INTERNATIONAL AND INTERREGIONAL DIFFERENCES IN EMPLOYMENT AND UNEMPLOYMENT RATES*

1. Introduction

The average rate of unemployment in Western Europe increased from less than 3 per cent of labour force in the early seventies to about 10 per cent in the early nineties of the last century; a substantially smaller increase in unemployment took place in the same period in the United States: from 5 to 7 per cent.

The high level of European unemployment in the early nineties stimulated discussions and proposals by international organizations and economists. In 1994 the OECD worked out a 'job-strategy' for reducing unemployment. In 1997 Amartya Sen, after having stressed the importance of the rise in living standards in European countries over the last two centuries, singled out unemployment as the main unsolved issue, and highlighted the different 'penalties of unemployment': economic, social, psychological and political. In 2000 the Lisbon European Council set the objective of increasing the average employment rate to 70 per cent by 2010.

Over the last decade average employment rates have increased significantly in most countries; however, in some regions of Italy, Germany and Spain unemployment is still a disruptive social problem. This paper is devoted to an analysis of international and interregional differences in employment and unemployment rates, in the theoretical framework of international macroeconomics.

2. The 'penalties of unemployment'

In 1997 Amartya Sen, after having drawn attention to increases in living standards recorded in the European countries over the last

* A preliminary version of this Paper was presented at the XIX Villa Mondragone International Economic Seminar on "The Economic Future of Europe?", CEIS – University Tor Vergata Rome, June 25th-26th 2007.

two centuries, singled out unemployment as the main problem still to be faced[1]:

"If, at the present time, we look for grounds for doubting 'the glory of Europe', we are unlikely to find a better reason than the extraordinary prevalence of unemployment and worklessness in this continent. With double-digit unemployment rates across most countries in Europe (…), the basis of self-reliant and self-confident economic existence of great many Europeans is severely undermined. This contrasts not only with the contemporary experience of other economically developed countries as the Unites States and Japan (with unemployment rates not much more than 3 to 5 per cent), but also with Europe's own achievements of remarkably low unemployment not so long ago (… below 3 per cent). The 'glory of Europe' is more than a little tarnished with tens of millions of jobless people – suffering material hardship, psychological agony and a sense of being helpless and unwanted.

Yet this state of affairs seems to have become 'acceptable' in Europe – feeble protests are combined with remarkable resignation. There is also an insufficient acknowledgement of the torments and disintegrations caused by high levels of unemployment and insufficient assessment of what is at stake. (…)

The joblessness that plagues Europe today inflicts damages in many different ways, and we have to differentiate between the different concerns (…): loss of current output: unemployment involves wasting of productive power (…); skill loss and long-run damages: just as people 'learn by doing', they also 'unlearn' by 'not doing' (…); income loss and inequality (…): unemployment influences the extent of inequality and also the extent of poverty (…); loss of freedom and social exclusion (…) attitudinal studies have brought out the extent to which this loss of freedom is seen by many unemployed people as a central deprivation; psychological harm and misery (…) leading to a long-run loss of self-esteem (…); ill-health and mortality (…) also for lack of self-respect and motivation generated by persistent unemployment; loss of human relations and family life; motivational decline and resignation, with a weakening of the distinction between being in the labour force but unemployed and being out of the labour force altogether; gender and racial inequality and tensions, since immigrants are often seen as taking away jobs from natives; weakening of social values: unemployment (…) feeds a sense of exclusion and a feeling of grievance against a world that does not give the jobless an opportunity to earn an honest living;

[1] Sen (1975) had earlier distinguished between three different features of employment: output aspect, income aspect, and recognition aspect. Here the attention is mainly upon the recognition aspect: being recognised by others as well as oneself as a productive and sought-after person. The connection between suffering and motivational impairment was analysed by Solow (1995).

> when unemployment is high, is stronger the workers' resistance to restructurings which can increase productivity at a cost of lay-offs, since it would take a long time for displaced workers to find a new occupation; raising the retirement age is more difficult, since this is also seen has having adverse effects on unemployed people" (Sen, 1997, pp.7-18).

Amartya Sen proposed a political commitment to reduce unemployment in the European Union, of the same kind of that aiming at reducing public deficits and debts, in order to strengthen the principle of putting more emphasis on people's ability to help themselves, rather than the State doing things for them. A situation in which a young person has a high probability of remaining unemployed for a long time does not certainly foster freedom; a jobless person that has the necessity of being supported by the State is certainly not encouraged to think in terms of self-reliance. According to Sen (1997, p. 26):

> "Tolerating enormously high levels of unemployment certainly goes against the foundations of a society in which self-help is possible. The penalties of unemployment not only include issues of income loss, but also far-reaching effects on self-confidence, work motivation, basic competence, social integration and the appreciation and use of individual freedom".

3. Internal and external macroeconomic equilibrium for nations and regions

A thorough analysis of macroeconomic policies for internal and external balance of nations and regions[2] was carried out by Meade (1951). The essential points of Meade's analysis were presented in a diagrammatic form by Swan (1955); Swan's synthetic presentation of Meade's analysis has afterwards been reported in many textbooks of international macroeconomics; among others, Caves and Jones (1973, pp. 365-370), and the various editions of the classic textbook of International Economics by Krugman and Obstfeld (for example, sixth edition, 2003, pp. 552-556).

Internal balance relates to the equilibrium between demand and supply of labour; while this notion was still vague in the early fifties

[2] Here 'regions' and 'nations' have the same meaning as in Ohlin (1933). The mobility of workers is supposed to be difficult both between regions and between nations; the main difference is that nations are politically independent while regions are not.

of the last century, after the genial insights by Friedman (1968) and Phelps (1968), it can be defined with reference to the notion of the equilibrium or 'natural' rate of unemployment, which keeps the inflation rate at the level preferred by the government. External balance requires in general, at least for the long run, a value of imports of goods and services equal to the value of exports of goods and services, plus sustainable net external transfers received from other nations or regions.

Meade's analysis pointed out that in order to achieve both an equilibrium rate of employment and external balance, two instruments of policy are necessary: monetary or fiscal policy (financial policy in Meade's terminology) in order to keep at the appropriate level in each nation or region aggregate demand, and expenditure switching instruments (essentially flexibility in *real* relative wage rates, through flexibility either in exchange rates or in money wage rates) in order to keep in equilibrium the distribution of world aggregate demand between the products, and hence the workers, of the different nations and regions[3].

In Meade's analysis, an increase of employment in a nation or region can be obtained either through a decrease in the relative price of labour, which entails an increase of competitiveness, or through an expansionary financial policy (monetary or fiscal policy). The effects on external balance of these two kinds of policies are however quite different: while a reduction in the relative price of labour causes an increase in net exports of goods and services, an expansionary financial policy leads to a reduction of net exports of goods and

[3] Meade pointed out that the true demand switching variable is the relative *real* wage: "*If it were judged that there were insufficient flexibility of money wage rates to meet the demands which were likely to be put upon a gold-standard system, then some other mechanism of adjustment (such as variable exchange rates) would have to be chosen in its place. But it would be useless to turn to the mechanism of variable exchange rates unless there were sufficient flexibility of real wage rates, because any spontaneous disturbance which, if a new equilibrium is to be found, requires a change in the real terms of trade between A and B is likely to require some change in the real wage rates in A and B. For example, a shift of demand away from B's products to A's products will (if external balance is to be achieved through price adjustment and without disturbance of internal balance) requires a movement in the terms of trade against B sufficient to shift demand back again from A's products on to B's products. And this movement of the terms of trade against B means that a unit of B's goods can exchange for a smaller amount of A's goods; and therefore, in so far as imported products are consumed by wage earners, it involves a fall in the real wage rate in B*". (Meade, 1951, pp. 201-202).

services. From the point of view of political and social feasibility, an expansionary financial policy, and in particular an expansionary fiscal policy, is a much more popular way of increasing employment than a reduction of the relative price of labour; this is however possible only if the nation or region can afford a reduction of net exports of goods and services, either because it starts from a strong position of positive net exports, or because markets expect that an expansionary monetary policy will lead to profitable investments leading to an increase in productive capability and competitiveness, or because the nation or region can receive greater unilateral transfers from other countries or regions. This last possibility is of course more realistic for a relatively less efficient region inside a rich country than for a politically independent nation.

4. Unemployment and employment rates

The main indicator used to summarize the relationship between the demand and the supply of labour has been for a long time the unemployment rate, defined as the number of people actively trying to get a job, as a percentage of the total number of people either employed or looking for a job. The main problem with this indicator is the assessment of the people looking actively for a job; particularly in those regions where the opportunities for employment are grim, a significant number of potential workers often do not try actively to find a job, because they are discouraged by the difficulties of getting one. For this reason, over the last decades both governments and researchers have been more and more focusing on employment rates, namely the number of persons actually working as a percentage of the total number of people in working age (usually from 15 to 64 years old). Although for most countries and regions there is a strong negative correlation between the rates of employment and unemployment, sometimes their dynamic behaviour shows significant differences. The most striking example is Southern Italy, where from 1999 to 2006 the rate of unemployment has decreased from 17.3 to 9.9 per cent (-7.4 percentage points) for men, and from 31.3 to 16.5 (-14,8 percentage points) for women, while the rate of employment has increased by only 3.7 percentage points for men (from 58.6 to 62.3 per cent) and 7 percentage points for women (from 24.1 to 31.1 per cent). On average, the increase in the rate of employment in Southern Italy from 1999 to 2006 has been less than half the decrease in the rate of unemployment. Besides, in cross sections analyses, differences in the rates of unemployment are usually smaller than differences in the rates of employment; for example, in 2006 the rate of unemployment in Southern Italy was 7.1 percentage points greater than in Northern Italy for men, and 11.4 percentage points greater for women, while the rate of employment was in Northern Italy 13.6 percentage points higher than in Southern Italy for men, and 25.3 percentage points greater for women (Bank of Italy, 2007a, Tab. A8.7).

5. Employment and unemployment in different nations and regions: a long run view

The average rate of employment in the European Union (EU15[4]), decreased from about 62.5 per cent of working-age population (15-64 years) in 1975 to 58.5 per cent in 1985, afterwards it increased up to 61.5 per cent in 1991, but decreased again up to 59.8 per cent in 1995; afterwards it has increased to about 66 per cent in 2007.

The average rate of unemployment in the European Union (EU15), increased from about 2.6 per cent of labour force in 1972-74 to 10 per cent in 1991-1995; afterwards it has decreased up to about 7 per cent in 2007[5]. The peaks in the unemployment rates were reached in France in 1996 (11.6), in Italy in 1998 (11.3)[6], in Spain in 1994 (19.5), in Sweden in 1997 (9.9), in the United Kingdom in 1987 (10.3) and, after a decline up to 6.9 per cent in 1990, again in 1993 (10.2). In West Germany the unemployment rate reached a minimum of 4.2 per cent in 1991; after the reunification, the unified Germany's rate of unemployment increased from 7.7 per cent in 1993, to 9.2 per cent in 1997; there was then a decrease up to 7.2

[4] EU15 includes the member countries of the European Union on January 1st 1995: Belgium, France, Germany, Italy, Luxembourg, Netherlands (with these countries the European Economic Community started in 1957), United Kingdom, Denmark, Ireland (in the EU since 1/1/73), Greece (1/1/81), Spain, Portugal (1/1/86), Austria, Finland, and Sweden (1/1/95); 12 more countries entered the European Union in this century: Czeck Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, Slovak Republic (1/5/2004), Bulgaria and Romania (1/1/2007). Turkey, Croatia, and Macedonia are expected to the enter the European Union in the future.

[5] European Commission (2002, 2007).

[6] In Italy the unemployment rate remained above 11 per cent for five years, from 1995 to 1999.

per cent in 2000, and then a new increase up to 9.6 per cent in 2004-2005; only in 2006-07 Germany's rate of unemployment seems to have entered a clearly decreasing trend[7].

While national differences in employment and unemployment rate have diminished substantially over the last 20 years; quite large regional differences within some large countries, such as Italy, Spain, and Germany, have remained substantially unchanged. While there is no statistically significant relationship between employment rates and productivity among different nations, there is a highly significant positive relationship among different regions in each of the largest countries (in particular Italy, Germany, and Spain).

Over the period from the mid seventies to the mid nineties of last century the employment performance was in the United States exceptionally good. Starting in 1975 from an employment rate smaller than the European one (61.3 per cent of working-age population) the 'great American job machine' reached an employment rate of about 71 per cent in 1989 (an increase of ten percentage points in 14 years); afterwards there was a decline to 69 per cent in 1991-92, and a new increase up to 72 at the end of last century, and a slight decline to little more than 71 in the first years of the new century. The average unemployment rate in the United States increased from 5.4 per cent in the early seventies up to 8.3 per cent in the early eighties, after a decrease up to 5.3 per cent in 1989 there was a new increase to 7.5 per cent in 1992, and afterwards a decline up to an historical minimum of 4 per cent in 2000; there was then a new increase to 6 per cent in 2003, and a new decrease to 4.6 per cent in 2006[8].

The European Commission (2006) provides the estimated values of full time equivalent employment rates (FTE employment rates); on average, in 2005 the estimated values of FTE employment rates have been lower than employment rates, by 6.5 percentage points for EU15 and by 5.7 percentage points for EU25. The difference between unadjusted employment rates and FTE employment rates has been much greater than average, and increasing over time, for Netherlands (12.7 percentage points in 1994, 15.4 in 2000, 16.8 in 2006), United Kingdom (9.2, 9.9, and 9.8, respectively in 1994, 2000, and 2005), and

[7] OECD (2007b, 2007c); data refer to standardised unemployment rates.

[8] European Commission (2002, 2006), OECD (2007b, 2007c).

TABLE 1 - *Employment and Unemployment Rates in Nations and Regions, 1994-2006*

	Employment rate (ER)			FTE (*) employment rate		Employment rate - FTE employment rate		Unemployment rate		Regional disparities in employment rates in 2004			
	1994	2005	2006	1994	2005	1994	2005	1994	2006	Coeff. Var.	Min ER	Max ER	max - min
Belgium	55,7	61,1	61,1	53,2	56,3	2,5	4,8	9,8	8,2	8,7	51,8	67,0	15,2
Germany	64,7	65,4	66,2	59,8	56,7	4,9	8,7	8,3	8,5	6,2	55,7	70,7	15,0
Spain	46,1	63,3	64,8	44,3	59,2	1,8	4,1	19,5	8,5	8,7	49,8	67,2	17,4
France	59,1	63,1	63,2	56,2	58,5	2,9	4,6	11,7	9,0	7,1	50,8	66,9	16,1
Italy	51,4	57,6	58,9	50,4	54,4	1,0	3,2	10,6	6,8	15,6	43,4	69,4	26,0
Northern Italy, men	71,2	75,1	75,9					4,1	2,8				
Northern Italy, women	45,2	55,1	56,4					10	5,1				
Southern Italy, men	58,1	61,9	62,3					16,7	9,9				
Southern Italy, women	23	30,1	31,1					29,4	16,5				
Netherlands	64,0	73,2	73,8	51,3	56,4	12,7	16,8	6,8	4,2	2,3	68,5	75,7	7,2
Poland		52,8	54,4		51,1		1,7		13,8	6,4	47,2	57,0	9,8
Portugal	64,1	67,5	68,0	62,1	65,9	2,0	1,6	6,9	7,6	3,5	63,3	72,1	8,8
Sweden	70,2	72,5	73,3		66,0		6,5	9,4	5,3	4,4	67,2	76,4	9,2
United Kindom	67,9	71,7	71,5	58,7	61,9	9,2	9,8	9,3	5,5	5,8	62,9	78,2	15,3
EU15	59,8	65,2	66,0		58,7		6,5	10,5	7,2	11,1			
EU25		63,8	64,6		58,1		5,7		8,1	12,2			
United States		71,2						9,5	4,6				
Japan		74,6	75,5					2,9	4,1				

(*) FTE means 'Full time equivalent'.
Source: European Commission (2006); OECD (2007b, 2007c); Bank of Italy (2007a, 2007b), Svimez (2007).

Germany (4.9, 7.0, 8.7); it has been much lower than average for Italy (1.0, 2.9, 3.2, respectively in 1994, 2000, and 2005). As a consequence, Italy's lag in employment rates with respect to Netherlands and Germany appears quite smaller when measured in terms of FTE employment rates: 2.3 percentage points less than Germany, and 2 points less than Netherlands (Table 1).

6. The OECD job strategy and the Lisbon EU strategy

In 1994 the OECD (1994) proposed a strategy for reducing the historically high unemployment rates which were experienced by several countries in the late 1980s and early 1990s. The main elements of the strategy were the following: 1) a macroeconomic policy for a non-inflationary growth; 2) enhancing technological know-how; 3) flexibility of working time; 4) reducing obstacles to the start-up and the expansion of enterprises; 5) matching labour costs to local conditions and individual skill levels; 6) reform of employment security provisions in order to stimulate employment; 7) more effective active labour market policies; 8) improvement of labour force skills and competence; 9) reform of unemployment benefits to stimulate a more efficient functioning of labour markets; 10) more competition in product markets.

In reassessing its 1994 job strategy, the OECD (2006b, p. 17) has pointed out that

> "Regional labour market imbalances are persistent in some countries, compromising the achievement of high employment goals. Decentralized wage-setting to allow regional wage to better fit regional productivity was already identified in the 1994 jobs strategy as a way to reduce regional imbalances. But little progress has been made on this front".

In 2000 the Lisbon European Council set a strategy according to which the European Union would have to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion. As far as employment was concerned, quantitative objective were set for employment rates by 2010: as close as possible to 70 per cent for the average, and more than 60 per cent for women, also in order to reinforce the sustainability of social protection systems. The Stockholm European Council of 2001 added a new specific target: raising the average employment rate of men and women aged 55-64 to 50 per cent by 2010.

In July 2005 the European Council decided to re-launch the Lisbon strategy, in order to redress Europe's weak growth performance and insufficient job creation. An integrated guidelines package was adopted, which laid out a comprehensive strategy of macroeconomic, microeconomic, and employment policies.

TABLE 2 - *Gaps from Lisbona-Stockholm Targets, and regional Disparities in the 5 Biggest EU Countries*

		Gap in 2006 below Lisbona target for 2010			% of working-age population living in regions with employments rates below 90% of national average (underperforming regions or U.R.)		Employments rates of U.R. as a percentage of average employment rates	
	Population	Total employment rate (target = 70%)	Female employment rate (target = 60%)	Older people (55-64) employment rate (target = 50%)	2000	2004	2000	2004
Germany	82	-4	0	-4	4	4	88	88
France	59	-7	-2	-12	11	4	85	89
United Kingdom (*)	58	1	6	7	11	5	89	88
Italy	58	-12	-14	-18	33	33	77	79
- North		-4	-4					
- Centre		-9	-9					
- South	20	-14	-29					
Spain	43	-5	-8	-6	23	23	83	86

(*) Positive numbers for gaps indicate that UK has already exceeded the Lisbon targets.
Source: European Commission (2006); OECD (2007b, 2007c); Bank of Italy (2007a, 2007b), Svimez (2007).

The employment guidelines continue to reflect the EU's overall goal of achieving full employment, quality and productivity at work, and social and territorial cohesion, and advocate a lifecycle approach to work that tackles the problems faced by all age groups. The eight employment guidelines fall under three broad areas of action: attract and retain more people in employment, increase labour supply and modernise social protection systems; improve adaptability of workers and enterprises; increase investment in human capital through better education and skills (European Commission, 2006, p. 28).

Data reported in Table 2 show that the United Kingdom has already surpassed in 2006 all the employment Lisbona targets; Germany has reached the target for women and has a gap of 4 percentage points for the average employment rate. As far as the average employment rate is concerned, in 2006 the gap was 5 points for Spain, 7 points for France, and 12 points for Italy. The average high gap of Italy stems mainly from the very low rate of employment in southern Italy, particularly for women; in northern Italy the gap from the Lisbona targets is equal to the German one, and smaller than the French one.

7. Regional differences in employment rates and in productivity levels

One of the most significant elements of the 1994 OECD job strategy was the suggestion to decentralise the wage-setting process, in order for labour costs to reflect local conditions. This is particularly important in countries, such as Italy, where interregional mobility of workers is quite low, and interregional differences in productivity in foot-loose economic activities quite high.

According to OECD (2006a, p. 148), Italy is the country where regional differences both in employment and in unemployment rates are the highest in the world, with a coefficient of variation of about 17 for employment rates and more than 80 for unemployment rates. The ranking of the other countries is somewhat different for employment and unemployment rates; after Italy, the countries with the highest coefficient of dispersion of employment rates in 2003 were, in decreasing order, Turkey, Spain, Belgium, Hungary, Slovak Republic, Poland, United Kingdom, Germany, Czech Republic, Canada, Finland, France, Mexico, New Zealand, United States, Sweden, Switzerland, Greece, Japan, South Korea, Portugal, Australia, Austria, Netherlands, Norway, Ireland. The ranking of countries in decreasing order of the coefficient of variation of the unemployment rate were, after Italy, Germany, Belgium, Mexico, Czech Republic, Austria, Turkey, Spain, Hungary, United Kingdom, Slovak Republic, Portugal, Korea, Canada, Finland, Japan, France, Switzerland, Greece, Poland, Sweden, New Zealand, United States, Netherlands, Ireland, Norway, Australia. The most striking difference between the two rankings concerns Germany, which has the highest regional dispersion of unemployment rates after Italy, but is only at the 8th place as far as the regional dispersion in employment rates is concerned. This because, contrary to Italy, in Germany activity rates are higher in the eastern regions, where unemployment rates are higher, than in the western ones.

High regional disparities are usually associated with high average rates of unemployment and low average rates of employment; it is then important to reduce regional differences, in order to further reduce the average rate of unemployment and increase the average rate of employment. This is so much true, if one considers that in high-employment regions rates of unemployment are sometimes even smaller than 3 per cent, and there are then very few possibilities of further reductions. In low-employment regions, instead, rates of unemployment are sometimes higher than 20 per cent, and rates of employment are sometimes substantially smaller than 50 per cent, so that the possibilities of improvement are quite substantial.

Over the past decade regional disparities in employment rates have on average remained substantially unchanged, with significant increases in Italy, Canada, and Spain, and reductions in Germany, Greece, South Korea, Japan, and the United States (OECD, 2006a, p. 147). According to the estimates of the European Commission reported in Table 3, in 2004 about one third of the Italian working age population lived in regions where the average employment rate was below 80% of the national average.

TABLE 3 - *Regional Disparities in Employment Rates, with Respect to Underperforming Regions, 2000 and 2004*

	% of working age population (15-64) in regions with employment rates below 90% of the national average		Average employment rates of underperforming regions as a % of national employment rates	
	2000	2004	2000	2004
Belgium	12,3	21,9	88,6	87,5
Czeck Republic	12,6	12,4	89,8	89,9
Germany	3,8	3,9	88,2	88,5
Greece	n.a.	2,6	n.a.	89,7
Spain	23,4	23	83,4	86,5
France	11,2	4	84,8	89,3
Italy	33,1	33,1	76,9	79,1
Hungary	27,4	27,6	87,4	88,9
Netherlands	n.a.	n.a.	n.a.	n.a.
Austria	n.a.	n.a.	n.a.	n.a.
Poland	14,7	n.a.	88,8	n.a.
Portugal	2,2	n.a.	88	n.a.
Slovak Republic	n.a.	n.a.	n.a.	n.a.
Finland	12,9	12,5	88,5	89,4
Sweden	n.a.	n.a.	n.a.	n.a.
United Kindom	10,6	5,2	88,6	87,8

Source: European Commission (2006), p. 69.

The OECD (2006a, p. 147) has pointed out that an insufficient wage adjustment at regional levels may be partly responsible for the persistence of employment disparities. Sestito (2004) and OECD (2007d) have found that regional employment gaps are positively correlated with regional disparities in productivity rates, with higher levels of productivities associated with higher employment rates: employment rates are lower in regions where productivity levels are smaller. This means that the negative effects on income levels of low productivity and low employment rates are cumulative for different regions in the same nation. No such statistically significant relationship seems to exist when different countries are concerned; this suggests that the main cause of regional differences in employment rates is the political difficulty of compensating regional differences in productivity through corresponding differences either in wages or in taxes on wages.

The regression results reported in Table 4 (cross-section over 24 EU countries in 2006) seem to suggest that intercountry differences in employment rates are not related to differences in the countries' productivity, while they are negatively related to differences in the countries' total GDP (scale); this is probably due to the fact that in larger countries interregional differences in employment rates are greater.

TABLE 4 - *International Differences in Employment, Productivity and Scale: A Cross-section Analysis (Dependent Variable: Employment Rates), 2006*

Independ. Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	60.61757	3.385358	17.90581	0.0000
PRODUCTIVITY	0.035407	0.085600	0.413635	0.6833
SCALE	-0.087159	0.044609	-1.953847	0.0642
R-squared	0.159677	Mean dependent var		60.42083
Adjusted R-squared	0.079646	S.D. dependent var		4.790932
S.E. of regression	4.596183	Akaike info criterion		6.004798
Sum squared resid	443.6229	Schwarz criterion		6.152055
Log likelihood	-69.05758	F-statistic		1.995197
Durbin-Watson stat	1.470576	Prob(F-statistic)		0.160948

8. EMPLOYMENT AND UNEMPLOYMENT IN THE 5 BIGGEST EU COUNTRIES

8.1 Italy

In the last decade the rate of employment in Italy has increased from 66.2 per cent in 1996 to 70.5 per cent in 2006 for men, and from 38.3 in 1996 to 46.3 in 2006 for women; in northern Italy the rate of employment has increased from 71.2 in 1996 to 75.9 in 2006 for men, and from 45.2 to 56.4 for women; an increase of 4.7 percentage points for men, and of 11.2 points for women. In southern Italy the rate of employment has increased from 58.1 to 62.3 per cent for men, and from 23 to 31.1 per cent for women; with increases of 4.2 percentage points for men and 8.1 percentage points for women. The differences in employment rates between northern and southern Italy has increased for men from 13.1 percentage points in 1996, to 13.6 in 2006, and for women from 22.2 percentage points in 1996 to 25.3 percentage points in 2006. Differences in unemployment rates have instead decreased quite substantially: for men from 12.6 percentage points in 1996 to 7.1 in 2006; for women from 19.4 percentage points in 1996 to 11.4 in 2006 (Bank of Italy, 2007a, Tab. A8.7).

According to ISTAT (2007) in the first quarter of 2007 the rate of employment increased by 0.4 percentage points in Northern Italy, while it decreased by 0.5 points in the Centre and 0.2 points in the South of Italy. The differences in employment rates between the North and the South of Italy has increased to 20.4 percentage points (14.7 points for men, and 25.7 points for women). The rate of employment of women is now almost twice as high in Northern Italy as in Southern Italy. Besides, a much higher percentage of employment is irregular in Southern Italy than in Northern Italy. The rate of unemployment decreased to 3.8 per cent (-0.4) in the North, 5.5 per cent (-0.9) in the Centre, and 11,4 per cent (-2.7) in the South. The decrease in the rates of both employment and unemployment in the Centre and the South of Italy has been caused by a strong decrease in the rate of activity. On the basis of these data Boeri and Garibaldi (2007) have reaffirmed their conviction that a decentralization of wage contracts is absolutely necessary in order to increase significantly employment in Southern Italy.

8.2 Germany

Besides Italy, Germany is the country with the wider regional differences in unemployment rates. According to Bundesagentur für Arbeit Statistics (2007), in April 2007 the average rate of unemployment was 7.8 per cent in West Germany, and 15.9 per cent in East Germany[9]. In April 2007 the ranking of the German Länder,

[9] According to Bundesagentur für Arbeit Statistics, in April 2006 the average rate of unemployment in Germany was 11.5 per cent; according to

in increasing order of unemployment rates, was the following: Baden-Württemberg (5.2), Bayern (5.7), Rheinland-Pfalz (6.8), Hessen (8.0), Schleswing-Holstein (8.8), Niedersachsen (9,2), Hamburg (9,6), Nordrhein-Westfalen (10,0), Bremen (13.1), Thüringen (14.1), Sachsen (15.7), Brandenburg (15.8), Berlin (16.1), Sachsen-Anhalt (16.8), Mecklenburg-Vorpommern (17.8). In April 2007 the difference between the highest and the lowest unemployment rate was 17.8-5.2 = 12.6 percentage points. According to German Statistics, the average unemployment rate decreased two percentage points (from 11.5 to 9.5 per cent) from April 2006 to April 2007, the decrease was 2.6 percentage points (from 18.5 to 15.9) in East Germany, and 1.9 percentage points (from 9.7 to 7.8) in West Germany. The difference between the highest and the lowest unemployment rate decreased from 13.4 percentage points in April 2006 to 12.6 points in April 2007[10].

Even though all the Eastern Länder have higher unemployment rates than the western ones, the highest unemployment rate in West Germany (Bremen, 13.1) is just one point smaller than the lowest unemployment rate in East Germany (Thüringen, 14.1). Contrary to Italy, both in West and in East Germany unemployment rates are usually smaller in Southern Länder than in Northern ones, with the exception of Schleswing-Holstein, in the extreme north of West Germany, with an unemployment rate only slightly grater (8.8) than the average of West Germany (7.8)[11].

OECD (2006b), instead, the average rate of unemployment in Germany was either 8 per cent (commonly used definitions), or 8.5 per cent (standardized unemployment rates). Similar to OECD's estimates of German unemployment rates are those reported by European Commission (2006). The estimates of Unemployment rates for Germany published by the Economist are instead similar to those of Bundesagentur für Arbeit Statistics.

[10] However, in eastern Pomerania unemployment is almost 30 per cent of the labour force.

[11] Unemployment rates underestimate substantially the difficulties of finding a job in East Germany, since quite a lot of working-age East Germans have emigrated over the years, mainly towards West Germany, contributing to a decrease of about 8 per cent of East Germany population since the early nineties. Many other residents of East German areas nearest to West Germany commute weekly or daily: *"There are roughly 1 million empty apartments in the East. Many are being demolished. (…) in reality they're more likely to be destined for a future as retirement havens. This future is already taking shape in cities like Görlitz. Millions in urban renewal funds*

Since reunification in 1989-90, about 1,500 billion of euro have been transferred from West Germany to East Germany, on the basis of the Solidarity Pacts which regulate transfers to East Germany for 30 years after reunification (from 1989 to 2019). The value of transfers from western Germany to eastern Germany is currently about 4 per cent of total German GDP (about 80 billion euro in 2006[12]).

While substantial wage equality between East and West Germany prevails in the public sector, the trade unions' attempts to achieve wage equality with the West in the private sector have been unsuccessful; since wage equality proved to be a hindrance to building new businesses during reconstruction; about three-quarters of eastern German industrial workers are not subject to collective bargaining agreements. Unionized workers are a very small percentage of total workers in eastern Germany (about 8 percent of the working population) and only 10 percent of business owners are organized as part of employer associations. In the private sector both wages and productivity are about one-third lower in East Germany than in West Germany (Berg *et al.,* 2005).

8.3 France

At about 9 per cent in 2006, the rate of French unemployment is currently one of the highest in the world[13]; however, the state of the

have transformed this Renaissance city on the Neisse River into an architectural gem – and a paradise for retirees from western Germany who can afford to live in magnificent apartments in old downtown buildings for rents that would be unheard-of in the West. But for young people, except those who work in professions caring for the elderly, the city offers little in the way of career opportunities. Like in many other places in the East, they either move away or commute, sometimes hundreds of kilometres, to jobs and job training sites elsewhere. Neuhaus, a town in the Thüringer Wald region, has become the quintessential bedroom community. According to statistics compiled by the Federal Office of Labor, a record 49.4 percent of the town's 4,780 inhabitants commute across the former inner-German border to more lucrative jobs in the West" (Berg *et al.,* 2005).

[12] Since population in East Germany is about 16 millions, the value of *per capita* transfers received on average by East Germans is about 5 thousand euro per year; this value is nearly twice as high as the value of transfers *per capita* received on average by the inhabitants of southern Italy (about 56 billions of transfer received in 2006 by a population of about 21 million people).

[13] OECD (2007b).

French labour market does not appear so dramatic if one considers the full time employment rates reported in Table 1: 58.5 per cent in France in 2005, against 56.7 in Germany, 54.4 in Italy, 58.7 for the average of EU15. The unadjusted employment rate is however smaller in France (63.2%) than in Germany (66.2%); particularly low is in France the employment rate for people from 55 to 64 years old (38%, i.e. 12 point less than the Lisbon target for 2010). Regional differences in employment rate do not appear a serious problem in France: in 2004 only 4% of working-age French lived in regions with employments rates below 90% of the national average, and the average employment rate in these regions was about 89% of the national average. According to OECD (2005a, p. 95):

> "With high unemployment, low participation of specific groups such as the low skilled and those near retirement age, and relatively low average hours worked, France is far from using its full labour potential. Improving the labour market situation would not only increase living standard (…) but also reduce social exclusion and ease pressures on public spending".

The main causes of the relatively low employment rates in France seem to be the employment protection legislation and the minimum wages, while since the 1990s the wage bargaining system, although still rather centralized, seems to have allowed for a significant level of firm-level bargaining. The minimum wage in France is about 60% of the median production worker's wage, and it is paid to about 13% of workers; according to OECD (2005a, p. 34), this level of the minimum wage is high relatively to the potential productivity of many would-be workers, so that a significant number of lower-paid jobs are simply eliminated or pushed in the informal economy. As far as the employment protection legislation is concerned, the normal contract between an employer and an employee should be in France of indefinite duration, and can only be ended by the employer if the employee commits a serious error or if a court of law decides that such a termination is necessary to avoid the firm closing. Even in this case, the firm cannot choose freely which workers are to be dismissed, and must also do what it can to help them to find new jobs. This legislation reflects the idea that the role of a firm is not to serve only the interest of its shareholders, but it has a duty to provide continuing employment for its existing employees; it however entails that a firm which is uncertain about its future will be less likely to recruit new workers (OECD, 2005a).

8.4 United Kingdom

In the last 20 years the United kingdom has been one of the best performer in Europe as far as Employment and unemployment is concerned. The average unemployment rate decreased from more of 10 per cent in 1980-87, to about 5 per cent in 2000-2006. The employment rate has increased from 68 per cent in 1994 up to more than 71 per cent in 2000-2006. Regional disparities in employment rate are now quite limited; in 2004 only 5 per cent of the working-age population lived in regions with employment rates below 90% of the national average, and in these regions the average employment rate was about 88 per cent of the national average.

According to Nickell and Quintini (2002, pp. 206-210), this good performance of the UK labour market owes much to changes in industrial relations, the benefit system, and labour taxes introduced in the 1980's by the Thatcher government. The trade union legislation of the 1980s moved the balance of power in disputes away from employees and made it harder for unions to organize, so making less easy and attractive to join a union. The actual level of benefits relative to earnings declined quite rapidly since the late 1970s, because of the abolition of the earnings-related supplement and the switch of indexation from an earnings basis to a price basis, introduced by the first Thatcher administration; the tax wedge has fallen since the early 1980s.

According to OECD (2005b, p. 34), The United Kingdom is among the leading countries in terms of liberal product market regulation and ranks highly in most aspects of labour market flexibility.

8.5 Spain

The average rate of employment has increased in Spain from 46.1 per cent in 1994 to 64.8 per cent in 2006; over the same period, the average rate of unemployment has decreased from 19.5 to 8.5 per cent. After Italy, in 2003 Spain had the greatest regional dispersion in employment rates among EU countries, while the regional dispersion in unemployment rates was in Spain smaller than in Italy, Germany, Belgium, the Czech Republic, and Austria. In the same way as in Italy, but unlike Germany, in Spain regional differences are greater in employment rates than in unemployment rates. By the third quarter of 2006, the three regions with the lowest unemployment rates were Navarra (4.8%), Baleares (4.8%), and Aragon (5.2%), while the regions with the highest unemployment rates were Extremadura (11.3%), Canarias (11.8%), and Andalucia (12.5%), with an average unemployment rate of 8.7%[14]. In 2004 23% of the Spanish working age population lived in regions were the average rate of employment was 86.5% of the national average. The regional mobility of the Spanish working age population is almost as low as that of the Italian one; much smaller than in Germany, France and Portugal.

Collective wage bargaining in Spain is mainly conducted at industry, regional and national levels; in large firms, particularly in the energy and mining industries, there is usually wage bargaining also at the company level. For small and medium-sized firms bargaining takes place mainly at the industry level. National-level bargaining is mainly restricted to financial services. Sometimes outcomes of industry-level or national-level agreements are complemented with regional and company-level agreements. By extension clauses, wage agreements usually apply also to the firms of the same area or sector which did not take part to the negotiation. Despite a rate of union membership smaller than 15%, collective bargaining covers more than 80% of Spanish workers[15].

9. Conclusions

The average rate of unemployment in Western Europe increased from less than 3 per cent of labour force in the early seventies to about 10 per cent in the early nineties of the last century. A much smaller increase in unemployment took place in the same period in the United States: from 5 to 7 per cent.

In 1994 the OECD proposed a 'job-strategy' for reducing unemployment; in 1997 Amartya Sen singled out unemployment as the main cause of concern for the European countries, and highlighted the economic, social, psychological and political 'penalties of unemployment'. In 2000 the Lisbon European Council set the objective of increasing the average rate of employment to 70 per cent by 2010.

Over the last ten years employment rates have increased significantly in most European countries, and the average rate of

[14] OECD, 2007b, p. 85.

[15] OECD, 2007a, p. 73.

unemployment has decreased to less than 7 per cent in 2007. Regional differences in unemployment rates have remained however very high in several European countries, particularly in Italy, Germany, and Spain. In these countries unemployment rates are substantially higher than average in less productive regions, so compounding the negative effects on production and incomes of lower productivity and lower employment rates. To some extent the negative effects on income are alleviated by internal transfers, which have however stemmed, particularly in Italy, increasing political objections in the most productive regions.

The results of the empirical analysis here presented are disappointing: when considering politically independent nations there is no statistically significant relationship between differences in productivity and in employment rates; when considering different regions, on the contrary, a statistically significant positive relationship emerges between differences in productivity and in employment rates (in regions where productivity is relatively lower employment rates are also relatively lower). This result is disappointing, since relatively less efficient regions which belong to relatively rich nations can usually benefit from substantial transfers from relatively more productive regions, and hence have the possibility of stimulating employment through more expansionary fiscal policies.

This paradoxical result stems from the fact that the comparative advantage of regions as far as fiscal policy is concerned is more than outweighed by their comparative disadvantage from the point of view of the possibility of compensating their lower productivity by means of a lower price for labour.

ANTONIO AQUINO
Università della Calabria, Dipartimento di Economia e Statistica, Cosenza, Italia

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ABSTRACT

In the mid nineties of last century unemployment was perceived in several countries as one of the most disruptive social problems. Several economists, sociologists and policymakers proposed of reducing by law working hours as the only effective strategy for diminishing unemployment.

In the last decade employment has increased significantly in almost all countries and average rates of unemployment have diminished. Inside a few large countries there are however some regions where rates of employment are still very low and unemployment remains a disruptive social problem.

In the analytical framework of international economics this result appears quite disappointing, since relatively less efficient regions which belong to relatively rich nations can usually benefit from substantial transfers from relatively more productive regions, and have hence the possibility of stimulating employment through more expansionary fiscal policies. This paradoxical result stems from the fact that the comparative advantage of regions as far as fiscal policy is concerned is more than outweighed by their comparative disadvantage from the point of view of the possibility of compensating their lower productivity by means of a lower price for labour.

Keywords: International Competitive Equilibrium, Labour Markets, Employment and Unemployment

JEL Classification: F16, R12, J6

RIASSUNTO

Differenze internazionali e interregionali nei tassi di occupazione e di disoccupazione

Intorno alla metà degli anni novanta del secolo scorso la carenza di opportunità di lavoro era percepita in molti paesi come uno dei più gravi problemi sociali. Alcuni economisti, sociologi e uomini politici sostenevano addirittura la necessità di imporre per legge una riduzione dell'orario di lavoro al fine di ridurre la disoccupazione.

Nell'ultimo decennio l'occupazione è aumentata in misura significativa in pressoché tutti i paesi, e il tasso medio di disoccupazione è diminuito. All'interno di alcuni grandi paesi rimangono tuttavia vaste aree in cui il tasso d'impiego dei potenziali lavoratori è ancora molto basso.

In quest'articolo, utilizzando alcuni strumenti analitici tipici dell'economia internazionale, si cerca di capire perché spesso all'interno dei paesi l'occupazione è aumentata significativamente in regioni in cui essa era già relativamente alta, mentre la disoccupazione rimane ancora un problema drammatico in vaste aree di alcuni grandi paesi.

Ciò appare paradossale, poiché le regioni relativamente meno efficienti facenti parte di paesi economicamente sviluppati possono di solito permettersi una politica fiscale relativamente più espansiva, e quindi una maggiore occupazione, potendo contare di solito su significativi trasferimenti dalle regioni

più efficienti dello stesso paese. La spiegazione di questo paradosso è che il vantaggio delle regioni meno efficienti dal punto di vista della possibilità di stimolare l'espansione dell'occupazione mediante politiche fiscali espansive è più che compensato dalle maggiori difficoltà che esse incontrano in concreto nel compensare la loro minore produttività mediante un più basso prezzo del lavoro.