.

Again, however, it should be emphasized that these conclusions only hold under quite restrictive assumptions. In particular, productive capital — i.e. firms — is supposed to be mobile at no cost, and not to benefit at all from the public goods and services provided by local governments. When the former assumption is abandoned, and mobility costs are introduced, firms and local governments are placed in a strategic environment and firms' expectations regarding the future course of local taxation have to be taken into account. One consequence is that local governments may then try to attract businesses by granting temporary tax rebates or offering new firms facilities — land, buildings, infrastructures, etc.. Competition amongst local governments is then not limited to one instrument (the tax rate on capital income), but involves the use of both revenue and expenditures. Signaling and credible commitments by local authorities then become an important ingredient in the analysis of firms' location decisions (Madiès, 1997b). In such contexts, it may be shown that competition amongst local governments to attract businesses has little or no effect on the spatial distribution of firms; the latter tend to benefit from such a competition by reaping windfall gains when they move to a specific location.

1.2. Macroeconomic aspects of tax competition

The recent literature on EMU has emphasized the problems that may arise in a monetary area with decentralized fiscal policies in the field of macroeconomic stabilization. Both in case of common adverse shocks and in case of asymmetric — country-specific — shocks, arguments in favor of some form of fiscal policy coordination, or even centralization, usually rest on the existence of

[28] Taxing income from capital at the household's (shareholder's) level according to the residence principle is, theoretically, neutral in terms of spatial allocation when individuals re immobile. However, the problem is then possible tax evasion or fraud, as will be discussed later.

macroeconomic spillover effects, mostly through trade flows, but possibly also by other channels, such as firms' relocations or capital accumulation. The gist of these arguments is that, in such an economically and monetarily integrated area, national governments may be tempted by non cooperative, macroeconomic strategies, of a «beggar-thy-neighbor» type. In the present context of high unemployment, recourse to tax competition is likely to appear particularly attractive, insofar as tax reductions or rebates are usually regarded as «supply-friendly» tools to stimulate domestic economic activity.

In effect, tax competition may be seen as a substitute, in the new European monetary environment, for non cooperative policies pursued by member-state governments in the European Monetary System (EMS), with instruments that will no longer be available to them. Such policies as «competitive devaluations» or even «competitive disinflation» -- of the kind French governments have been pursuing for about ten years – are indeed non cooperative in nature, insofar as they aim at gaining a competitive advantage over, i.e., relative to, other economies within the EMS. Tax competition has exactly the same macroeconomic rationale: it similarly aims at gaining a competitive (cost) advantage over partners in the Union.

2. *Instruments of tax competition in the EU*

On the eve of the completion of the Single European Market, the issue of tax competition in the EU was raised by the Commission and some national governments. Given the likely consequences of abolishing national borders, attention focused on the risks arising in the fields of indirect taxation and taxes on income from personal savings. More recently, with the perspective of monetary union, fears were expressed that tax competition may happen in the field of business taxation and that social dumping may, in practice, develop as a way of attracting firms.

2.1. Indirect taxation

Whereas the generalization of VAT in Europe — and in a large fraction of the world — has characterized the 60s and 70s, the structures of rates and classification of goods and services had remained quite heterogeneous amongst member countries. However, insofar as the destination principle prevails for VAT, the potential for use of such an indirect tax for the sake of tax competition is extremely limited: although it does indirectly affect domestic production costs, due to some imperfections in the deduction rules, this influence may be regarded as negligible.

Other indirect taxes do, however, affect domestic production costs, at least in some sectors. This is so in particular for taxes on fuels and the projected taxes on polluting activities — the so-called «eco-taxes». Whereas the current level of these taxes has probably been already reflected in overall domestic production prices, thanks to competition and past exchange rate changes, the same would not be true for future modifications in the rates of such taxes, which would effectively increase domestic production costs.

2.2. *Taxes on personal savings*

With the complete liberalization of cross-border financial transactions and the abolition of exchange controls in all European countries in the late 80s, combined with deregulation of financial markets and financial innovations, international mobility of financial capital has increased, and is not limited to the EU markets, but worldwide. The previous modes of taxation of income and capital gains from financial asset holdings by individuals and firms, which in most countries has been characterized by a maze of specific tax treatments for some assets or some transactions — France was probably an extreme example of such a complexity, but by no means unique (Gubian and Le Cacheux, 1987; Sterdyniak, *et alii*, 1991) —, could not resist this enhanced competition to attract financial investments. In fact, tax competition already existed before, many countries having a different regime for residents and non-residents. But with complete financial liberalization, the pressure of tax competition increased and tax rates were driven down to very low levels in most countries.

The Commission's proposal to create a minimum withholding tax at source was never accepted by those countries having low tax rates on financial investment income and capital gains and a tradition of bank secret — in particular Luxembourg — while countries, such as Germany in 1989 and Belgium in 1992, that had tried to introduce a withholding tax on interest income have had to retreat in the face of large capital outflows. It should however be stressed that tax competition on financial assets is only effective because of tax evasion and fraud on income from such sources located abroad: indeed the taxation principle that prevails everywhere for personal income is the residence principle, implying that individuals should pay taxes on all their incomes, whatever the country of origin, in their country of residence. Hence, it is only because of failure to implement this principle that tax competition arises in this context. It should also be added that, after an initial phase of tax pressure reduction on this category of incomes, the recent tendency in most EU members has been to raise average tax rates again, while, in many cases, preserving the distinction between residents and non-residents.

2.3. *Business taxation*

Attempts at attracting businesses by providing them with a favorable tax treatment have always existed, especially in economically backward countries; for some European countries, such as Ireland, or regions, it has long been part of their «catching-up» strategy. In Europe, this kind of competition has yielded a marked decline and convergence — in the range of 30% to 40% — of statutory tax rates on firms' profits, in the late 80s. But this move is only the visible part of the process: special tax treatments — for coordination centers, for specific sectors — have proliferated, as well as tax holidays for newly installed firms in many regions or localities, and subsidies in cash or in kind — real estate, infrastructures, etc. Although the Commission's competition policy rules have attempted — and in some cases succeeded — to check these practices, they seem to be very widespread in most member states of the EU.

2.4. *Social dumping?*

Given the importance of social contributions — and more generally of labor market regulations — in total labor costs, national governments may use social contribution reductions or rebates in an effort to attract firms from abroad or to grant a competitive advantage on the domestically based firms. In spite of occasional airing of such critiques aimed at some EU members — the UK, for instance —, there does not seem to have a widespread recourse to such instruments of tax competition, at least across the board. Some instances may however be identified in specific sectors — textile in France, for example —, though, again, the Commission competition policy has usually checked these attempts.

3. *Evidence*

So far, the evidence of tax competition amongst member states of the EU is rather scant, except in the field of financial investments, for which the Commission has recently restated its proposal to create a withholding tax of 15% on interest income, that would in effect act as a floor on national taxation of such incomes. However, given the fact that the EU is financially completely open, the overall consequences of such a device should be carefully weighted against potential benefits in terms of internal tax competition: from the viewpoint of EU residents, such a tax may be regarded as an incentive to export capital, while it effectively would function as a tax on capital imports from the rest of the world.

For other taxes, evaluating the degree of tax competition is a difficult exercise, due to the many forms it can take and the absence of synthetic indicators of their overall consequences on economic incentives.

3.1. *National tax structures in the EU*

The total tax pressure, as measured by total tax receipts as a ratio of GDP, has tended to increase in all EU members over the past decades (Charts 1a and 1b), although a stabilization is apparent in some countries over the most recent period. Even though this increasing trend is common, the charts do not display clear signs of convergence on this global indicator, except for countries of Southern Europe that clearly «catch up». These European trends however stand in clear contrast with developments in the US, were total tax pressure has been remarkably constant over the past decade.

The structures of national tax receipts in EU member states were indeed very different in the mid-80s, at the time when they signed the Single European Act (Chart 2a). But, contrary to what may be expected if tax competition had been effective, there has been little evidence of convergence in national tax structures over the following decade (Chart 2b). Some common trends may however be identified over the recent years, not only in the EU but in the OECD at large. First, the share of indirect taxes in total receipts has tended to increase, while the share of personal income taxes has been reduced: in many countries, tax reforms in the late 80s and early 90s have simplified the structure of personal income tax rates, reducing progressiveness and somewhat enlarging the base; meanwhile, there has been a significant shift to specific, excise type, indirect taxes on some goods — tobacco, alcohol, pollutants in particular. (Le Cacheux, 1997). Second, efforts have been made to alleviate taxation on labor income and/or labor costs, either by modifying the base (as in France with the CSG), or by switching to other sources of financing, such as indirect taxation.

3.2. VAT and indirect taxes

The evidence of tax competition on indirect taxes — VAT and excise duties — is not conclusive either. In the mid-80s, before the beginning of negotiations to harmonize indirect taxes in the perspective of completing the Single Market, the spreads on the various VAT rates in EU member states were large indeed, but they were about as large ten years later (Table 1). In spite of the Commission's efforts to impose a harmonization process aiming at taxation at source, which would have implied a narrowing of the spreads, member states have apparently been content with the so-called «transitory regime», which preserves the destination principle — implying a distinction between sales in the domestic economy and tax-exempt sales in other member states' economies, treated as «exports», thus effectively breaching the single-market principle — and simply imposes rules on the number of rates (two in principle, often three in practice) and minimum rates (5% for the reduced rate, 15% for the normal rate). Whereas this «transitory regime» is often presented as cumbersome for firms and as conducive to frauds, it offers the obvious advantage of preserving the basic principles of VAT, as well as national governments' autonomy, without leading to much competition. Clearly, the abolition of border controls has somewhat increased the possibility of cross-border trade for individual consumers; but this seems to be limited significance and has always existed.

The stakes of excise duties' harmonization are potentially higher, especially for some activities — road transportation, for instance —, in that they have a large impact on production costs. In the early 90s, national governments have agreed on — fairly wide — ranges for major excise duties; but, as exemplified in France in the current debate on increasing the tax burden on diesel fuel, the margin of maneuver of national governments is still large. In the European monetary union, the issue may become more acute, especially with respect to the various projects of «eco-taxes» that are being discussed in many member countries: a non coordinated introduction of such taxes may have large effects of the competitive positions of firms in some sectors, such as energy and energy-intensive productions.

3.3. Capital income taxation

The relative convergence of statutory tax rates on firms' profits (Table 2) and on individual investors' incomes and capital gains, that has been reported in the previous section, does not, in itself, give much indication on the extent of tax competition and effective differences amongst member states in the tax treatment of such incomes: as is well known from standard microeconomics, the effect of differences in taxation on economic decisions — to save, to invest and to locate businesses — depends on their marginal impact on the rates of return to investment, which in turn depends not only

on apparent tax rates, but also on rules determining the tax base — depreciation allowances, interest expense deductions, local tax deductions, possible tax credits, etc. —, on possible tax credits for investments, subsidies, etc. What is needed to evaluate the outcome of all these aspects of the tax code is a synthetic indicator of marginal effective tax rates on capital returns.
Although the building of such indicators is theoretically quite straightforward (see, for instance, King and Fullerton, 1984; Gubian, Guillaumat-Tailliet, and Le Cacheux, 1986), in practice, it is quite cumbersome, both because it requires information on the various aspects of the tax codes, national and local, as well as on subsidies, for all situations firms may face in a given location, and because data on important determinants of effective tax rates — such as balance-sheet structures, for instances — are not always available with sufficient detail. It is nevertheless possible to carry out such calculations for various types of firms; they are partial by nature — they do not take local taxation into account, for instance — and rest on a number of specific assumptions — concerning financing, in particular —, but these calculations show how large the current spreads of effective marginal tax rates actually are, pointing to the potentially large consequences of tax competition on capital income(Devereux, 1995 ; Le Cacheux, ed., 1999).

4. *Concluding remarks*

Although the evidence on tax competition in the EU is not conclusive so far, it is quite likely that the completion of monetary union will strengthen the potential for such practices. While some analysts point to the advantages of having competition amongst tax and social systems, in that it would «tame Leviathan» and enhance efficiency in national public sectors, the bulk of the literature on the microeconomics of tax competition concludes that it does lead to inefficient outcomes, in the provision and financing of public goods and services, as well as to horizontal inequity amongst tax-payers benefiting from incomes from different sources.

4.1. Some conclusions from the microeconomics of tax competition

While the latter consequence of tax competition has attracted much attention, in particular in France, the former is at least as serious and the evidence of sizable differences on effective tax rates on capital income suggests tha, with increased mobility of financial capital and businesses, tax competition may constitute a serious threat.

4.11. Inefficiency of tax competition

The inefficiency that arises in the context of tax competition originates in the distorsion it introduces in the spatial distribution of productive capital. Not only does it alter the returns on immobile factors; it leads to under-provision of public goods and services, due to spillover effect and to the characteristics of these goods and services, namely non-excludability and, usually, increasing returns to scale in their production. This implication may be mitigated if firms make their location decisions by taking account of at least some of the public goods and services, either because they directly benefit from them (infrastructure, for instance), or because their employees do.

4.12. Strategic aspects of tax competition

Outside the ideal world of perfect mobility at no cost, and perfect competition amongst firms, tax competition has strategic aspects that are worth recalling. In particular, although tax competition is potentially very costly for public finances, it may have little or no effect on the firms' location decisions, and simply generate windfall gains for firms when they change location. Moreover, in such an environment, the predictability and credibility of national governments' tax policies is an essential ingredient of any policy aiming at attracting businesses.

4.2. Individual fiscal nomadism?

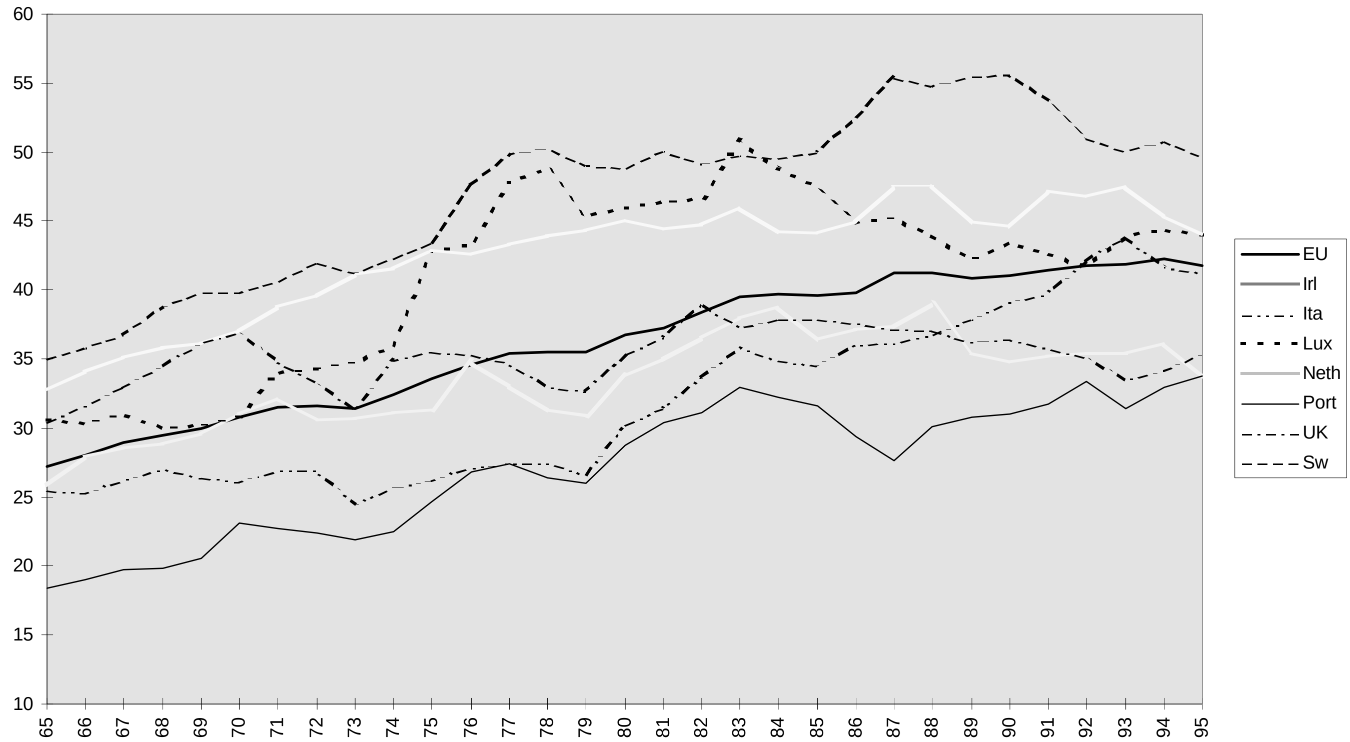
Most national tax and social systems are characterized by at least some degree of redistribution amongst individuals at a point in time; but a significant part of this redistribution in fact operates over the life-cycle of individuals, so that in a steady demographic environment and with unchanged rules for taxation and social protection, the net inter-individual redistributive effect of the system is probably much more limited than apparent. In such a context, increased individual mobility may result in opportunistic strategies of «fiscal and social nomadism»: individuals may indulge in «fiscal shopping», changing residence over their life-cycle, in order to maximize net benefits from the social systems. Such strategies would obviously jeopardize the foundations of European welfare systems.

4.3. Is harmonization the answer?

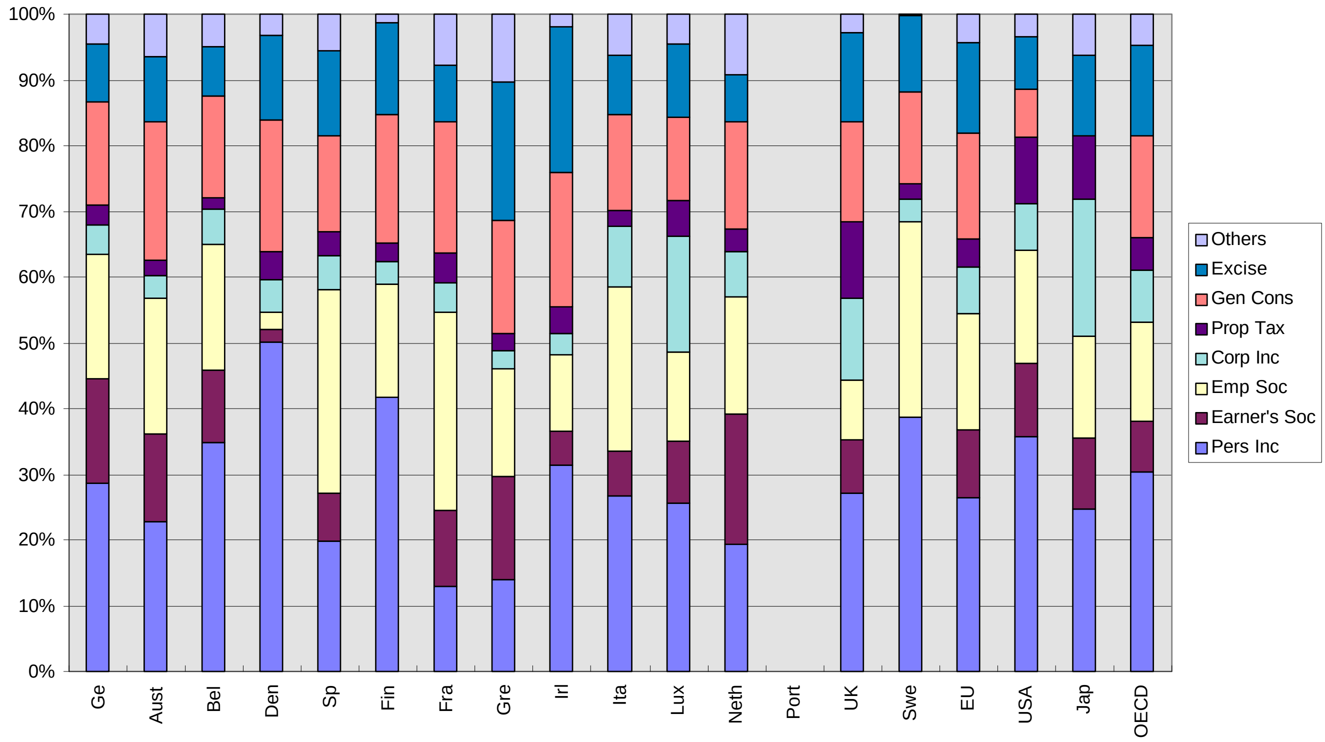
Faced with the potential dangers of tax competition, but also with requirements of subsidiarity and the desire of national governments to retain some degree of autonomy in tax matters, the Commission has repeatedly aired harmonization proposals. So far, their success has been of limited significance. More recently, a «code of good behavior» for business taxation has been discussed, in order to prevent the more obvious forms of tax dumping. However, if monetary union does lead to an increase in mobility of firms, and possibly of at least some categories of individuals, then harmonization may not be sufficient. The Commission's competition policy rules act as a safeguard against the clearest attempts of national governments to underbid their partners; but short of a complete unification of business taxation, there will always be ways for governments to compete with taxes and subsidies. The question really is how much inefficiency and inequity will European member states tolerate as a price for their fiscal sovereignty.

1a. Total Tax Pressure in EU Member States (1965-1995, % of GDP)

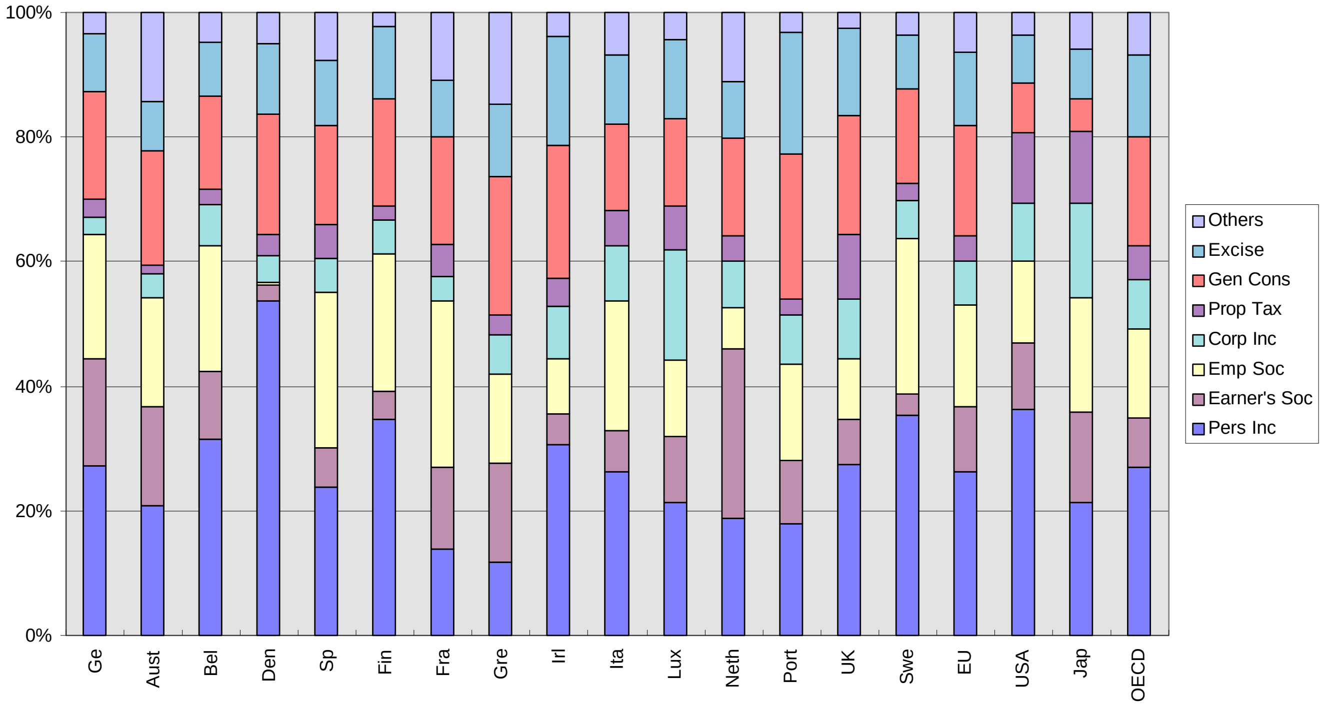
1b. Total tax pressure in EU members states (1965-1995, % of GDP)



2a. Tax Structures in 1985 (% of total tax receipts)



2b. Tax Structures in 1995 (% of total tax receipts)



Source :OECD, 1997.

*Table 1. Changes in VAT standard rates **between** 1990 and 1998*

	90	91	92	93	94	95	96	98
Austria	20	20	20	20	20	20	20	20
Belgium	19	19	19.5	19.5	20.5	20.5	21	21
Denmark	22	22	25	25	25	25	25	25
Finland	-	-	-	-	22	22	22	22
France	18.6	18.6	18.6	18.6	18.6	20.6	20.6	20.6
Germany	14	14	14	15	15	15	15	16
Greece	18	18	18	18	18	18	18	18
Ireland	23	21	21	21	21	21	21	21
Italy	19	19	19	19	19	19	19	20
Luxembourg	12	12	15	15	15	15	15	15
Netherlands	18.5	18.5	17.5	17.5	17.5	17.5	17.5	17.5
Portugal	17	16	16	16	16	17	17	17
Spain	12	12	13(1)/15(2)	15	15	16	16	16
Sweden	23.46	23.46	25	25	25	25	25	25
UK	15	17.5	17.5	17.5	17.5	17.5	17.5	17.5

Source : European Commission, *European Tax Handbook*, IBFD publication 1998
(1) from 1/1/1992
(2) from 1/8/1992

Table 2. Changes in standard rates of corporate income taxes (1990-1998)

	1990	1991	1993	1994	1998
Belgium	43	39	39	39	39(3)
Denmark	40	38	38	34	34
France (1)	37/42	34 / 42	34	33.3	36.2/3 (4)
Germany (1)	50/ 36	50 / 36	50 / 36	45 / 30	45 / 30 (2)
Ireland	43	43	40	40	32
Italy (1)	36	36	36	36	37
Luxembourg	34	33.33	33.33	33.33	30
Netherlands	35	35	35	35	35
Portugal	36.5	36	36	36	34
Spain	35	35	35	35	35
UK	35	34	33	33	31

Source : A tax guide to Europe 1994, edition Arthur Andersen, *Les impôts en Europe 1997* Eura Audit, *European Tax Handbook*, IBFD publication 1998.

(1) The first rate applies to non-distributed profits, the second to distributed profits.
(2) A 5.5% surcharge is added to this standard rate.
(3) A 3% surcharge is added to this standard rate.
(4) The standard rate is 33.3%, but a 10% or 25% surcharge is added according to the specific situation.

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Tax policy under EMU
(comments on the paper presented by Jacques Le Cacheux)[29]

Michel Didier
Professor, CNAM; Director, Rexecode

I - Federalism and open economy theory

Two ideas in economic literature can be referred to in order to analyze tax competition : the federalism economic theory and the macroeconomics of open economies.

1. The federalism theory

The reference to the federalism theory is based on the fact that we can think of the EMU as a Federal State, each country of the EMU being the local States of the Federation.
This way of thinking presents two limits.

1.1. The first limit is due to the limits of the spatial theory built on Tiebout's paper. Le Cacheux is right to outline the very restrictive assumptions of the model of Tiebout (mobility of capital, lump-sum taxation of individuals, no increasing returns). The theoretic world of Tiebout seems quite far from the real world of Europe. So, I'm not sure that we can draw many lessons from this approach.
For example, it has been shown that in Tiebout's model, tax competition on income from capital could lead to underprovision of local public goods. That is probably true in theory. But, in practice, this does not seem to be the number one problem in Europe.

1.2. The second limit to the federalism theory is the fact that the idea of federalism is generally associated with a sort of equilibrium between a central government and a decentralized government either of which being responsible for a significant part of the provision of public goods and services in the Federation.
The allocation between the European level and the countries level is not in any kind an equilibrated one. The European level is mainly a level of regulation, all the taxes and public budgets being decided upon and applied at the State level.

[29] The paper submitted by Jacques Le Cacheux addresses the question of tax competition in the European Monetary Union. If, within a same monetary zone, different countries or public entities set up different tax rates on the revenue of capital, and if the capital is mobile between countries, the question is : should we expect that the " lower-rate country " would experience the higher rate of production and employment ?

2. Taxation in an open economy

The second approach is based on the macroeconomic analysis of open economies. Jacques Le Cacheux refers to recent literature on the problems of macroeconomic stabilization that may arise in a monetary area with decentralized fiscal policies, including the famous problem of asymetric shocks.

It seems to me that the structural aspects of the problem are perhaps more important than stabilization policies, and that they are less deeply analyzed.

Let me just say, by the way, that I don't fully agree with the view of section 1-2 of the paper that a competitive disinflation (of the kind the French government has been pursuing) is a noncooperative game. We should say, on the contrary, that the convergence of inflation rates, which meant for many countries an effort towards more acceptable levels of inflation, is a typical cooperative game.

Going further into the area of the macroeconomics of open economies, I would like to present some complements to Jacques Le Cacheux's very interesting work .

II - Some comparisons on fiscal wedges

First, we have to observe that the impact of taxes on general economic equilibrium is not directly linked to the party paying the tax. A case in point is the social charges, a part of which is paid by the employee and another part of which is paid by the employer. Although they are paid by different economic entities, the final effect is relatively similar in that both participate in the gap between the total cost for the employer and the net salary received by the employee. What is important is not who is supposed to pay but the total fiscal wedge created by the legislation.

So, if we want to analyse the impact of tax systems in different countries, given a single monetary system, we must do two things :

1. Try to look behind the individual detailed tax legislation for each member country in order to understand what kind of wedges each of these systems creates.

2. Try to understand how the wedges affect the economic situation in each country. This second point has to be studied not only from a static standpoint but also from a dynamic standpoint.

In short, the tax system can be summarized by three different wedges : one on the market of goods and two on the markets of production factors : labor and capital. Each wedge creates a difference between the price paid by the buyer and the amount received by the provider. From a static equilibrium analysis, we can estimate that the larger the wedge, the farther we get from the general equilibrium of the economy. But the situation is not as simple as that because the impact of the wedge also depends on the elasticities of the supply and demand curves. The fact remains though that there is a large gap beween the different socio-fiscal wedges of each member country.

1. The total wedge

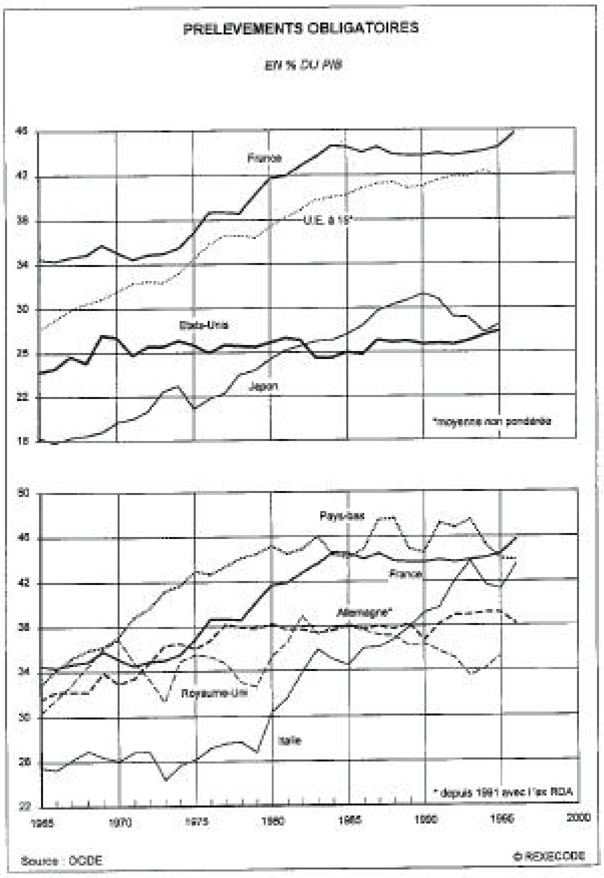
Let's first take a look at the global wedge, defined as the total social and fiscal burden on the GNP of European member countries.

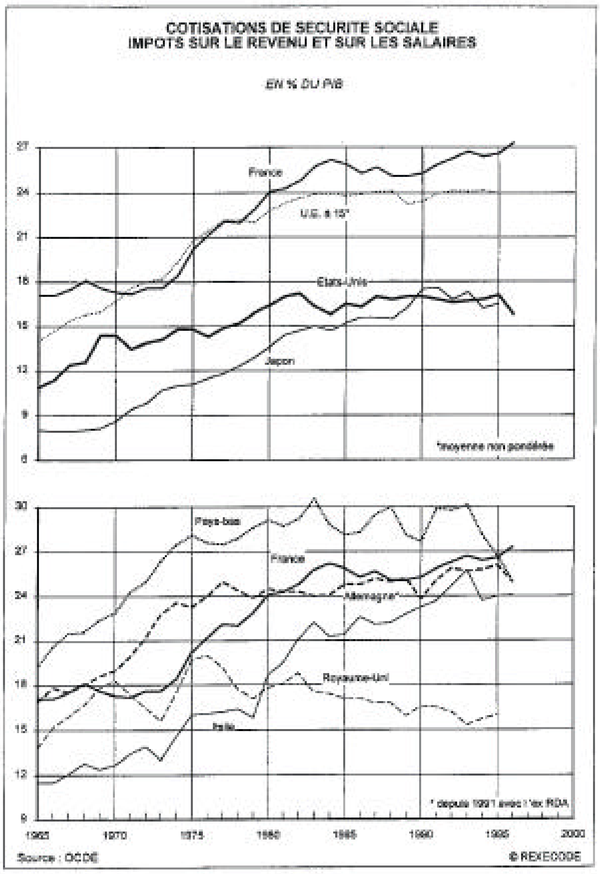
As you can see, the highest level is for Sweden at 52%, and the lowest is for Portugal at 33% (year 1996). For the five leading countries, the ratio ranges from 35% (United Kingdom) to 46% (France). We have not seen yet any process of convergence on the global wedge (but for the total of social contributions and income tax, this convergence is clearer).

It would be interesting to go further into the comparisons and to estimate each of the three wedges, on the labor market, on the capital market and on the market of goods and services.

Tax and Social Contributions (% of GDP) (Year 1996)	
The United States	27.9
Japan	28.5
Portugal	33.4
Spain	33.7
The United Kingdom	35.1
Canada	37.2
Germany	38.2
Greece	41.4
The European Union	42.4
Italy	43.5
Holland	43.9
Austria	44.1
France	45.7
Belgium	46.6
Finland	48.8
Denmark	51.9
Sweden	51.9

Note : The figures for Greece, Japan, The U.S. and Canada are 1995 figures. For the United Kingdom and the European Union, the data is supplied by Eurostat.



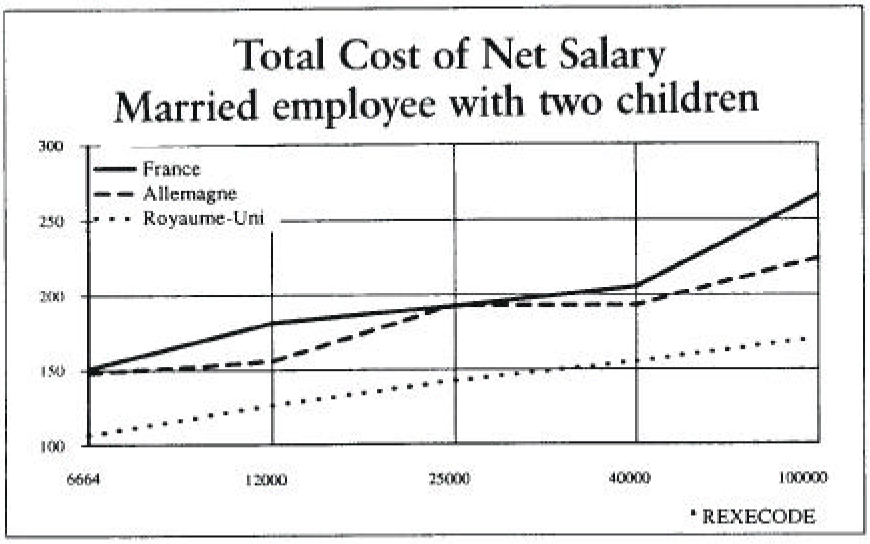


2. The wedge on the labor market

The most classic wedge is the wedge on the labor market which has been the object of a lot of analyses from a theoretical point of view, but less from a practical point of view. Rexecode has looked into this question and has compared quite precisely the gap between the cost of labor for the employee and the net revenue received by the employer, after social contributions and income taxes have been deducted. As income tax depends on the family situation and on the level of income, we have developed several hypotheses. We also have to take into account government allowances to families because in some countries, they are paid by the Government and, in other countries, they are received in the form of tax deductions on income tax returns.

Let's take a look at a typical married employee with two children. In order for the employee to receive the same sum of, let's say one hundred units, in three different countries, France, Germany and the United Kingdom, we can observe that in any country, the higher the salary, the higher the wedge. But beyond this particular similarity, there are several significant differences between the three countries.

Total cost to an employer for a before-Tax salary of 100 F *Married employee with two children*			
Monthly salary in FF	France	Germany	The United Kingdom
6664	151	148	107
12 000	181	156	127
25 000	193	193	143
40 000	205	193	155
100 000	266	224	171



The levels of the wedge are very different at any given salary level. For example, let's look at a low monthly salary (taken at the minimum wage in France) in our exemple. The wedge ranges from 107 for the U.K. up to 151 for France, which represents a huge difference. Germany is lower than France for every salary level, but is much closer to France than to the United Kingdom.

For a much higher gross monthly salary (of let's-say, 40000 FF), the wedge ranges from 155 for the U.K. to 205 for France, which creates a relatively lower gap than for low salaries between the three countries. Another way of presenting this situation is to compare the ratio of wedges for high salaries and for low salaries in the three countries. The ratios are 1.59 for the U.K., 1.48 for Germany, and 1.76 for France. So Germany resembles France for the absolute level of the wedge, but resembles the U.K. more for the range of wedges between low and high salaries.

The view is different for a single person (see annex), and this confirms the complexity of the distortions. To summarize, we can say that the combination of social and fiscal policies will create distortions among the different European member countries, and that those distorsions would depend on the salary level. This also means distortions on the qualification structure of the labor demand. We don't yet know the exact consequences of such distortions on the individual country economies, but we can imagine that, for example, the fiscal policies would have indirect and perhaps undesired consequences on the structure by industrial sector, encouraging or discouraging perhaps high technology sectors which necessitate highly skilled workers.

3. The wedge on the capital market

Let's now turn to the wedge on the cost of capital. This situation is much more complicated to analyse because it can depend on such factors as how the investment is financed. For companies, tax regulations are different for investments financed by borrowing and for investments financed by company capital. For an individual investor in a company, tax regulations are not the same if the money is lent or if it is invested by the purchase of shares. And finally, a part of investments are financed not directly but through Financial Institution. To avoid the problem of the level of intermediation by the financial sector in each country, we can examine the situation of direct investors.

If we take France as an example, a taxable profit will generate a succession of taxes, which are described in Table 1.

We can read in Table 1 that the ratio of taxable profit to the net disposable income is between 200% and 300% (depending on the absolute level of income). Those ratios are typically the same as ratios of cost of labor to net income for the employee.

We cannot present the same calculation for other European countries, but we can suggest that the gap between the wedges on capital are very high if we compare some components of it for five countries (corporate tax and maximum tax marginal rate income).

Table 1
France, wedge on capital for a shareholder

	Marginal Rate of income tax	
	33%	54%
1- Taxable profit	100.0	100.0
2- Corporate tax	41.6	41.6
3- Net	58.4	58.4
Determination of taxable income		
4- Tax credit (50% of 3)	29.2	29.2
5- Income (including tax credit)	87.6	87.6
6- Deduction of a part of social contributions (5,1%)	-4.5	-4.5
7- Taxable income	83.1	83.1
Determination of tax payments		
8- Social contributions (10% x 5)	8.8	8.8
9- Gross income tax (rate x 7)	27.7	44.9
Wedge (8+9+2-4)	48.9	66.1
Net disposable income	51.1	33.9
Ratio : taxable profit divided by net disposable income (%)	195.6	295.0

Table 2
Components of the wedge on capital

	Rate of diffenrent taxes (%)				
	France	Germany	Spain	Italy	UK
Corporate profits	41.6	32,2	35	53,2	21 to 31
« Professional tax »	Yes (project to decrease de labor base)	Yes	Yes	No	No
Income tax	64	53	56	51	40

(maximum rate)					
Capital gains	20,9	0	0/20/35	With income tax	With income tax

III - Some additional views

Let me also outline some other points which were just quickly (or not) mentioned in Jacques Le Cacheux's paper and which could be put on the agenda for some other research in the future.

We should ourselves if we can really try to measure the impact of tax policy on the economy if we don't also take into account the impact of public goods on the production sector and on the welfare of the population.

The impact of the public sector can be considered from different points of view. It seems reasonable to make a distinction between the direct provision of public goods like Safety, Justice and Education, and the provision of redistribution services like Social Security contributions and benefits, Unemployment benefits, and so on. The global tax wedge could be higher in a country because a higher part of the public goods and services are provided by public entities, the level of the production of the public goods and services being the same, or because the levels of production of public goods and services are different in the two countries. The two situations are different. In the first one, we should take into account the external effects of public goods on the competitiveness of the economy. In the second , we should compare the efficiency of public or private provision of the same level of "public" good.

A second point is that it is necessary to think of the economies dynamic systems. There are two consequences :

1. When thinking of the impact of the wedge, we have to take into account the elasticities of the cost of labour to wedge shocks. If appears that the reaction of the labour market are different in the European countries.

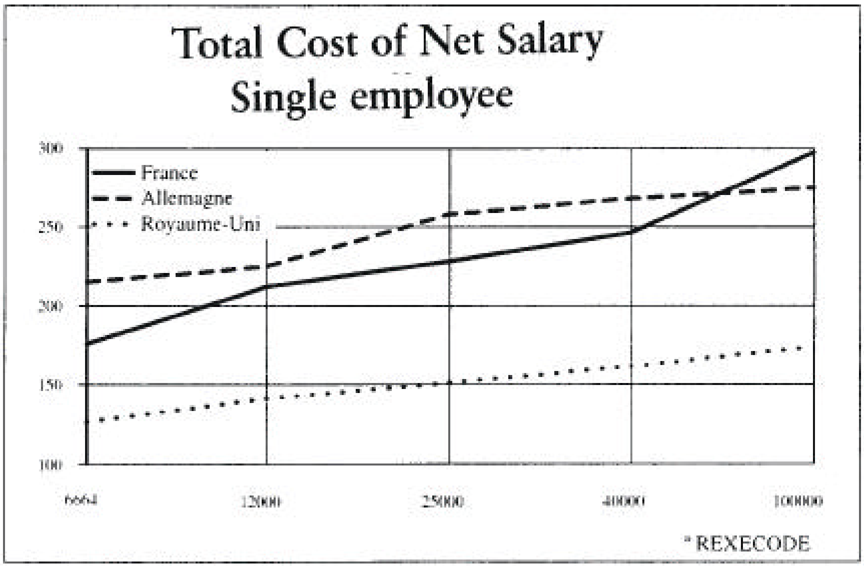
Elasticity of labor costs		
In relation	**Employer Social Security contributions**	**Employee Social Security contributions**
Germany	1	1
Canada	0.8	0.8
Japan	0.5	0.5
Finland	0.5	0.5
Australia	0.5	0.5
France	0.4	0.4
Italy	0.4	0.4
Sweden	0	0
The US	0	1
The UK	0.25	0.25

Source : Tyrvainen, "Real wage resistance and Unemployiment : multivariate analysie of cointegration relations in 10 OECD economies", Study on Employment

2. From a long term point of view, if we refer to the Endonegeous Growth Theory, we can suspect that a possibility of divergence does exist within different territories. This is the central point of our discussion because it is not clear if the possibility of divergence due to wrong fiscal policy should be increased or decreased in the EMU.

ANNEX

Total Cost for employer for a salary before Taxes of 100 FF *Single Employee*			
Monthly salary in FF	France	Germany	The United Kingdom
6664 (worker)	176	215	127
12 000 (employee)	212	325	141
25 000 (manager)	228	368	151
40 000 (top manager)	246	268	162
100 000 (managing dir.)	297	275	174



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Zentrum für Europäische Integrationsforschung
Center for European Integration Studies
Rheinische Friedrich-Wilhelms-Universität Bonn

Walter-Flex-Strasse 3
D-53113 Bonn
Germany

Tel.: +49-228-73-1732
Fax: +49-228-73-1809
www.zei.de