

REFLECTIONS ON MACROECONOMIC POLICY AND EUROPEAN UNEMPLOYMENT AFTER MAASTRICHT: SOME EVIDENCE

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Abstract

Effective economic policies that promote conditions for full employment have yet to be seen. In Europe economic policy has suffered many setbacks and restrictions, due, in the main, to the criteria imposed by the Maastricht treaty. In this paper the policy ramifications, as well as the impact that the Maastricht provisions have exerted on European unemployment, are explored. To this effect empirical evidence suggests that the prevailing 'austere' economic conditions might have contributed to a mediocre economic performance and poor record of employment creation (JEL: E12).

Key words: EU, Maastricht Criteria, European Unemployment.

1. Introduction

Despite the commitment of EU member states to the goal of economic and monetary union (EMU), a debate over the matter continues to rage. For the entire of the EU region the convergence criteria implied by the Maastricht Treaty have been the sole source of economic policy targets. The strict deficit and debt restrictions provide a new contractionary framework on the basis of which national budgets are not allowed to be used as means of offsetting distortions within the UE. In the absence of an effective employment policy a number of commentators have been swift to speculate on the future of such economic venture. "The problems arising from unemployment are not only economic problems of inefficiency arising from wastage of human resources, rising public sector deficits and possible monetary instability arising from this but also an increase in social tension and social cost in terms of ill health, increasing poverty, family and community breakdown, and arguably increasing crime levels" (Symes 1995, p. 1).

This paper focuses on issues relating to European unemployment in view of the Maastricht convergence criteria. More specifically, section 2, touches on the controversy surrounding the credibility of the convergence criteria in promoting conditions for full employment. Arguably, the growing polarisation of the debate over such a venture has caused a lot of speculation to emerge. For the lingering doubters the single currency will have an adverse effect on the economic life of all member states; a European super-state endowed with enormous powers will impose a crippling burden of regulatory and other costs on Europe's economies; economic problems such as unemployment, which has been plaguing the lives of millions of people across Europe, will persist due to the restrictive policies that are required to meet the criteria set by the Maastricht treaty and to advance to the ultimate objective. On the other hand, many of its proponents regard EMU as conducive to the creation of a stronger EU with greater economic, political and social cohesion. They maintain that without such a union, European economies will remain divided and weak, unable to compete internationally with the low-wage economies of Asia or with the large high-wage economy of USA.

Moreover, a close look at some statistical tables illustrating the behaviour of some significant economic variables over the period 1960-1998, enables us to visualise the extent to which the deflationary policies that were implemented by all member states have affected their economies. Section 3, attempts to gain a further insight into the European Central Bank (ECB) and its endowed power to set monetary policy. In section 4, the reasons why fiscal policy is still a policy instrument that can be used to eliminate unemployment are spelled out. In section 5, an empirical exposition of some regression results provides some indicative evidence of the extent to which the policies implied by the convergence criteria have influenced a number of economic indicators after the ratification of the Maastricht treaty, while, section 6. concludes.

2. Maastricht vs. European Unemployment

Advancing towards an era where the seeds of globalisation have started to take root, in Europe, over the last decade, the economic policy alternative has revolved around the convergence criteria ratified by the Maastricht. The contractionary postulates - strict deficit and debt restrictions - that such a venture involves have wiped out any hope of resorting to a corresponding expansion of the EU budget to offset contractionary effects and resulting distortions within the Community.

A quick inspection of some economic indicators suggests that a poor economic performance has permeated nearly all EU member states after the ratification of the Maastricht Treaty. Table 1 exposes the trend around which the growth rate of GDP has fluctuated before and after 1992.

TABLE 1
GDP, Growth Rates (Averages)

COUNTRIES	1961-66	1967-72	1973-78	1979-84	1985-91	1992-98
Germany	4.5	4.2	2.5	1.5	4.6	1.7
France	5.7	5.1	3.2	1.8	2.7	1.6
Italy	5.3	4.9	3.7	2.3	2.7	1.1
Netherlands	4.5	5.2	3.0	1.1	3.0	2.5
Belgium	4.7	5.0	3.0	1.4	2.6	1.5
Luxembourg	3.2	4.2	2.3	2.2	5.9	4.6
U.K.	2.9	2.7	2.2	1.2	2.6	2.2
Ireland	3.3	5.4	5.2	2.6	4.1	6.4
Denmark	4.6	3.9	1.9	2.0	1.8	2.3
Spain	8.5	6.1	3.6	1.0	3.9	1.7
Greece	7.8	7.7	4.4	1.5	2.2	1.6
Portugal	6.0	7.0	3.8	2.0	4.3	2.0
Sweden	4.7	3.6	1.8	2.0	2.2	2.4
Finland	4.5	5.2	2.2	4.0	3.9	3.6
<i>Austria</i>	4.3	5.0	2.9	1.9	2.9	1.7
<i>USA</i>	5.2	3.2	3.4	2.3	2.4	2.6
<i>Canada</i>	5.8	4.5	4.4	2.6	2.6	2.5
<i>Japan</i>	9.4	9.7	3.9	3.5	4.5	0.8
<i>OECD countries</i>	5.2	4.6	3.4	2.7	3.5	1.9

Sources: OECD Economic Outlook

The growth rates of GDP for all 15 countries suggest that a substantial effort had been made to sustain economic growth during the first two periods. Public expenditure-type policies were the chief reason behind such achievement. After that, a spell of economic slow-down¹ (1973-78, 1979-91) gave way to a period of short-lived economic growth. Then the ratification of the Maastricht treaty heralded a period of low growth, mainly due to the policies implied by its target figures². Likewise, the trend around which the growth rates of GDP

fluctuated in the rest of the OECD countries as well as in Canada and Japan separately, resembles the one that characterizes the EU economies, i.e. a constant decline.

In the 1960s, there was general agreement on the priority to be given to full employment policies. After that period, and at least until the mid-1980s, most European countries experienced a rather strong upward trend in unemployment³. Then unemployment fell sharply following the boom in the late-1980s, rose again during the recession in the early-1990s, and is now falling again. A representation of that behaviour can be observed by simply looking at table 2, which documents the average unemployment rates over a period of time (1961-1998) for all 15 countries.

TABLE 2
Unemployment Rate (Averages)

COUNTRIES	1961-66	1967-72	1973-78	1979-84	1985-91	1992-98
Germany	0.7	1.0	3.1	5.5	7.2	9.6
France	1.6	2.5	4.1	7.6	9.8	11.9
Italy	3.6	4.1	4.7	6.8	9.6	11.2
Netherlands	N/A	1.3	3.4	7.3	7.4	6.4
Belgium	2.1	2.3	4.9	10.7	10.5	12.4
Luxembourg	N/A	N/A	0.4	1.2	1.5	2.7
U.K.	1.6	2.5	3.7	8.1	8.5	8.1
Ireland	4.9	5.4	7.3	10.9	15.9	12.9
Denmark	1.3	1.6	4.6	8.8	8.9	10.0
Spain	2.4	3.0	4.4	14.9	18.9	22.0
Greece	5.2	4.3	1.9	5.0	7.5	9.9
Portugal	2.0	3.9	4.7	7.9	6.3	6.4
Sweden	1.5	2.2	1.9	2.7	2.2	7.5
Finland	1.4	2.7	3.9	5.2	4.9	15.8
Austria	1.9	1.5	1.5	2.7	4.6	6.0
<i>USA</i>	5.2	4.6	6.6	7.9	6.2	5.9
<i>Canada</i>	5.1	5.2	6.9	9.5	8.9	9.9
<i>Japan</i>	1.3	1.2	1.8	2.3	2.5	3.1
<i>OECD</i>	2.9	3.7	6.3	10.3	7.8	8.6
<i>Countries</i>						

Sources: OECD, Economic Outlook.

Such a pattern reinforces the notion that a recession is superseded by a boom, in which case job losses while during the downturn are not fully restored once the economy picks up again. The ensuing results is what many economists call 'hysteresis', an inevitable augmentation of the base of the labour force that is out of work.

A point worth noting is that after 1991, the increasing trend in the unemployment rate is uniform in most EU countries. Such a behaviour reflects the contractionary stance that EU governments took in view of the convergence criteria and their ensuing impact on the labour markets.

3. ECB⁴ and Deflation

The emergence of the European Central Bank (ECB hereafter)⁵ as an economic institution⁶ responsible for setting monetary policy within the region is an additional feature that is worth probing. Modelled on the German Bundesbank, its principal objective is the elimination of inflation⁷; hence, the deflationary bias that characterises the economies of all EU countries (see Appendix 1 for a more comprehensive analysis).

Over the years a number of economists have attempted to provide some evidence regarding the connection between deflation and unemployment⁸, and more importantly, the connection between the role of an independent central bank⁹ and unemployment. In some recent empirical studies Hall & Franzese (1998), Cukierman & Lippi (1999) and Kilponen (1999a) all provide evidence of a positive correlation between central bank independence and unemployment¹⁰. Furthermore, different studies have concluded that a central bank with the capacity to set monetary and exchange rate policies separate from governments clashes with traditional demand management (Arestis, McCaulley & Sawyer 1999). Additionally, Kirshner (1998) underlines the lack of evidence as to whether central bank independence does in fact improve real economic performance.

The widely held view that the main role for macroeconomic policy is to control inflation¹¹, and that most unemployment is of a structural¹² rather than a cyclical¹³ nature, in view of which demand management policy is of no use, appears to be influencing the conduct of economic policy in the EU. Such a belief implies that a potential ECB intervention to stimulate demand¹⁴ is ruled out. Any disequilibria in the labour markets should therefore be corrected by fostering policies that promote changes in regulation or reforms in trade union structures or education and training. If these measures fall through, then un-

employment should be accepted as inevitable. Moreover, conducting monetary and fiscal policies independently may well result in cumulative instability (Meade and Weale 1992).

As can be discerned from table 3, combating inflation¹⁵ has been given top priority in the agenda of every EU government.

TABLE 3
CPI, Growth Rates (Averages)

Countries	1961-66	1967-72	1973-78	1979-84	1985-91	1992-98
Germany	2.9	3.2	5.1	4.4	1.8	2.0
France	3.6	5.1	10.1	11.1	3.5	1.4
Italy	4.6	3.8	15.5	15.9	6.2	3.1
Netherlands	3.7	5.6	7.8	4.9	1.3	1.5
Belgium	2.8	3.8	8.9	6.8	2.7	1.6
Luxembourg	2.3	3.6	7.7	7.0	2.3	1.8
U.K.	3.5	5.9	15.0	10.0	5.6	2.0
Ireland	4.0	6.9	14.7	14.6	3.6	1.9
Denmark	5.6	6.4	10.1	9.5	3.8	1.5
Spain	6.9	5.9	17.7	13.9	6.7	3.8
Greece	2.1	2.6	15.5	21.4	17.9	10.4
Portugal	2.4	6.0	21.9	22.7	12.5	4.9
Sweden	4.0	4.9	9.7	9.8	6.9	2.1
Finland	5.0	5.5	13.3	9.4	4.9	1.3
Austria	3.6	4.2	6.9	5.0	2.5	2.3
<i>USA</i>	<i>1.5</i>	<i>4.7</i>	<i>8.1</i>	<i>6.7</i>	<i>3.6</i>	<i>2.0</i>
<i>Canada</i>	<i>2.2</i>	<i>4.3</i>	<i>9.2</i>	<i>8.0</i>	<i>3.0</i>	<i>1.4</i>
<i>Japan</i>	<i>4.6</i>	<i>6.0</i>	<i>9.7</i>	<i>2.6</i>	<i>1.9</i>	<i>0.3</i>

Source: OECD, Economic Outlook.

A quick inspection of the growth rates of inflation for different periods suggest that for the period 1961-78 the rate of inflation is steadily rising whereas for the period 1979-91 and 1992-1998 (after the ratification of the Maastricht treaty) it is subsiding. The latter period is characterized by the deflationary policies that EU member states have adopted so that the prescribed target figure of 1.5 per cent is reached on time. This tendency seems to be uniform in all EU countries, with the exception only of the Netherlands and Lux-

embourg where the growth rate of inflation for the period 1992-98 has gone up by 0.6 percent and 0.4 percent respectively.

The deflationary bias of these policies has caused interest rates to go up and remain at quite a high level throughout the whole period (see table 4). As a result, the volume of investment (see table 5) suffered a major slowdown, which in turn had devastating effects on job creation. An identical pattern of an initial inflationary bias during the period 1961-1972 and a switch to deflationary policies during the remaining period is prevalent in the USA, Canada, Japan and the rest of the OECD countries as well.

TABLE 4
Interest Rates (Averages)

Countries	1961-66	1967-72	1973-78	1979-84	1985-91	1992-98
Germany	6.4	7.5	8.3	8.6	7.2	6.5
France	5.7	7.8	10.4	14.1	9.9	7.0
Italy	5.3	6.3	11.2	16.9	12.3	10.0
Netherlands	4.9	7.2	8.5	9.4	7.3	6.5
Belgium	6.0	7.1	8.5	12.1	9.1	7.0
Luxembourg	N/A	N/A	N/A	N/A	N/A	N/A
U.K.	6.0	7.9	12.6	12.9	10.3	7.8
Ireland	6.1	8.3	13.3	15.5	10.4	7.7
Denmark	7.6	10.5	15.6	18.2	10.3	7.4
Spain	7.4	8.7	10.8	15.7	12.9	9.3
Greece	N/A	N/A	N/A	N/A	N/A	N/A
Portugal	5.5	6.3	11.7	23.3	21.3	11.2
Sweden	5.8	7.1	9.1	12.5	11.7	8.6
Finland	7.8	8.0	9.5	10.6	10.7	7.5
Austria	6.7	7.5	8.9	9.0	7.6	6.2
USA	4.2	6.1	7.6	11.9	8.6	6.7
Canada	5.2	7.1	8.8	12.7	10.2	7.5
Japan	n/a	7.0	7.7	8.2	5.7	3.5

Source: OECD, Economic Outlook.

The preceding table shows how interest rates¹⁷ have fluctuated over a span of 38 years in the EU region, USA, Canada and Japan. The first period 1961-66 is dominated by low interest rates. After that, and more specifically in the three

successive periods, interest rates have risen inexorably, culminating in an unprecedented period of sky-high interest rates. All the policies¹⁸ that led to those double-digit figures had a tremendous impact on the EU economies as well as the economies of the USA, Canada and Japan. Workers employed in the manufacturing sector were the first to experience the rigor of being laid off due to closures and lack of investment. Potentially, the ensuing chain reaction effects ushered in a new era of increasing unemployment and growing inequality that has plagued the entire population ever since. What was to follow was a period of spasmodic¹⁹ attempts to redress the balance by putting a halt to this upward trend. As a result, the following two periods 1985-91 and 1992-98, were characterized by interest rates that were lower but not low enough to ensure the restoration of the earlier volume of investment.

TABLE 5

Investment, Growth Rates (Averages)

Countries	1961-66	1967-72	1973-78	1979-84	1985-91	1992-98
Germany	4.7	3.9	-0.7	0.3	6.7	1.2
France	8.8	6.4	1.1	-0.6	4.7	-0.3
Italy	3.2	5.1	0.7	1.3	3.2	-0.1
Netherlands	7.1	4.0	1.0	-1.2	3.7	2.6
Belgium	7.3	2.8	3.1	-3.0	6.7	1.5
Luxembourg	5.7	3.9	-0.9	-0.5	13.7	2.5
U.K.	6.0	3.1	0.8	1.2	3.4	1.8
Ireland	10.3	8.9	6.2	0.5	0.7	5.9
Denmark	7.9	5.4	-0.3	-1.7	1.8	4.3
Spain	14.2	6.7	1.7	-2.2	9.4	4.0
Greece	9.8	11.1	0.5	-2.3	2.8	5.3
Portugal	9.0	6.7	1.7	-1.6	7.2	4.0
Sweden	6.2	2.8	-0.9	1.5	3.4	-0.5
Finland	4.5	4.8	-0.2	3.7	1.1	-0.1
Austria	7.0	7.2	0.7	-0.2	5.1	2.5
<i>USA</i>	5.9	3.2	3.7	2.6	0.6	5.6
<i>Canada</i>	8.5	3.1	5.3	3.6	5.0	3.0
<i>Japan</i>	14.1	14.7	2.7	1.8	7.2	-0.5
<i>OECD Countries</i>	6.9	5.4	2.1	1.9	3.8	2.3

Source: OECD, Economic Outlook.

4. Fiscal Policy: Still a Policy Instrument

In Europe, despite the flexibility of labour markets that has been achieved as well as the significant decline in the bargaining power²⁰ of the trade unions, the problem of unemployment has persisted (Morgan, 1996).

Arguably, the reduction in the rate of inflation reflected by the economic agenda set at Maastricht - which requires the adoption of restrictive monetary policy over a long period - has been achieved at the expense of increasing unemployment. The Ricardian belief that changes in government borrowing has no effect on aggregate demand has to a great extent influenced the way economic policy is formulated within EU member states. However, while such a development is unfolding, the notion that the alarmingly high levels of EU unemployment as well as the persistent macroeconomic instability necessitate the introduction of other policy instruments is gathering momentum. To this effect, the use of fiscal policy (public expenditure and taxation), is perceived as being instrumental in affecting economic activity. Holland (1995) proposes a significant increase in government spending and greater deficits, while others, such as Dreze and Malinvaud (1994), envisage an expansionary monetary policy designed to cut real interest rates to zero in the short term.

Empirical evidence suggests that a rise in final government expenditure of 1 per cent of GDP will raise European output by 3.5 per cent after 6 years (Richardson et al 1994). The prospect, however, of promoting employment through the conduct of the aforementioned policies has been discouraged by a number of forces within the European circles. Nowadays, stabilization through the use of fiscal policy is a time-consuming process of consolidation to make governments more creditworthy. According to Grahl (1997), such a process is conducive to good rates of economic growth and low interest rates. In other words, the whole philosophy of the Maastricht treaty is in conflict with these conditions. Looking upon the convergence criteria not as numbers, but as a policy measure to stabilize the EU's public finances might make sense. However, neglecting the macroeconomic impact that the narrowing²¹ of public sector deficits will have on EU economies could be detrimental. That is because deficit reduction is likely to be tackled by major reductions in expenditure rather than increases in revenue, that will lead to weaker public sectors.

It could be argued that a major setback in the economies of all EU countries was the reduction in capacity of fiscal policy. The decline in the size of the public sector in nearly all 15 countries has had an adverse effect on expenditure and economic activity.

Table 6 shows how the growth rates of public spending have behaved over various periods before, and especially after 1991, when the EU economies entered phase 1, towards EMU. As we can see, a substantial squeeze in public spending over the period 1992-98 was experienced by Finland, Sweden, Greece, Spain, Portugal, Denmark, UK, Luxembourg, Italy and France. In the remaining five countries, the picture was slightly better, but not good enough to ensure a steady recovery. Public investment has dwindled considerably, while social security expenditures have had to rise, in order to deal with the pernicious repercussions of rising unemployment. Moreover, a substantial squeeze in public spending has been exerted on the economies of the US, Canada, Japan and the OECD countries as well.

TABLE 6
Public Spending, Growth Rates (Averages)

Countries	1961-66	1967-72	1973-78	1979-84	1985-91	1992-98
Germany	11.0	11.1	10.3	5.6	4.1	5.0
France	9.9	11.7	17.4	14.3	5.4	4.6
Italy	13.5	11.4	19.8	22.1	11.2	3.5
Netherlands	13.0	13.1	13.7	4.2	2.5	3.7
Belgium	9.2	11.5	15.1	6.5	3.7	4.5
Luxembourg	9.0	10.0	15.5	9.2	8.6	7.9
U.K.	7.8	10.4	19.3	13.2	8.3	4.7
Ireland	9.8	16.6	22.6	17.9	5.6	7.0
Denmark	15.9	15.9	15.6	11.5	5.4	3.6
Spain	16.4	15.2	26.3	18.1	13.6	6.9
Greece	11.5	11.8	26.3	26.1	20.5	12.5
Portugal	11.5	13.9	23.7	25.3	23.4	8.9
Sweden	12.5	12.2	16.4	11.2	8.5	1.8
Finland	13.3	14.0	19.6	14.6	10.6	0.1
Austria	9.6	11.4	15.0	7.5	5.6	6.2
USA	4.6	2.0	1.0	1.6	2.7	0.3
Canada	5.3	5.9	4.3	1.8	3.1	-0.3
Japan	5.2	4.5	5.2	3.3	2.1	1.7
OECD Countries	4.5	3.0	2.6	2.4	2.6	0.8

Source: OECD, Economic Outlook.

Following Kurzer (1988), firms' reaction to a decline in disposable income and public spending will be a delay in productive investment. The belief that returns on capital in the future will be marginal (or at least too thin to warrant present investments), makes firms use their reserves to acquire financial²², rather than productive assets.

No one disputes the contention that the unacceptably high levels of public finance (debt, deficit²³) should be addressed at once. The salient question, however, is how to go about dealing with a situation which, if treated hastily, may have perverse effects on the economy.

Mainstream economics seems to overlook the existing connection between the public and the private sector. As a result, fiscal policies are invariably believed to be bound up with the public sector. Allsop (1998) argues that when dealing with the private sector, it is wise to look also at the influence that public policy exerts on the private sector. The observed increasing figures in European debt should therefore be seen as a rising trend of public sector asset holdings by the private sector. In other words, changes in the debt trend are possible, provided that either private sector savings decrease, or investment increases.

Policy makers' goal over the last years has been to create the conditions under which more investment opportunities will be encouraged. With this in mind, the pursuit of policies to generate economic growth got under way. A reduction in public borrowing became a principle to which all countries seeking economic growth would have to adhere. Inevitably, the dominant view in the mid-1990s appeared to be that fiscal tightening, together with 'supply side' measures, would lower interest rates and support the required revival of investment spending²⁴. As it turned out however, the negative short-term effects of fiscal tightening put the economy in a rather precarious position.

In Europe, the looming difficulties of fiscal consolidation were not given the appropriate attention by its economic bodies (Allsop and Vines, 1996). A country's policy to pursue fiscal adjustment often entails lower interest rates, a lower exchange rate, and a positive balance of payments. In Maastricht's case, however, such a prospect is far from realistic²⁵. The policies envisaged are designed to promote a fiscal policy of restraint. Hence, in view of the limitations implied by the treaty, a credible strategy to instigate the necessary adjustment of investment is conspicuous by its absence.

At both national and European level, the use of fiscal policy is heavily constrained by the new set of rules embodied in the stability and growth pact. This new set of regulations sketches the course of action that each member state has to take if it fails to conform to the pacts' prescribed targets. More specifically, countries about to exceed the threshold in terms of the permitted deficit ratio will have to take corrective fiscal policy action in the form of reduced expenditure or increased taxation. Such a measure will have an adverse effect on income. If, however, the threshold has yet to be reached, financing the deficit by means of borrowing on EU capital markets will put pressure on the European interest rate, which in turn will raise debt-servicing outlays throughout the EU. Gregory and Weiserbs (1998), regard the deficit and debt provisions as contradictory²⁶ to the objective of Article 1 of the Treaty of Rome, which aimed at the leveling-up of living standards throughout the European Community.

An argument advanced by Emerson et al (1992) is that the creation of a monetary union in itself makes problems of excess borrowing more likely, since it will increase the perceived likelihood of bail-out²⁷. This argument refers to potential taxation levied on the citizens of one country to pay the debts of the government of another. An alternative route through which this bail-out could be feasible is in the form of inflation throughout the monetary union, which would reduce the real value of debt.

In Europe, following reductions in taxes on companies as well as reductions in direct taxation of incomes, taxation systems have become less progressive²⁸. Privatization has contributed further to the weakening of the public sector, since public assets have been sold at prices that do not compensate for the loss of future revenue from nationalized companies²⁹.

The notion that taxes on employment should be reduced in economies facing high unemployment has provided the platform on which those tax reforms have been based. However, this is not a reason to justify reduction of direct taxation on very well-paid jobs. Despite the fact that EU's fiscal federalism is not a precondition for EMU, an enhanced budget would greatly facilitate EMU³⁰ (Eichengreen 1992: 152). Sala-I-Martin and Sachs (1992) argue that fiscal federalism is an institutional way of achieving a policy equivalent to a high degree of coordination while Allsopp (1998) claims that a coordinated policy would be preferable, but if it is not feasible, perhaps because of difficulties in achieving agreement between policy makers, a centralized policy is preferable to nothing³¹.

One of the features of the Community's budget is that revenue has to equal expenditure³² (accounting budget). Therefore, the EU cannot run budget deficits in times of slump in order to stabilize the EU economy. Conversely, national budgets have become more functional and unbalanced. These economies have followed the legacy of the Keynesian revolution, which condoned the practice of governments running budgetary deficits (government expenditure exceeds tax intake) to stimulate demand, and in effect, reduce unemployment.

5. An Empirical Attempt to Interpret Maastricht's Policies. Some Evidence

So far, we have illustrated how some significant economic variables have behaved over a period of years and especially after the imposition of the Maastricht's convergence criteria, on all EU member states. The economic variables under scrutiny appear to have suffered significantly, primarily due to the deflationary policies that the EU countries had to implement in view of the qualification round to EMU.

The next task will be to generate some simple regression equations in order to establish an indication as to whether and to what extent what has been suggested by the analysis above is in line with the econometric evidence. More specifically we will set up equations of the form:

$$Y_{it} = \gamma D_{it}^{AM} + \delta D_{it}^{BM} + \varepsilon_{it} \text{ For } i = 1, 2, 3, \dots, T \text{ TV cross-section units and periods}$$

$$t = 1, 2, \dots, T.$$

Y_{it} is the devendent variable,

D_{it}^{AM} is a dummy variable which takes the value zero for the years before the Maastricht and the value one for the years after;

D_{it}^{BM} is a dummy variable which takes the value one for the years before the Maastrich and the value zero for the years ater;

ε_{it} is an error term;

This analysis will be carried out by using time series data³³ for all 15 EU countries from 1961 to 1999. Regression equations have been employed to test the significance of the means of certain variables. In particular, two dummy variables have been summoned to test the significance of the difference of the

means of the examined variables prior to, as well as after the ratification of the Maastricht. The restriction $D_1 - D_2 = 0$, will be imposed and the Wald test will be used to determine its significance. The sign as well as the significance of the dummy variables will establish the extent to which the policies fostered by EU members, have affected the behaviour of the variables in question.

An inspection of table 7, and more specifically the columns referring to the unemployment rate (UNR), suggests that employment creation within the EU region over the observed period had been rather conspicuous by its absence. In particular, in all EU countries both dummies are found to be significant and of positive signs. Moreover, when we imposed the restriction $D_1 - D_2 = 0$, the Wald test generated results according to which the null hypothesis, that is the restriction, was rejected at the 1% level of significance.

Likewise, private consumption (PC) is found to have suffered considerably, as both dummies are found to be highly significant and of negative signs. The Wald test suggests that the null hypothesis, that is the difference of the two means is equal to zero, is rejected at the 1% level of significance.

It is worth noting that two more variables were put to the rest - Capital formation and Government expenditure - but the results transpired to be rather ambiguous. More specifically, the dummy variable D^{AM} was found to be insignificant in all regressin equation. On the other hand, the dummy D^{BM} was found to be highly significant in all regressions, bearing positive signs.

Despite the ambiguity generated by the capital formation and government expenditure regressions, our initial exposition that European unemployment has been fluctuating at rather alarming levels can not be refuted.

The contractionary nature of the policies imposed upon the EU member states, to arguably facilitate their transition into the monetary union appear to, at least in the short run, have created an economic environment that is far from conducive to employment creation. Lack of strategies that target real, rather than nominal variables, permeates current economic policy as this is run by the think-tanks of an independent European Central Bank and its affiliated institutions.

TABLE 7
Summary of Individual Regression Results for every EU Country

Countries	UNR		Wald Test ($D_1 - D_2 = 0$)	PC		Wald Test ($D_1 - D_2 = 0$)
	D^{AM}_t	D^{BM}_t		D^{AM}_t	D^{BM}_t	
<i>France</i>	11.4 (1.27)	5.6 (0.66)	*	-0.028 (0.015)	-0.067 (0.007)	*
<i>Italy</i>	10.7 (12.7)	5.7 (0.60)	*	-0.031 (0.015)	-0.090 (0.007)	*
<i>Netherlands</i>	6.4 (12.7)	5.2 (0.72)	*	-0.030 (0.015)	-0.043 (0.007)	*
<i>Belgium</i>	11.9 (12.7)	6.0 (6.08)	*	-0.041 (0.015)	-0.051 (0.007)	*
<i>Ireland</i>	13.5 (12.7)	8.8 (6.08)	*	-0.061 (0.015)	-0.093 (0.007)	*
<i>Denmark</i>	10.4 (12.7)	4.8 (6.08)	*	-0.042 (0.015)	-0.078 (0.007)	*
<i>Spain</i>	21.4 (12.7)	8.5 (6.08)	*	-0.034 (0.015)	-0.101 (0.007)	*
<i>Sweden</i>	6.8 (12.7)	2.1 (6.08)	*	-0.027 (0.015)	-0.077 (0.007)	*
<i>Finland</i>	15.0 (12.7)	3.4 (6.08)	*	-0.057 (0.015)	-0.081 (0.007)	*
<i>Austria</i>	5.8 (12.7)	2.5 (6.08)	*	-0.076 (0.015)	-0.047 (0.007)	*
<i>UK</i>	8.4 (12.7)	4.7 (6.08)	*	-0.045 (0.015)	0.076 (0.007)	*
<i>Germany</i>	9.1 (12.7)	3.4 (6.08)	*	-0.055 (0.015)	-0.312 (0.007)	*
<i>Greece</i>	7.2 (12.7)	2.6 (6.08)	*	-0.032 (0.015)	-0.046 (0.007)	*
<i>Portugal</i>	6.1 (12.7)	3.3 (6.08)	*	-0.075 (0.015)	-0.053 (0.007)	*
<i>Luxembourg</i>	4.6 (12.7)	4.0 (6.08)	*	0.027 (0.015)	-0.045 (0.007)	*

Note: UNR stands for unemployment rate, PC denotes private consumption (growth rate), Null Hypothesis: $D_1 - D_2 = 0$, where star (*) denotes significant Wald test.

6. Concluding remarks

The impact of the new economic order, established in Europe by the ratification of the Maastricht Treaty as well as the introduction of the stability and growth pact, on European labour markets provided the platform on which this paper unfolded. By scrutinizing the behaviour of some significant economic indicators, it became apparent that the current economic situation of most of the European countries is rather dismal. Governments within the EU look upon the convergence rules as being the exclusive source of economic policy targets as well as the only policy option.

A growing body of literature argues that the current economic situation that characterizes most of the EU member states is far from conducive to nurture a viable monetary union. The existing criticism, surrounding the nature as well as the credibility of the convergence criteria, finds justification in the way these conditions have been defined in both quantitative and qualitative sense.

The emergence of an institution such as the European central bank (ECB), which is forbidden to fund any public programs and with exclusive purpose the control of inflation raises a number of questions as to what priorities should be given in the pursuit of a sound economic policy. Arguably the deflationary bias attached to an independent³⁴ ECB, is expected to exacerbate rather than alleviate the existing economic and social tension.

In the absence of an EU fiscal policy it was suggested that national governments should be allowed to pursue budget deficits when they feel it is necessary to do so. Ideally, this should be seen as a temporary expedient during a period in which a proper EU fiscal policy is generated.

Finally, through some econometric investigation, we sought to demonstrate the extent to which the ratification of the Maastricht Treaty has affected the European economies. In all likelihood, the evidence generated consolidates the notion that the deflationary frenzy by which economic policy in the EU is currently pursued has had an adverse effect on employment creation within EU region.

APPENDIX

The anti-inflationary bias that characterizes independent central banks can be demonstrated as follows:

Let us assume that policy-makers want to minimize the following loss-function:

$$A^g = \frac{1}{2}\pi_t^2 + \frac{a}{2}(y_t - y_t^*)^2 \quad (1)$$

where y_t is output, y_t^* denoted targeted output and a is government's weight on output stabilization ($a > 0$). Equation (2) is a simplified Lucas supply function:

$$y_t = (\pi_t - \pi_t^e) + \varepsilon_t \quad (2)$$

where π_t is actual inflation, π_t^e is expected inflation, and ε_t is a random shock with zero mean and (σ^2) variances. Provided that the policy-makers want to minimize eq.(1) on a period basis, taking the inflation expectations as given, the rational expectations inflation can be written as:

$$\pi_t = \alpha y_t^* - \frac{\alpha}{\alpha + 1} \varepsilon_t \quad (3)$$

By browsing at eq. (3) one can infer that the first term at the right hand-side is the inflationary bias whereas the second term reflects the degree to which stabilization of output shocks influence inflation. Assuming that the conduct of monetary policy has been delegated to a more inflation-averse central bank, eq. (4) can be thought of as the equivalent loss-function of the central bank:

$$A^{cb} = \frac{1+\theta}{2}\pi_t^2 + \frac{a}{2}(y_t - y_t^*)^2 \quad (4)$$

where θ stands for the inflation aversion of the central bank. The preferences of the central bank does not matter, unless it is able to determine monetary policy without much government interference. This can simply be modeled as follows (Eijffinger & Hoeberichts (1998):

$$M = \delta \Lambda^{cb} + (1-\delta)\Lambda^g \quad (5)$$

where δ denotes the degree of central bank independence, i.e. to which extent the central bank's loss-function affects monetary policy-making. If $\delta = 1$, the central bank fully determines monetary policy. With rational expectations and minimizing government's loss-function, inflation will be:

$$\pi_t = \frac{a}{1 + \delta\theta} y_t^* - \frac{a}{1 + \delta\theta + a} \varepsilon_t \quad (6)$$

By simply comparing equations (3) and (6), one can immediately see that the inflationary bias (the first term at the right hand of the equation) is lower for positive values of δ and θ . What flows from the above is that the delegation of monetary policy to an independent central bank will yield a lower level of inflation.

Notes

1. An additional factor contributing to the slow down of global economic growth was the oil price shock in the 1970s.

2. According to this table, Ireland and Denmark are the only exceptions.

3. Some of the most predominant views on the causes of unemployment, revolve around the lack of flexibility in the labour market i.e. "sclerosis", the long lasting effects of unemployment i.e. "hysteresis", or the inequality of earning power in the labour force (Britton 1994). For more on hysteresis see Blanchard and Summers 1986, 1987, Blanchard 1990, Bean 1994.

4. The view that inflation is a monetary phenomenon i.e. there is a causal mechanism running from changes in the stock of money to the rate of inflation, appears to affect the way the ECB operates.

5. According to a report published by the Committee for the Study of Economic and Monetary Union in 1989, ECB will be independent of any political control. However the prospect of the ECB being strongly influenced by the interests of the financial markets is more than certain.

6. According to Arestis, McCauley & Sawyer (1999) the current institutional structure and rules of the ECB are responsible for the dominance of monetary over fiscal policy.

7. One of the reasons why financial corporations are more concerned about inflation is that inflation depreciates the value of their loans and is at odds with the goal of a strong balance of payments and a stable currency. Persistent inflation also leads to various monetary imbalances that undermine the effectiveness of central bank action. Greater mobility of financial capital is deflationary, because, *ceteris paribus*, capital will seek out the highest real return, in other words, it will flow to the country with the highest real interest rate. States which wish to avoid capital losses or unwanted depreciation must conform their interest rate and other macroeconomic policies in line with those of the "tightest" state.

8. In a study conducted by Costa Dahlstrom (1998), policy measures directed to achieving price stability leads to an increase in the level of the 'misery index'. In the same line of argument, Meinder (1998) posits that the setting of new priorities, meaning those targeting price stability, are to be held culpable for the unprecedented high levels of Swedish unemployment.

9. Research on inflation targeting suggests that such a mandate has to be reconsidered. Inflation targeting has been advocated by distinguished economists such as Bernanke and Mishkin (1997). Price stability has topped the agenda of politicians around the world. In some cases (for example New Zealand) excessive inflation has even cost the central bank heads their job. For an extensive analysis on the politics of an 'Independent Central Bank' see Epstein and Schor, (1986), Burkitt et al, (1996), Alesina and Summers (1993), Hetzel (1990), Levy (1995), Cardim de Carvalho (1995), for a critique see Posen (1993).

10. The empirical work carried out by Hall & Franzese (1998) provides evidence from a pooled time series for inflation and unemployment based on annual as well as average data for 1955 to 1990 for 18 OECD countries.

11. In the enthusiasm of adopting deflationary policies, EU legislators have neglected the fact that some EU member states will be more vulnerable to the policy implications than that the deflationary policies involve. Arguably, achieving a low inflation rate is particularly pernicious to the southern European countries, where sectoral disparities give rise to acute inflationary pres-

asures. For example, wide differences in productivity growth among sectors, combined with a similar rate of growth of wage rates, lead to much bigger price increase in those with limited productivity gains.

12. Meaning that the general capacity of Euroland to produce goods and employ labour has fallen behind labour supply growth.

13. That is, due to deflationary policies in the run-up to EMU.

14. Empirical studies as to what the NAIRU is, have proven to be fickle. In the late 1980s, EU countries experienced fall a in unemployment due to measures purporting to boost aggregate demand.

15. The whole philosophy behind price stability lies in the notion that zero inflation is much easier to control. Michie (1998) maintains that there is no reason why this should be the case. The inflation rate is the average of thousands of price movements some falling, some stable and some rising. Therefore if "zero inflation is achieved it would not be because prices are stable but because these movements happen to cancel each other out" (p. 41).

16. During the first half of the 1980s the average inflation rate among members of the ERM was reduced by half. Such an achievement has been attributed to the favourable framework that the development of ERM provided (Gregory and Weiserbs 1998).

17. Barrel and Pain (1996) state that when real interest rates are high, unemployment is high. According to Phelps (1992), and Barrel et al (1995), there are two reasons for this Firstly, high real interest rates raise income from non-labour sources (like savings) and reduce the value of discounted future earnings, thereby reducing the costs of non-employment. Secondly, high real interest rates raise the costs to firms of holding stocks of goods and employing under-used workers (as an insurance against a sudden demand upturn). As a result they hold smaller stocks and reduce the size of their workforce. They also reduce the value of the returns to be gained in the future from investing in new employees now.

18. Minsky and Whalen (1996-97) argue that the current "monetary-policy goal of zero inflation be replaced by a return to the early postwar policy of low and stable interest rates" (pp. 165-66).

19. For Marx and his proponents, economic policies are formed by the ruling class (the capitalists) whose sole intention is to maintain their political control over the rest by going to any lengths. Reversing the flow of policies tailored to serve the interests of those particular groups within a society requires determination and radical measures: in other words, the overthrow of the capitalist system.

20. Margaret Thatcher was renowned for her zeal for weakening the power of British trade unions.

21. Borrowing restriction are not present in existing monetary unions (see for example Eichengreen 1997).

22. Nowadays, the predominant trend that characterizes businesses is speculation in FOREX and experimentation with novel financial instruments to expanding productive capital (See Alvater, 1987, Strange 1986, Armstrong et al. 1984, Minsky, 1982).

23. The most renowned critique of deficit spending came from Barro (1974). His theory, known as 'The Ricardian equivalent', is based on the argument that the impact of public spend-

ing will be no greater when it is deficit spending financed by borrowing, than when it is immediately financed by additional tax revenues.

24. The shift in policy was towards the implementation of policies aiming at making labour markets more flexible.

25. Individual countries' exchange rate type policies have been dismissed as "beggar-thy-neighbour" policies.

26. The deficit and debt criteria suggest that deflationary policies should be focused on countries about to exceed the threshold. This deflationary bias reflects the asymmetry of the deficit rule (Bean 1992; De Grauwe 1992; Gros and Thygesen 1992).

27. The public debt criterion may seem unnecessary for monetary union if contrasted to the Belgium and Luxembourg experience. In 1995, these two countries had the highest and the lowest public debt-to-GDP ratios in the EU. Nevertheless, they were successfully sharing a common currency, and had done so far decades (The Economist, 23 September 1995).

28. Governments may look upon switching the tax burden onto lower-income groups as an alternative to attract external investment and avoid the delocalisation (Grahl 1997).

29. The new tendency towards globalization and privatization is a new feature of the global economy. The contention that competition from cheap labour in East Asia has resulted in a fall in the relative demand for low skilled labour, and in increases in the ratio of earnings of the skilled to the unskilled within all countries is pervasive in contemporary economic literature.

30. This is in line with the notion that fiscal federalism was not a prerequisite when the common currencies in both USA and Canada were created.

31. Following the same line of argument Dreze et al (1987); Van der Ploeg (1991), claim that a fiscal coordination is conducive to an effective coordination of the fiscal-monetary policy mix at European level.

32. Harrop (1998) states that the 'Community budget does not play a stabilization role, and lacks flexibility as a result of its multi-annual programming' (pp. 19). Furthermore, Italianer and Van Heukelen (1993) suggested that a reserve on top of the budget should exist, with a view to helping out economies suffering an exogenous shock which raised their unemployment rate.

33. OECD, Economic Outlook is the main source of data collection.

34. Not unexpectedly, increased central bank independence is associated with lower inflation. What is more surprising is that such independence is not associated with improved real economic performance (Alesina and Summers 1993; Cukierman 1994).

35. Nominal, long term interest rates have been used for the undertaken analysis.

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