



***The European Labour Market  
in the light of demographic change***



Employment & Social Affairs



European Commission

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## *Introduction*

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Labour market conditions are mainly affected by the overall development of the economy. However, going into the next millennium, labour market performance is increasingly challenged by the demographic shift. Over the next 30 years, the dynamics of population ageing will have important implications on the workforce, particularly on its composition.

This brief quantitative analysis is a contribution to improving the understanding of future dynamics of the labour market, which is not addressed by short-term economic analyses. The paper aims at identifying what lies behind the aggregate national figures concerning the labour market performance. In fact, aggregate figures often mask critical information on the gender and age structure of the working age population and the labour force as well as the importance of regional disparities in relation to employment performance. Taking account of these dimensions may prove very helpful for the policy maker seeking to define adequate policy priorities and objectives.

The reliability of this analysis is, of course, strongly dependent on the demographic and economic scenarios employed which are associated with a strong element of uncertainty. Nevertheless, given the strength of the trends observed, it can provide some clear insight on the challenges ahead and facilitate the comparability among different situations observed across the European Union.

## 1. The Implications of Demographic Change

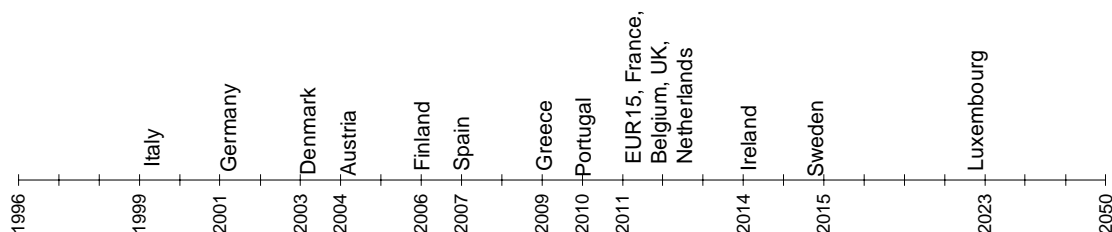
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The European working age population will soon stop growing in size. It will then gradually start decreasing, though at different times and speeds in different countries and regions (see graph 1). During the period 1997-2005, the age group of 15-29, from which entrants into the labour market are drawn, will decrease even more rapidly. Among the older age cohorts, the exact opposite will occur. This concerns all Member States although with differences in the intensity and timing of trends. Already, in almost one quarter of European regions, the working age population has stopped growing.

It is therefore, necessary to achieve activity rates for all groups in the working age population which are as high as possible. Graph 2 shows that if employment is to continue to grow at an average rate of 0.6%, as it has since 1985, and the maximum (average) employment rate is 75% then the labour reserves (the unemployed and the inactive, including the early retired) will almost halve by 2015.

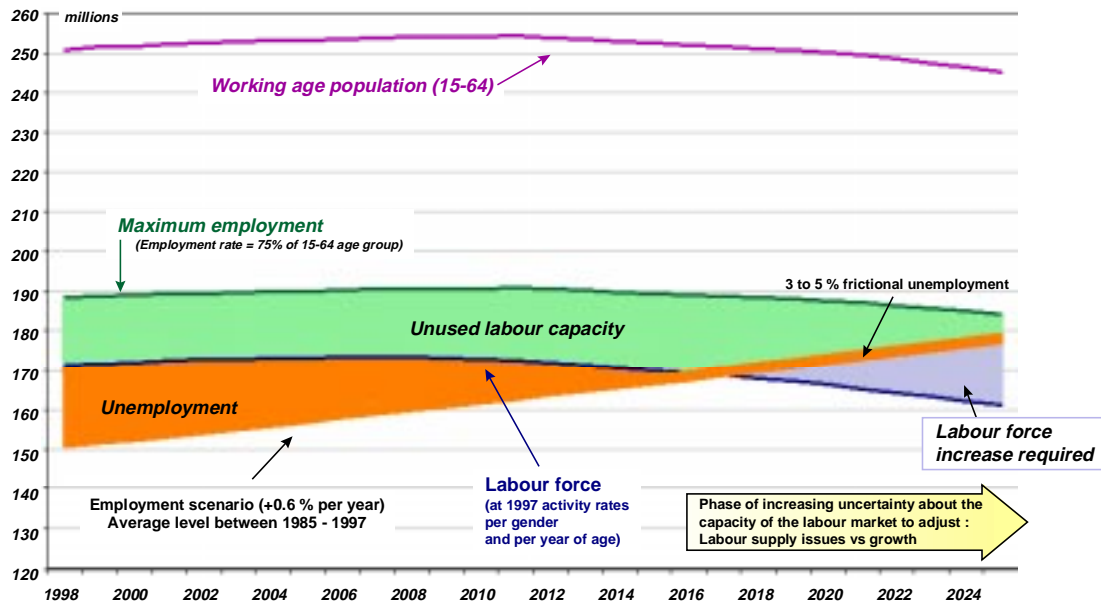
The success in mobilising inactive human resources represents an important policy challenge since the ageing of working age population implies that participation levels will be more and more influenced by the activity patterns of the (increasing in size) older generations. Therefore, achieving higher participation rates will require substantial changes in comparison to the participation levels of these groups today.

**Graph 1: First calendar year of the decrease of the working age population**



Source: Communication from the Commission: "Towards a Europe for All Ages - Promoting Prosperity and Intergenerational Solidarity" COM (1999)221

**Graph 2 : Interaction between demographic trends, employment and growth  
EUR 15 period 1998 - 2025**



Source: Communication from the Commission: "Towards a Europe for All Ages – Promoting Prosperity and Intergenerational Solidarity" COM (1999)221

## **2. The methodological approach**

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Based on Eurostat 1997 Demographic Projections and DG II medium-term economic projections, the paper attempts to shed more light on the impact of demographic change and the regional dimension by setting the following two main objectives:

- Developing a prospective view that compares the projected employment rates in 2005, disaggregated into 6 age and gender groups, with the corresponding rates observed in 1997.
- Presenting an analysis on the different employment situations at regional level (NUTS 2) in 1997.

### **Data Sources**

The employment scenario for 2005 has been based on the following data and assumptions:

- 1997 employment levels for each Member State taken from the Labour Force Survey 1997;
- Population projections for each Member State for 2005 for all age cohorts and by sex based on Eurostat 1997 Demographic Projections (baseline scenario – assuming net inward migration of about 700,000 per year);
- Annual employment growth rate assumptions for each Member State for 2005. The initial DG II projection period 1998-2003 was extended up to 2005 using the annual average employment growth rates over the period 1998-2003;
- Female share in total employment from 1987 to 1997 (Eurostat)<sup>1</sup> based on standard employment rates and full time equivalent rates.

Note that the results of this analysis assume no behavioural changes during the time period being considered i.e. 1997 to 2005

### **Methodology**

The *working age population* is defined as all males and females between the ages of 15 to 64 years.

Standard employment rate refers to the employment rate according to the ILO definition. Full time equivalent employment rates are calculated by assuming 2 part time jobs equivalent to 1 full time job.

The analysis considers three age groups for both males and females within the working age population. These particular groups are chosen to ensure a reasonably equal distribution of the population within the gender group, and to appreciate the varying labour market characteristics across the population. The groups are:

- Males 15–29, 30–49, 50-64 and
- Females 15–29, 30–49, 50-64

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<sup>1</sup> Data from 1987 onwards not available for all Member States

A reference situation in terms of employment rate performance has been developed. The rates are based upon employment levels in each group taken from the 1997 Labour Force Survey and corresponding Eurostat population projections for 1997 (baseline scenario). For each of the six groups, an unweighted, rounded average of the three "best" Member States in terms of employment rates has been calculated. These averages are referred to as the "maximum employment rate" for each gender and age group and can be considered as the politically desirable employment aim for other Member States.

In addition, graphical representations of the employment situation in each Member State have been provided in Annex I. The graphs relate to the employment situation in 2005 compared with 1997, with special attention given to the underlying demographic changes, labour supply shortages in different gender and age groups and the regional considerations for each Member State.

A more detailed description of the methodological approach used is found in Annex II.

### 3. Evaluation of the National situation...

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(See graphs MS 1 to MS 3 in Annex I)

#### 3.1 Key findings at National level: The Current Situation

**The three best Member States in each group:** The analysis of the Member States used for calculating the six maximum employment rates corresponding to the 6 age/gender groups is shown below in two tables (standard employment rate and full time equivalent). It confirms the results presented in the Employment Rates Report (COM(98)572).

**Table 1: The 3 best MS in terms of standard employment rate**

Standard employment rate						
MS Employment rate position	Male 15_29	Male 30_49	Male 50_64	Female 15_29	Female 30_49	Female 50_64
1st	DK	LU	PT	DK	DK	SE
2nd	NL	NL	DK	NL	SE	DK
3rd	UK	AT	SE	AT	FI	PT
Average rate of best 3 (%)	70.6	91.8	74.8	62.7	79.1	59.1

**Table 2: The 3 best MS in terms of full time equivalent employment rate**

Full-time equivalent employment rate						
MS Employment rate position	Male 15_29	Male 30_49	Male 50_64	Female 15_29	Female 30_49	Female 50_64
1st	DK	LU	PT	AT	FI	SW
2nd	AT	AT	DK	LU	PT	FI
3rd	UK	BE	GR	DK	DK	DK
Average rate of best 3 (%)	62.3	90.2	71.8	52.5	69.9	48.6

**The importance of female participation in the disparity of employment levels:** The main factor distinguishing Member States with the highest employment rates from those with the lowest is level of female employment, as male employment levels for the intermediate age group tend to be similar across all Member States. However, national diversity in the level of participation of the younger and older age groups in the labour market is also important. The Scandinavian states, especially Denmark, stand out for their high levels of employed population. Some other states also have very favourable situations: the Netherlands, the United Kingdom, Austria and Portugal. Mediterranean Member States (Greece, Italy and Spain) have the lowest employment levels mainly due to the low female participation and the delayed entry of young people into the labour market.

**Part-time work facilitates transition:** The level of part-time work plays an important role in the employment situation for the younger and older age groups, as it does for women in general. For example, Denmark, The Netherlands and the United Kingdom have high part-time employment levels in the early years of the working life, allowing young people to continue their studies while they progressively increase their participation in the labour market. In some instances, part-time jobs also act as a form of transition between full-time employment and final retirement; this is especially true for the Scandinavian states. The importance of part-time jobs on female employment levels is best demonstrated in the Netherlands where just over two thirds of employed females between 15 to 64 years old are in part-time work.

#### 3.2 Emerging Trends

**Uneven pace of job creation:** The increase of employment levels between 1997 and 2005 will depend on the following three factors: the initial situation, the rate of job creation (DG II medium term projection) and the change in population size of the age and gender groups. The latter is an extremely important factor: the arrival of the "baby boomers" to the older working



ages will increase the population size of this age, while the fertility decrease observed in the last three decades could bring about a rapid decrease in the younger population. The combined analysis of the demographic and employment scenario indicates an increase in the employment rate for the year 2005 in all the Member States, but not to an equal extent.

### ***3.2.1 Trends in each age group***

***Young People (15-29):*** The employment rate in this age group is likely to see the greatest growth due to the rapid reduction of the population size within this age group. Consequently, the younger part of the labour supply could be scarce in those Member States which currently have the highest participation rates (Denmark, the Netherlands, Austria, and to a lesser extent United Kingdom and Luxembourg). The situation in Spain, Italy, Greece, France and Ireland is different: the level of employment of young people is very low and they are faced with high unemployment rates. However, the rapid and intense decrease of fertility experienced by Mediterranean countries and Ireland in the last decades may change this situation in the medium term: the quick reduction of the size of these new cohorts could rapidly increase the employment rate, both for men and women.

***Intermediate age group (30-49):*** In this age group, the male employment level is presently very high in all the Member States. However, significant differences can be found in female employment: the three Scandinavian countries, Portugal, the United Kingdom and Austria have employment rates above 70% while they are very low in the Mediterranean countries and Ireland, about 50% (lower in Spain). The medium-term projection shows a stabilisation of male employment rates in 2005 and a slight increase in the female one. Differences among men and women will continue to be important, although the tendency would be towards a slow reduction of the gap. However, this general description of the medium term trends in female employment for the whole EU hides large divergences between countries: Ireland and Finland are likely to be those with the greatest growth; Luxembourg and the Netherlands, and to a lesser extent, Spain, Belgium and France, should also experience some growth in the female employment rates until 2005.

***Older Workers (50-64):*** In 2005, the relative situation of the countries should be roughly the same due to job creation being counteracted by the growth in the number of people in this age group (arrival of the "baby boomers"). Therefore, the population over 50 years of age will continue to be a large reserve of labour supply, especially women, due to their current low participation in the employment market. At present, Sweden, Denmark, Portugal, the United Kingdom, Greece (only for men) and Finland (only for women) are the countries with the highest employment rates among the oldest population. The situation is the reverse in the Mediterranean countries, with low female employment levels, but also in Belgium, Luxembourg, France and Finland (the two last countries, only in men), as a consequence of the early retirement policy.

### ***3.2.2 Trends in the Member States***

The key findings and trends described above combined with the graphical representations of each Member State (see Annex I) allows a distinction to be made between the different types of challenges that could confront each of the Member States in the medium term. This becomes more apparent when comparing each employment situation with the average of the three best countries in each gender and age group. The radar graphs (or "diamonds") shown in Annex I give a theoretical but helpful idea of the incidence of demographic restrictions on the labour supply for each country, and facilitate the grouping of Member States with similar characteristics.

In 2005, the following situations may arise:

- The radar graph for Denmark shows practically zero reserves in all the gender and age groups (except for women 50-64). A similar diamond shape can be seen for the United Kingdom and Portugal, indicating a similar employment situation; however there are some residual labour supply reserves of old and young people in these countries.
- Austria, The Netherlands, Luxembourg and to a lesser extent Germany, are characterised by the increased utilisation of their reserves of young people, but still have significant reserves in the older age groups (particularly women).
- Sweden is quite the opposite: it only has reserves of young people.
- Finland, France and Belgium have reserves of younger and older workers.
- Ireland, Italy and Spain face rapid reductions in their reserves of young people, but will continue to have significant female reserves (particularly older women). The situation is similar in Greece, except that it has a much larger reserve of younger people.

### **3.3 Key findings at regional level**

(See graphs MS 4 to MS 7 for each member state in Annex I showing the regional situation of the employment rates in relation to the national average. Regional employment rates are based on 1997 employment benchmark series)

#### ***3.3.1 Existing important regional disparities which could remain***

The data discussed until now correspond to aggregate national figures which can hide situations of large homogeneity or disparity, as shown in the Employment in Europe 1998 report. Some Member States demonstrate a high degree of homogeneity while others are confronted with very diversified regional realities - this can be of particular importance in terms of policy implementation.

In the European Union, the greatest internal homogeneity can be found in Sweden, Austria and The Netherlands. Germany, Finland, UK and Belgium show less homogeneity, as the percentage of working age population living in regions with values deviating from the national average is greater. However, across all these countries, the population lives in regions with employment rates between 85 and 115 (indexing the national employment rate at 100). Portugal, France and Greece show situations of greater disparity, with some regions under 85 and above 115, although the extreme situations generally affect lowly populated regions. Finally, Spain and Italy are the countries that have the least regional homogeneity because of the extreme conditions observed in the well-populated regions - or groups of regions. In Spain, the most populated region (Andalusia) has the lowest employment rate, while the second most populated (Catalonia) is well above the national average. The situation is more extreme in Italy: the southern regions, where a third of the working age population lives, have regional employment rates under 85 (taking the Italian average as 100). At the other extreme, the northern regions have relatively high employment rates. The disparities are so significant that there are no regions in the employment rate interval 85-95, and only 15% of the population lives in regions that lie in the interval 95-105, i.e. the interval containing the average employment rate performance.

Considering the general characteristics of the regional labour markets in terms of internal and external flexibility, it appears that a number of regions either do not have reserves of labour or they face specific difficulties relating to age or gender, structure of economic activity, institutional rigidities etc. in activating reserves that are available.

Based on the above information, the EU member states can be classified into 3 main groups facing similar regional challenges in terms of employment policy

*Austria, Netherlands, Sweden* – These are the most homogenous countries in terms of employment rates across regions.

*France, Portugal, Greece, Spain and Italy* – These countries have more regional differences in terms of employment rates. This is particularly important in the last two countries where a significant proportion of the population live in regions with relatively low employment rates.

*Germany, UK, Finland, Belgium* – These remaining countries can be seen as exhibiting "intermediate" levels of regional dispersion.

## 4. ...and some related considerations

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This analysis further underpins the European Employment Strategy. It also confirms a number of policy conclusions already presented in related Commission documents namely, the 1997 Demographic Report, the 1998 Employment Report, the Communication "Towards a Europe for all ages" and the Employment Rates report.

The main points are the following:

1. ***Demographic ageing emphasises the importance of human resource management and the need for better-skilled and more employable workers, together with more adaptable workplaces, will become more relevant.***

The main evidence arising for Europe as a whole and indeed for most of the national situations shows that:

- For younger cohorts (both male and female), there is a clear upward shift in employment participation;
- Significant labour reserves will remain for females in the intermediate and older age group and for males in the older age group

Therefore, whilst maintaining the development of appropriate training and education tools for the younger generation, particular attention should be given to activate the actual labour reserves. This strongly implies that:

2. ***It will be vital to preserve and strengthen the employability of the older generation in work so as to prevent their exclusion from the labour market.***

A mix of measures, which remove institutional restrictions and other rigidities, could promote job mobility for older people. For example, some companies may find it appropriate to recruit older workers to comply with the expectations of ageing consumers. Temporary contracts, part-time work and subcontracting represent increasing sources of job creation. Jobs are increasingly generated through SMEs, independent employment and different forms of flexible working. Employment policies need to facilitate the access of ageing workers to these kinds of enterprise and these forms of employment. Companies have an important role to play in achieving this through human resource management and job design.

The gender balance of the work force will also play a significant part. In particular, policies will need to consider the difficulties women face in combining economic activity with family obligations and the fact that they continue to be over-represented in the more vulnerable and lower paid sectors which are at the greatest risk of redundancy.

3. ***Some regions in Europe may experience increased tension in the labour market.***

The regions most likely to experience tight labour market conditions in the future are Southern Scandinavia, Northern Italy, England, Central Portugal and Southern Germany. These regions currently combine relatively high employment rates (sometimes beyond 70%) with a fast declining demographic trend. To achieve higher levels of economic growth, the question of regional divergence should be addressed in relation to economic conditions, the employment situation, social and educational policies. It may be necessary to review how related policies treat different regional realities. The reversal of demographic trends that, so clearly differentiate Europe's regions, naturally raises the question of mobility. Increased

labour mobility is one way of dealing with regional imbalances. Mobility has both an occupational and a geographical dimension. Occupational mobility - training, retraining of the workforce - is the most important factor for adjustment to new economic conditions. However, geographic mobility will play a more important role in the future, between regions and between Member States.

*Annex I*  
*Graphical representation of national  
employment situation*

This annex contains 5 pages<sup>2</sup> of tables and graphs describing the employment situation in each member state.

The first page contains two tables that show the population figures and employment levels in 1997 and 2005 for full time/part time (MS 1a) and full time equivalent scenarios (MS 1b). The calculation of these figures is described in Annex II.

The second page shows the employment rates for each of the six gender and age groups in the form of a six-pointed radar graph to facilitate comparisons between the different groups. The hypothetical maximum employment rate for each group is also indicated on the graphs in order to show the relative amount of unused labour capacity remaining within each group. The first graph (MS 2a) represents the rates using standard figures and the second (MS 2b) shows the full time equivalent situation.

The third page shows the levels of unused labour capacity in 1997 and 2005 for each of the six gender and age groups in the form of a column graph. Again the situation is represented in terms of standard employment (MS 3a) and full time equivalents (MS 3b).

The fourth and fifth pages describe the regional dimension underlying the total employment rates for each member state. MS 4 is a radar graph showing the employment rate for each region of the member state in 1997 (as defined at NUTS 2 level) compared to the national average employment rate and the hypothetical EU maximum level. MS 5 shows the regional change of the working age population size between 1997 and 2010 in the form of a radar graph. The 1997 working age population size in each region has been indexed at 100 and changes in 2010 are represented in relation to this index.

MS 6 shows the percentages of the working age population in 1997 living in regions facing below average, average and above average employment conditions relative to the national employment rate (the national average has been indexed at 100).

Finally, MS 7 is a scatter plot of the regional employment situation in terms of employment rate and working age population size for each region. Again the national employment rate has been indexed at 100 and all regional employment rates are represented in relation to this index.

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<sup>2</sup> Only 3 pages for Ireland, Denmark and Luxembourg as regional breakdowns not available.

## EU 1 - Employment scenarios 1997-2005

### a - Standard employment

European Union - Annual employment growth rate : **1.0 %** - End Year **2005**

	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	39645	20380	51,4	7593	35918	21801	60,7	3542	70,6
Male 30_49	55451	47048	84,8	3866	58108	50329	86,6	3025	91,8
Male 50_64	30909	18498	59,8	4610	33866	19788	58,4	5531	74,8
Female 15_29	37964	16282	42,9	7533	34205	17863	52,2	3594	62,7
Female 30_49	54414	34280	63,0	8739	56485	37609	66,6	7047	79,1
Female 50_64	31981	11645	36,4	7244	34880	12776	36,6	7826	59,1
Male 15_64	126004	85926	68,2	16069	127892	91918	71,9	12098	
Female 15_64	124359	62207	50,0	23517	125570	68248	54,4	18467	
<b>Total 15_64</b>	250364	148133	59,2	39640	253462	160165	63,2	29931	75,0
<i>Female as % of tot. empl. :</i>		42,0				42,6			

### b - Equivalent Full time

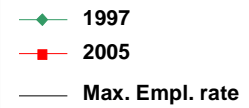
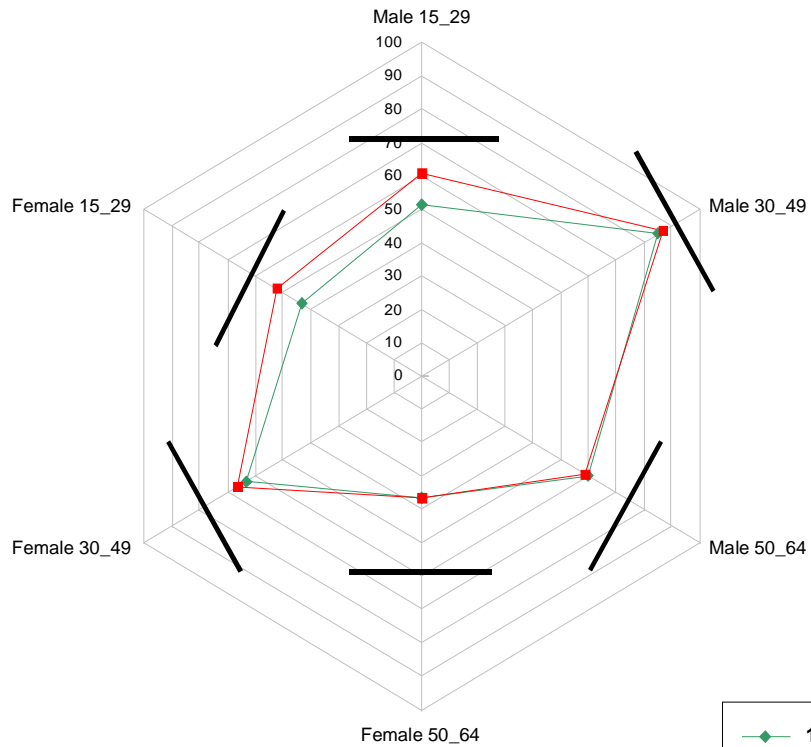
European Union - Annual employment growth rate : **1.3 %** - End Year **2005**

	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	39645	18799	47,4	5914	35918	20678	57,6	1711	62,3
Male 30_49	55451	45169	81,5	4827	58108	49684	85,5	2707	90,2
Male 50_64	30909	17627	57,0	4578	33866	19389	57,3	4941	71,8
Female 15_29	37964	13724	36,1	6198	34205	15420	45,1	2529	52,5
Female 30_49	54414	27777	51,0	10249	56485	31210	55,3	8263	69,9
Female 50_64	31981	9300	29,1	6227	34880	10449	30,0	6485	48,6
Male 15_64	126004	81595	64,8	15320	127892	89751	70,2	9360	
Female 15_64	124359	50800	40,8	22675	125570	57080	45,5	17277	
<b>Total 15_64</b>	250364	132395	52,9	30341	253462	146831	57,9	17919	65,0
<i>Female as % of tot. empl. :</i>		38,4				38,9			

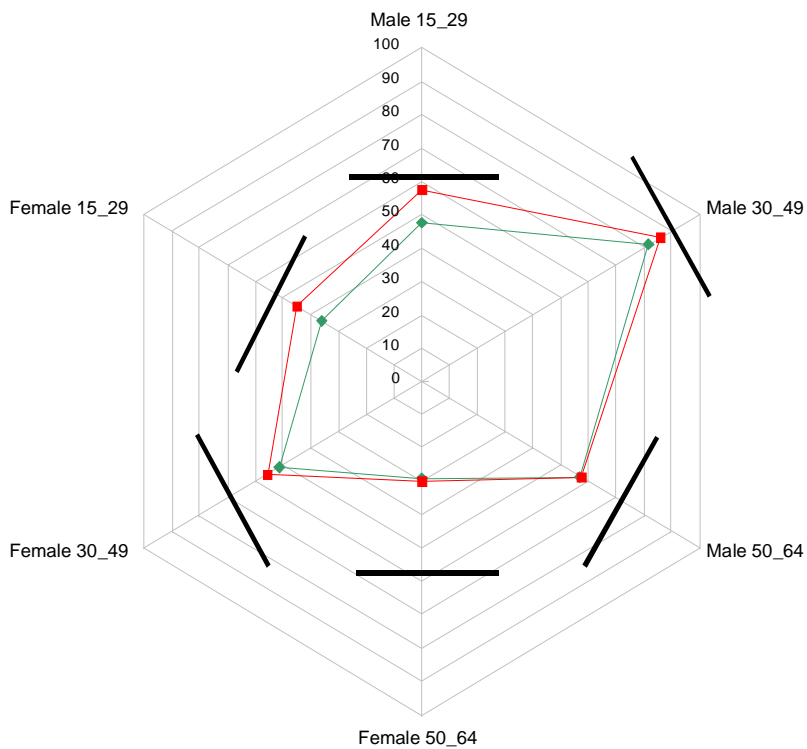


## EU 2 - Employment rates per gender and age group European Union

**a - Standard employment**

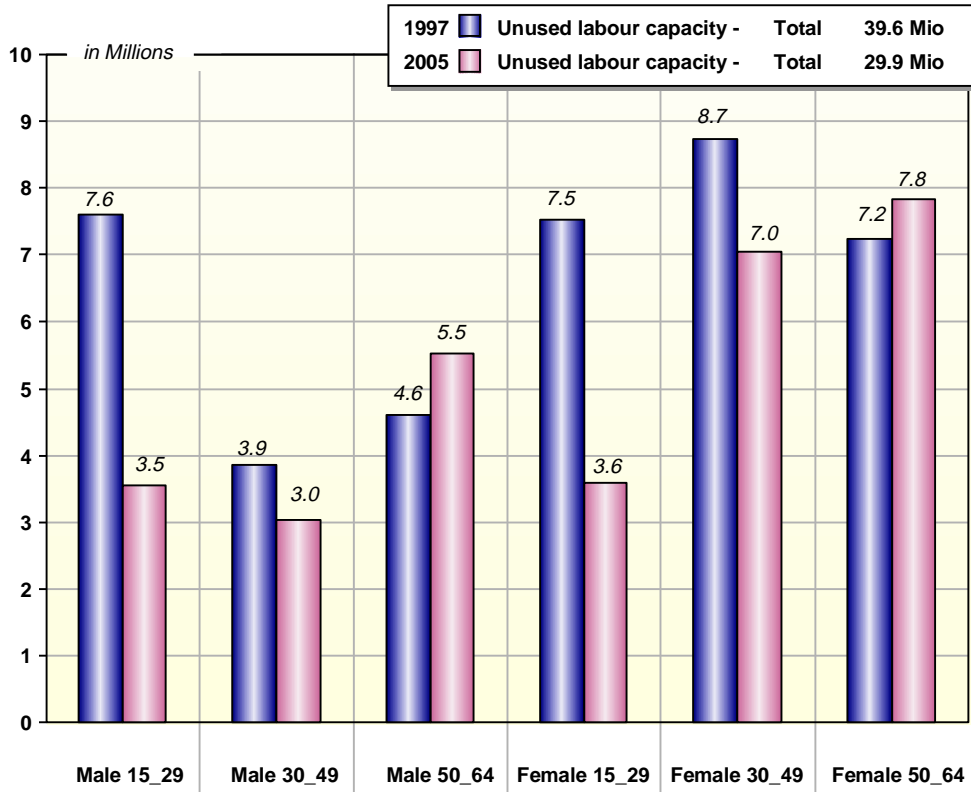


**b - Equivalent Full time**

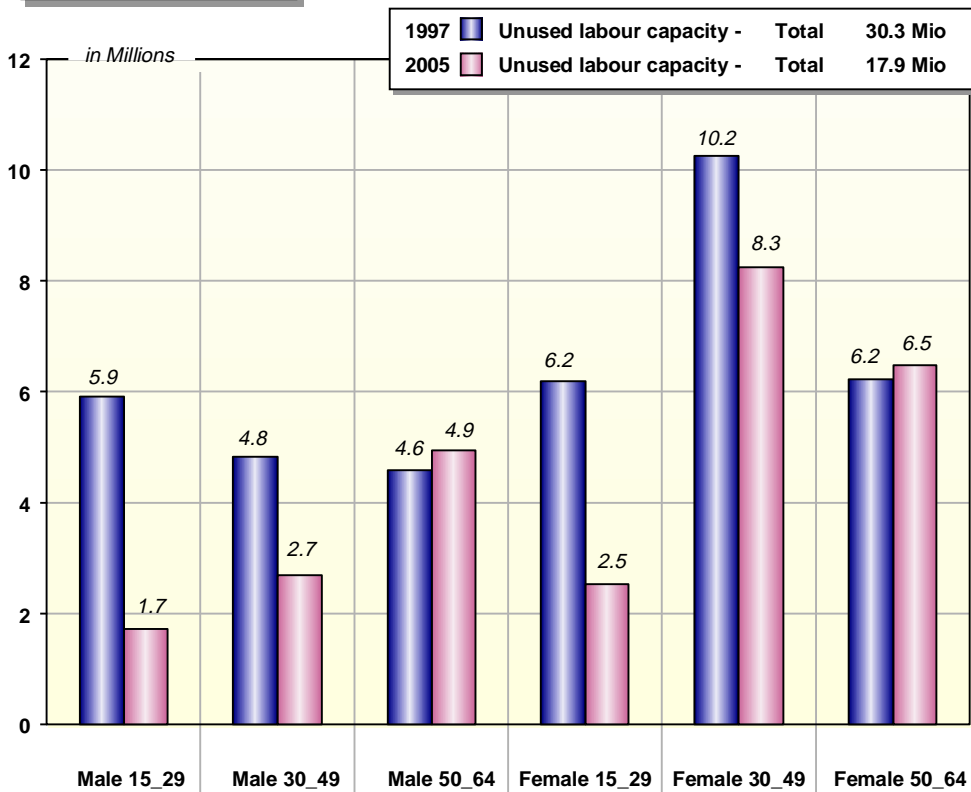


## EU 3 - Unused Labour capacity European Union

### a - Full time + Part time



### b - Equivalent Full time



## AT 1 - Employment scenarios 1997-2005

Austria - Annual employment growth rate : **0.8 %** - End Year **2005**

### a - Standard employment

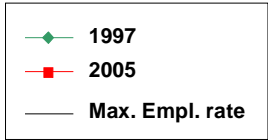
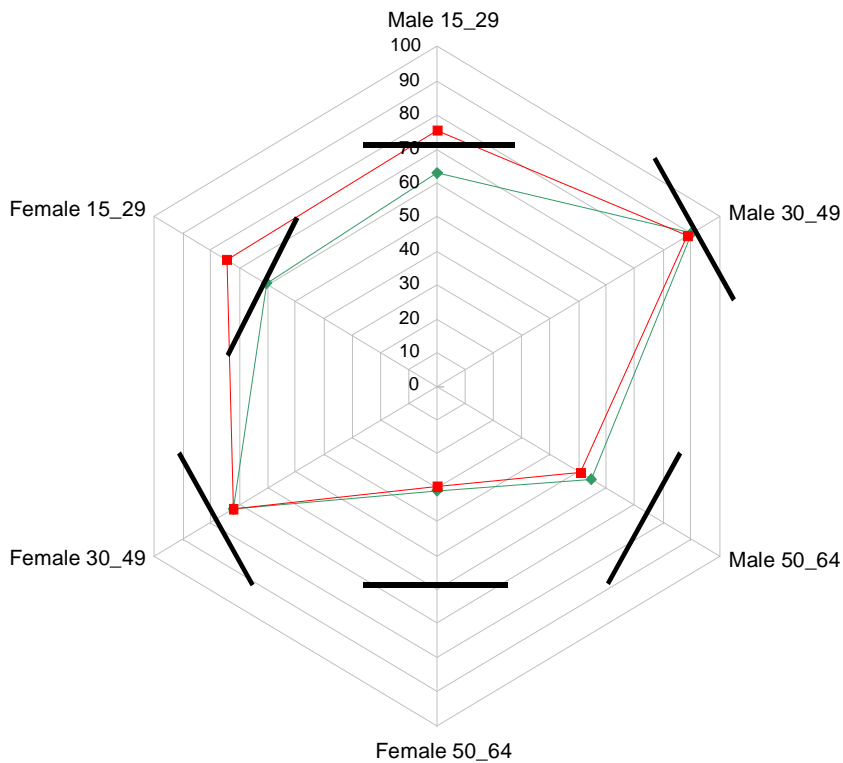
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	851	534	62,7	67	749	565	75,5	-37	70,6
Male 30_49	1260	1131	89,7	27	1351	1197	88,6	43	91,8
Male 50_64	646	352	54,5	131	731	372	50,9	174	74,8
Female 15_29	813	489	60,2	21	708	526	74,3	-82	62,7
Female 30_49	1201	862	71,7	88	1286	927	72,1	90	79,1
Female 50_64	674	206	30,6	192	751	221	29,5	222	59,1
Male 15_64	2757	2017	73,1	224	2831	2135	75,4	180	
Female 15_64	2688	1557	57,9	301	2745	1674	61,0	230	
<b>Total 15_64</b>	5446	3574	65,6	511	5576	3809	68,3	373	75,0
Female as % of tot. empl. :		43,6				44,0			

### b - Equivalent Full time

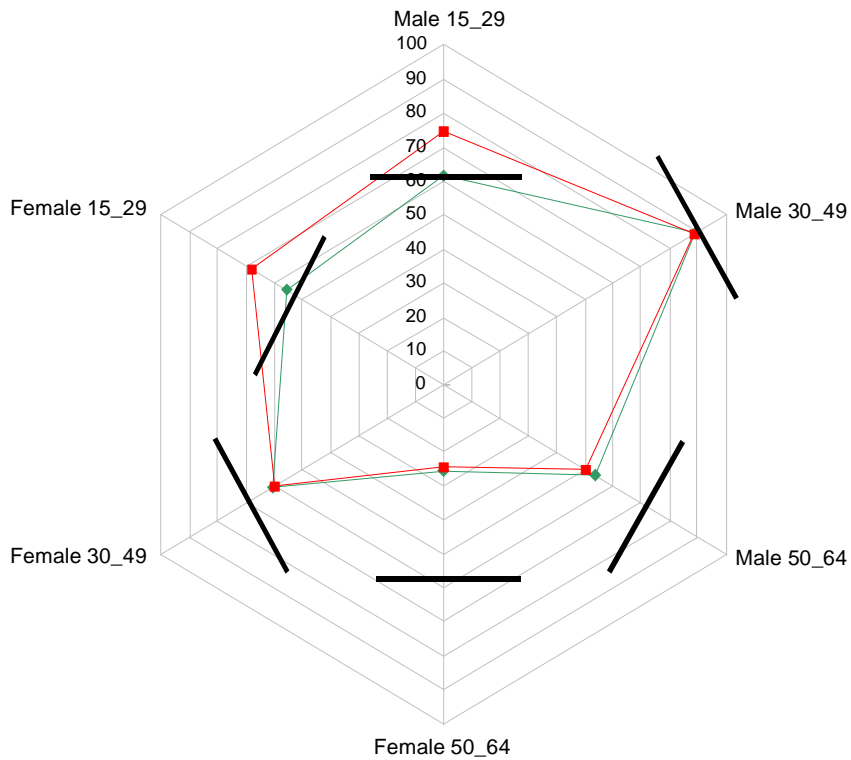
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	851	523	61,4	8	749	559	74,7	-92	62,3
Male 30_49	1260	1119	88,8	18	1351	1197	88,6	21	90,2
Male 50_64	646	343	53,1	121	731	367	50,2	158	71,8
Female 15_29	813	451	55,4	-24	708	478	67,4	-106	52,5
Female 30_49	1201	726	60,4	114	1286	770	59,8	129	69,9
Female 50_64	674	172	25,5	155	751	182	24,3	182	48,6
Male 15_64	2757	1984	72,0	147	2831	2123	75,0	87	
Female 15_64	2688	1349	50,2	245	2745	1429	52,1	206	
<b>Total 15_64</b>	5446	3333	61,2	207	5576	3552	63,7	72	65,0
Female as % of tot. empl. :		40,5				40,2			

# AT 2 - Employment rates per gender and age group Austria

a - Standard employment

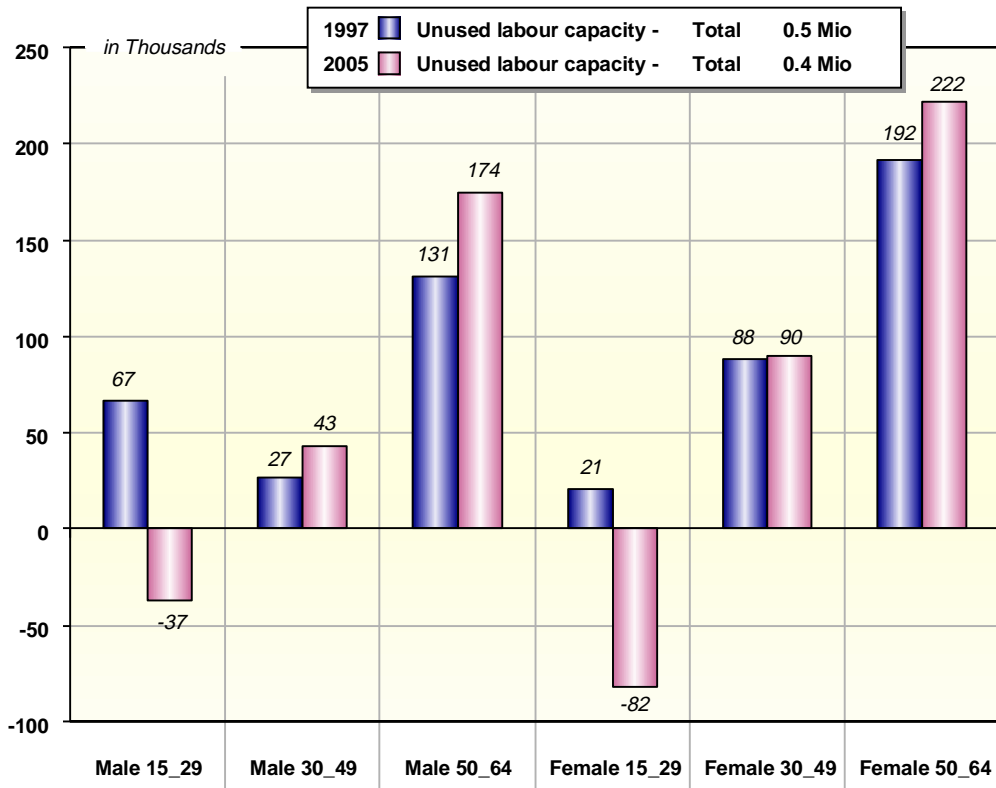


b - Equivalent Full time

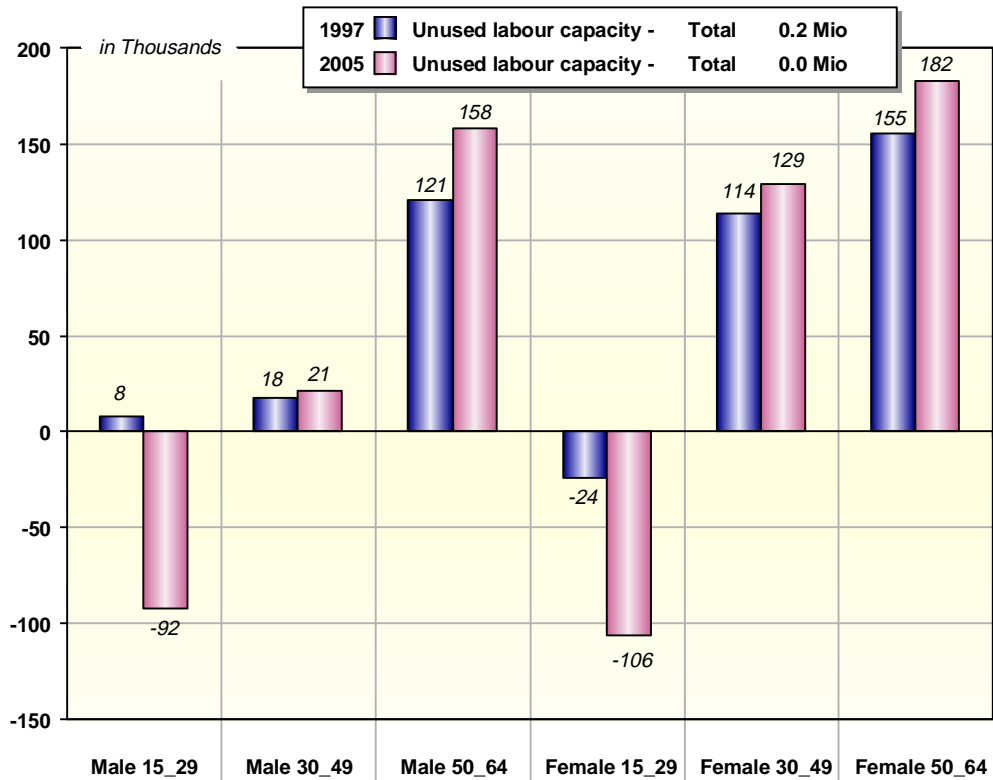


### AT 3 - Unused Labour capacity Austria

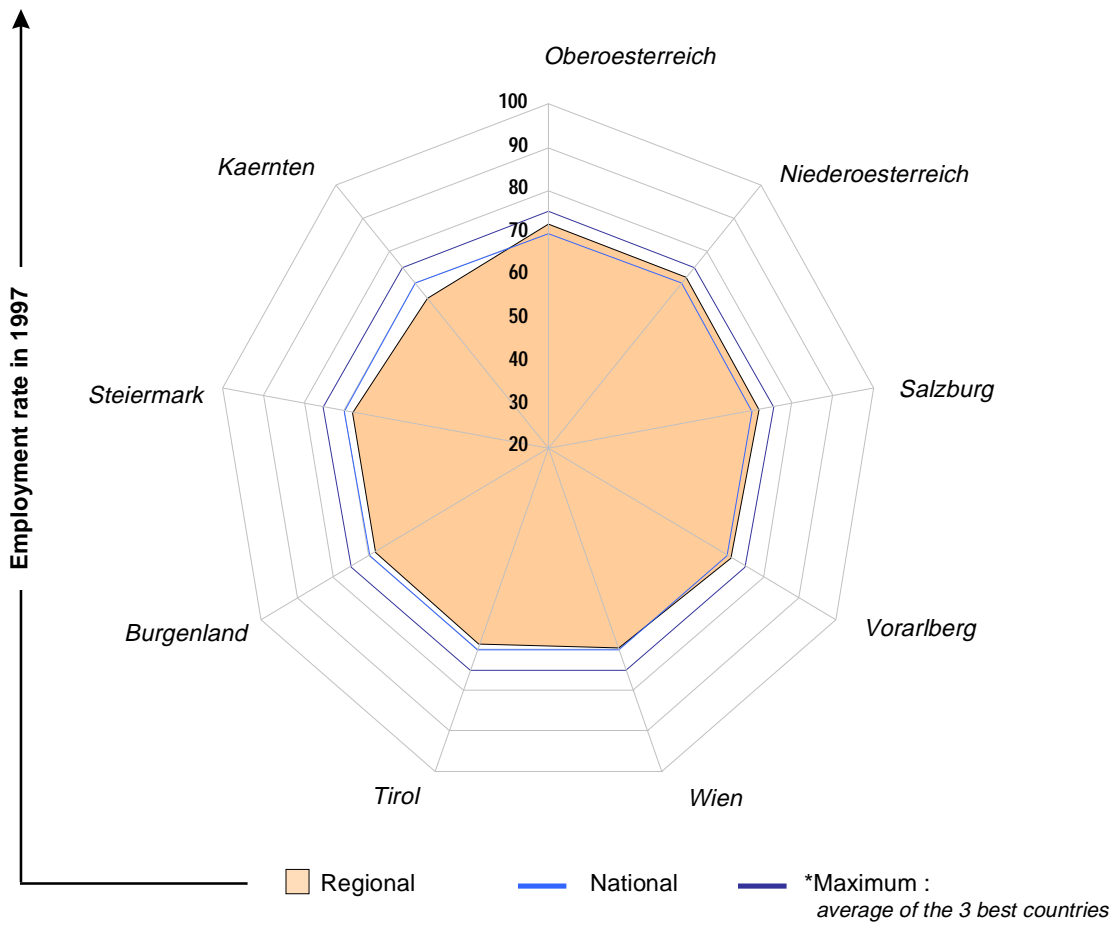
#### a - Full time + Part time



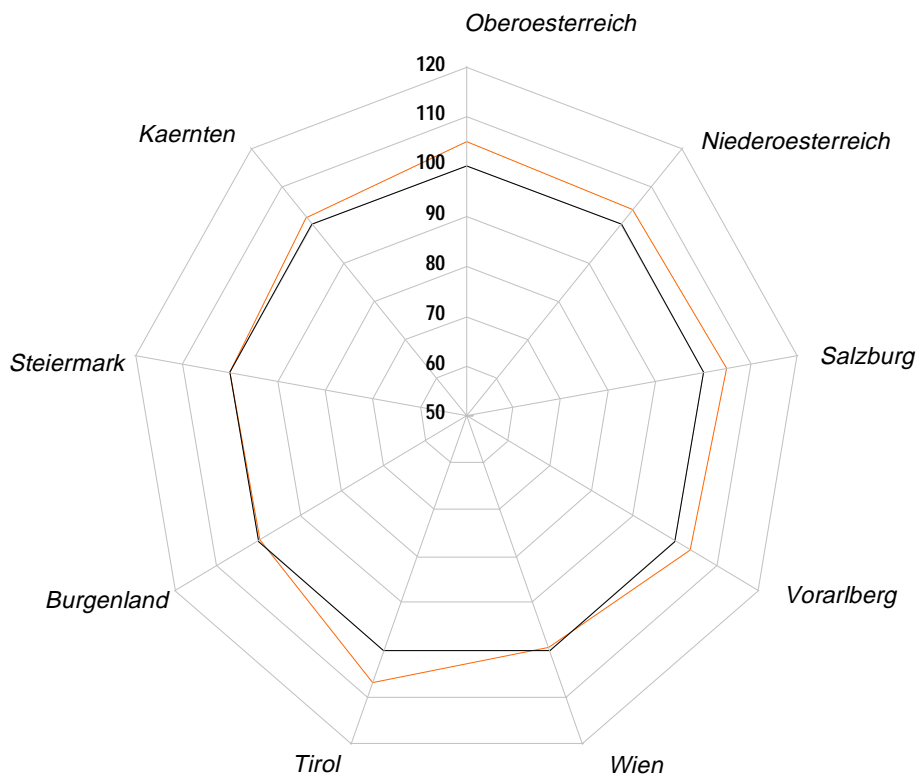
#### b - Equivalent Full time



**AT 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Austria**

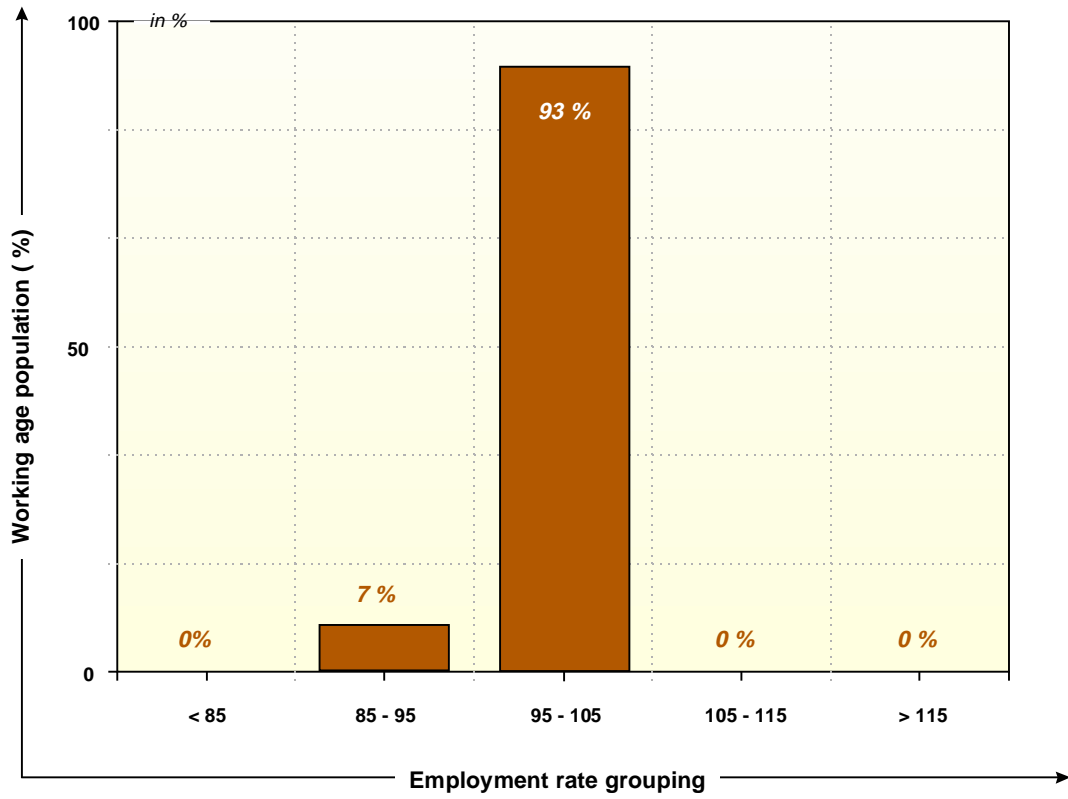


**AT 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)**

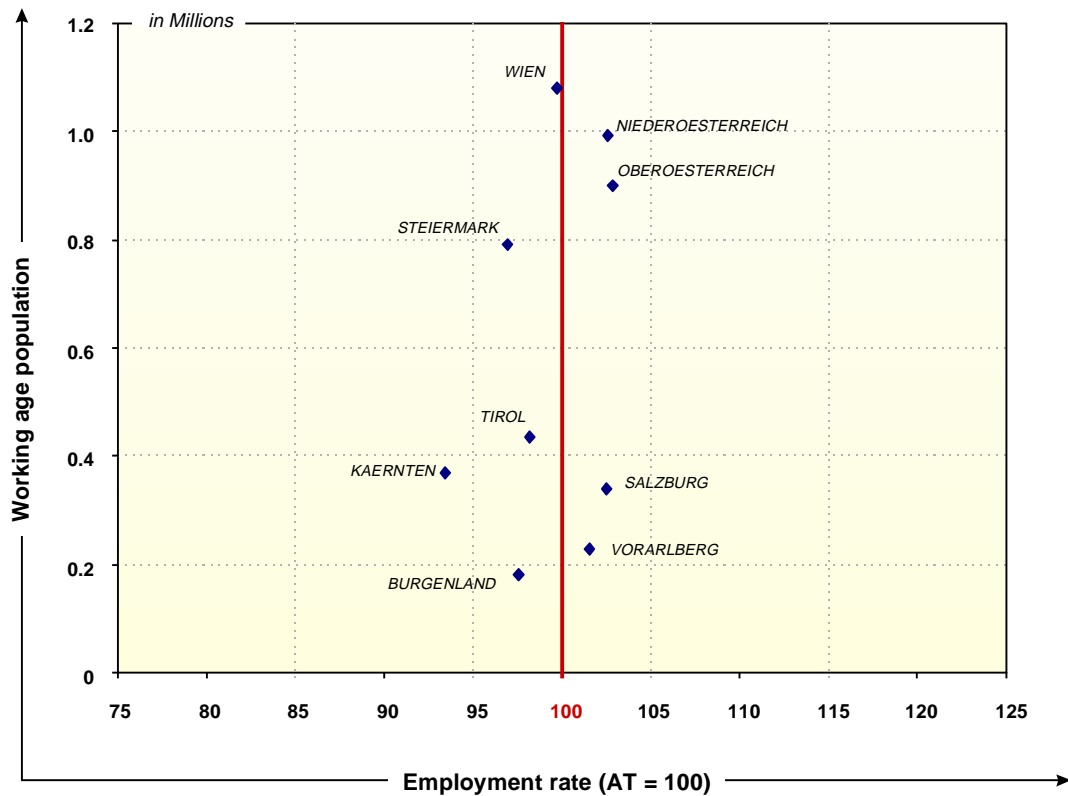


### AT 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### AT 7 - Relative position of regions in terms of working age population size and employment rate 1997



## BE 1 - Employment scenarios 1997-2005

Belgium - Annual employment growth rate : **1.0 %** - End Year **2005**

### a - Standard employment

	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	1022	501	49,0	220	953	530	55,7	142	70,6
Male 30_49	1552	1366	88,0	59	1548	1446	93,4	-25	91,8
Male 50_64	814	396	48,6	213	930	419	45,1	276	74,8
Female 15_29	984	397	40,3	221	912	444	48,6	128	62,7
Female 30_49	1506	971	64,5	220	1503	1085	72,2	103	79,1
Female 50_64	840	188	22,4	308	936	210	22,4	343	59,1
Male 15_64	3388	2264	66,8	491	3431	2396	69,8	393	
Female 15_64	3330	1555	46,7	749	3352	1739	51,9	575	
<b>Total 15_64</b>	<b>6718</b>	<b>3819</b>	<b>56,8</b>	<b>1220</b>	<b>6782</b>	<b>4135</b>	<b>61,0</b>	<b>952</b>	<b>75,0</b>
Female as % of tot. empl. :		40,7				42,1			

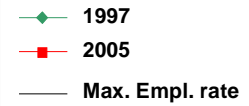
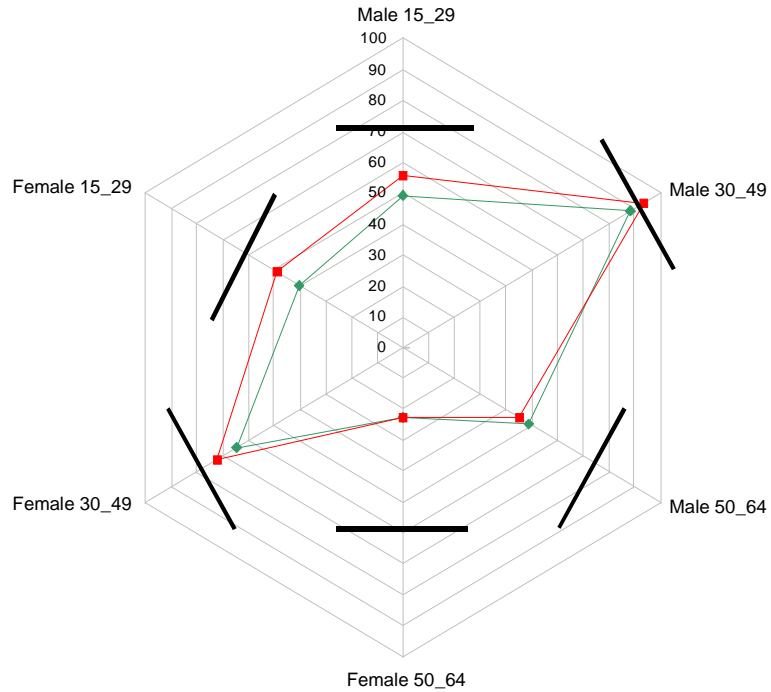
### b - Equivalent Full time

	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	1022	487	47,7	150	953	519	54,4	75	62,3
Male 30_49	1552	1351	87,1	48	1548	1439	92,9	-43	90,2
Male 50_64	814	390	47,9	195	930	415	44,7	253	71,8
Female 15_29	984	349	35,4	168	912	388	42,6	90	52,5
Female 30_49	1506	803	53,3	250	1503	894	59,4	157	69,9
Female 50_64	840	160	19,0	248	936	178	19,0	277	48,6
Male 15_64	3388	2228	65,8	393	3431	2373	69,2	285	
Female 15_64	3330	1311	39,4	665	3352	1460	43,6	524	
<b>Total 15_64</b>	<b>6718</b>	<b>3539</b>	<b>52,7</b>	<b>827</b>	<b>6782</b>	<b>3833</b>	<b>56,5</b>	<b>576</b>	<b>65,0</b>
Female as % of tot. empl. :		37,0				38,1			



## BE 2 - Employment rates per gender and age group Belgium

a - Standard employment

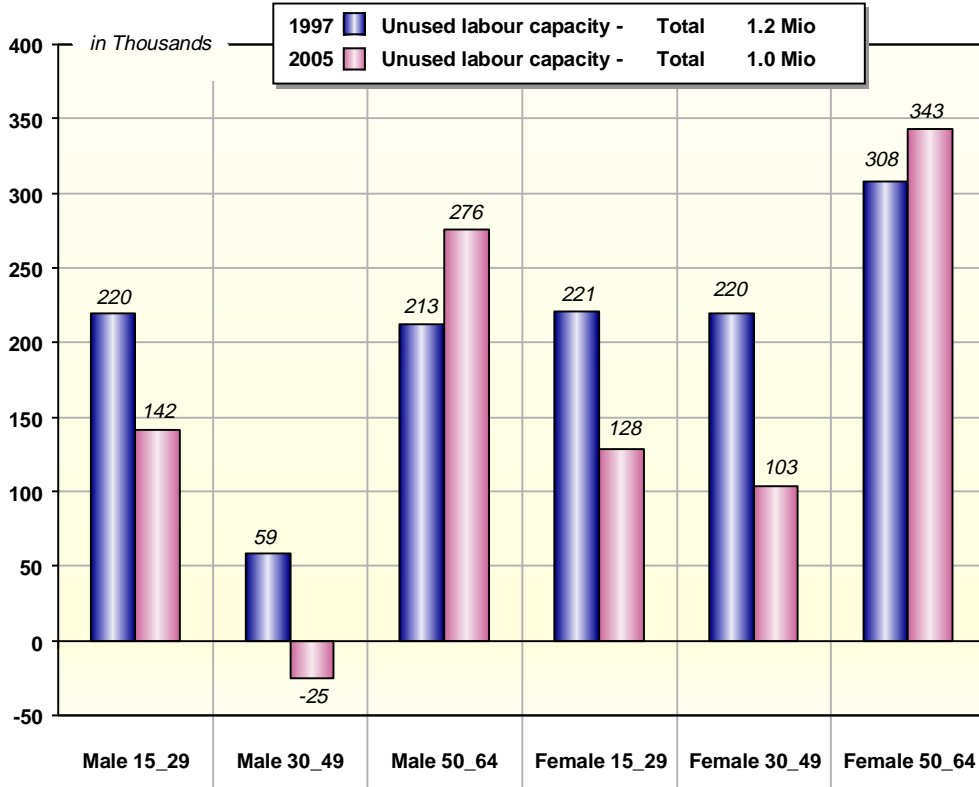


b - Equivalent Full time

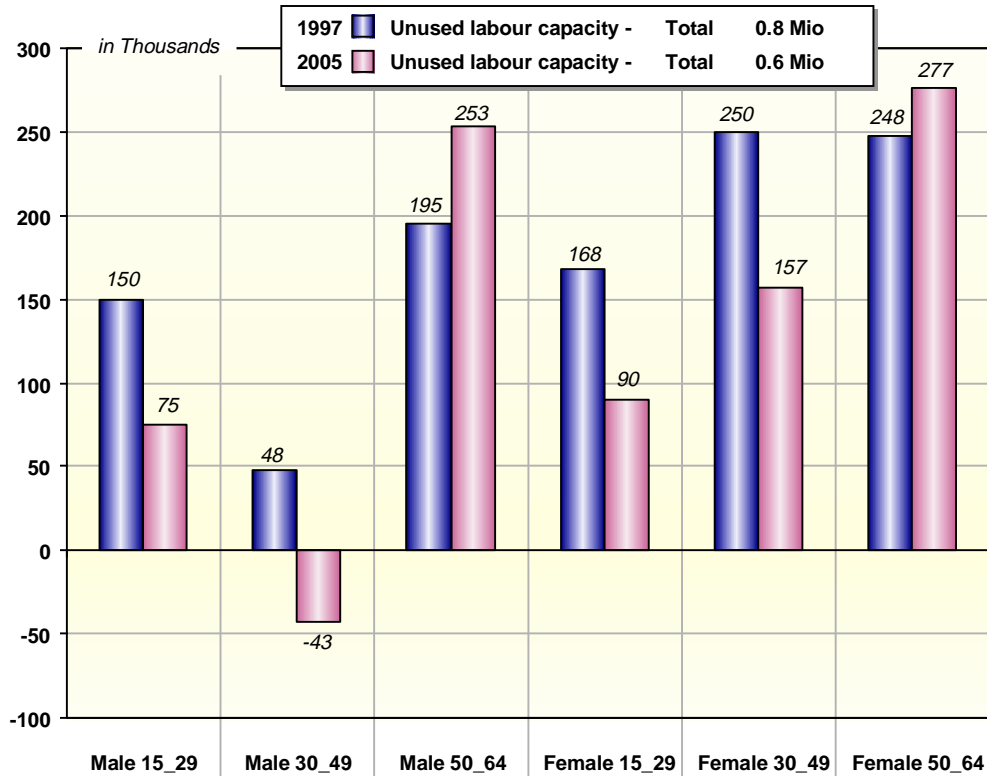


## BE 3 - Unused Labour capacity Belgium

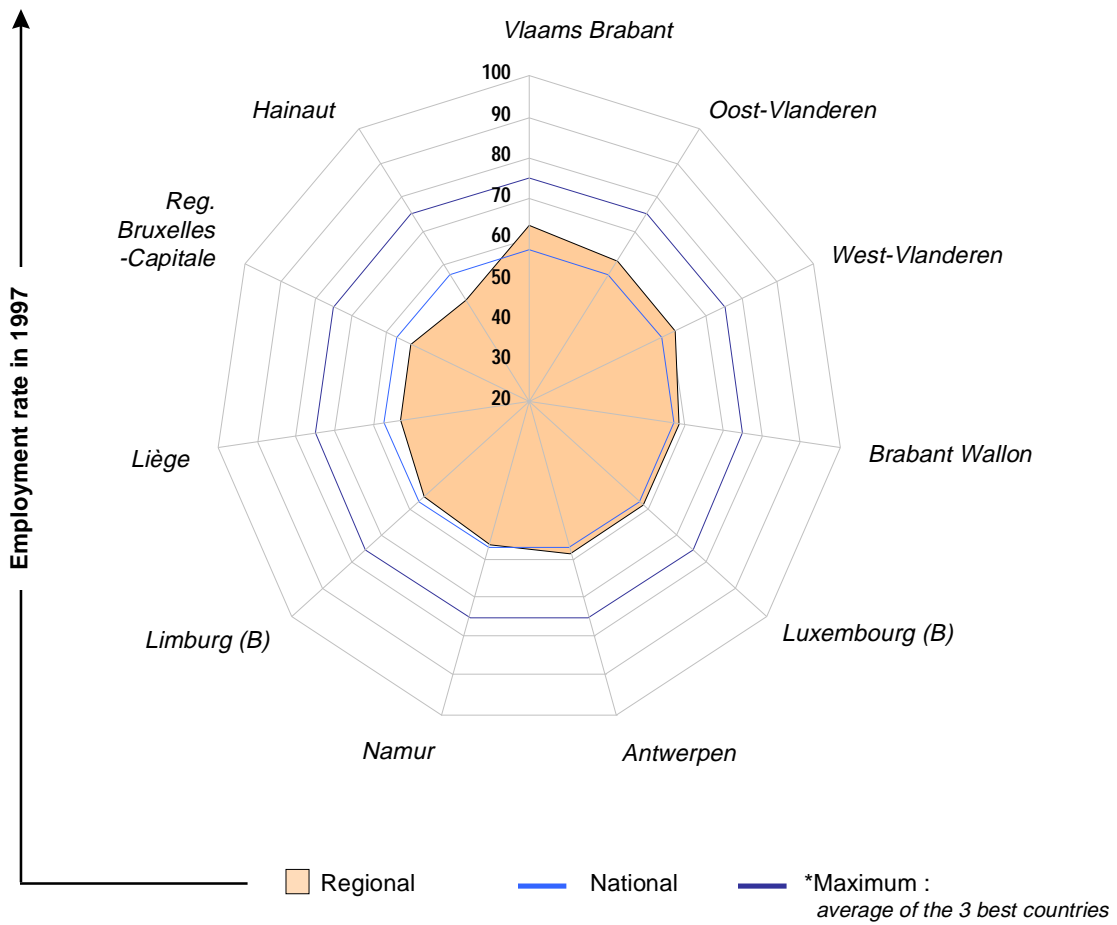
### a - Full time + Part time



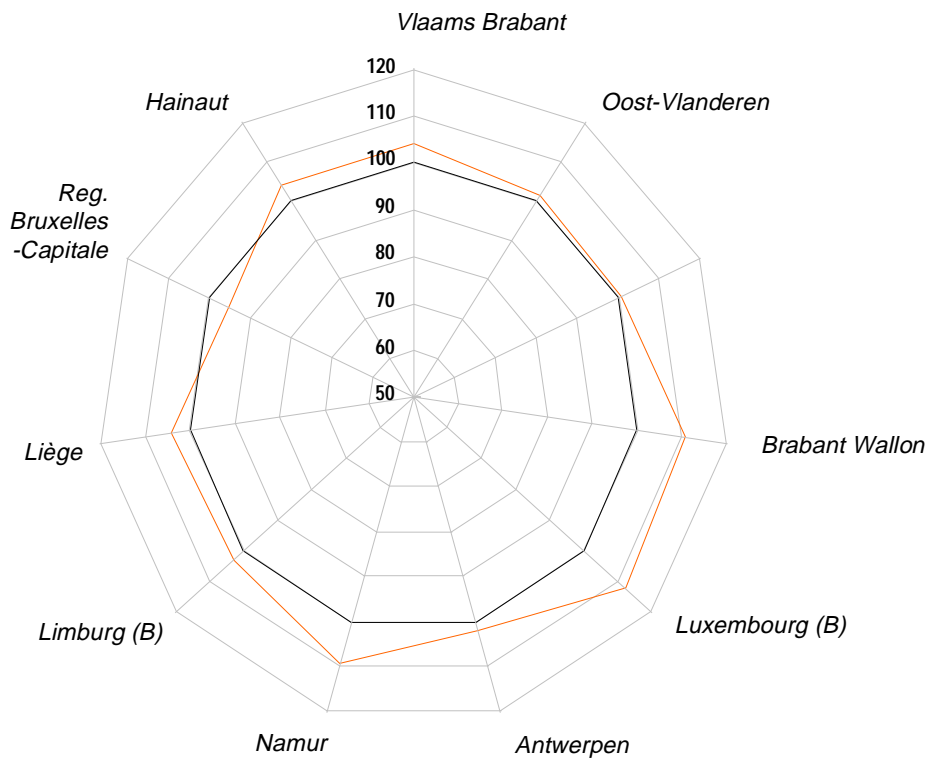
### b - Equivalent Full time



**BE 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Belgium**

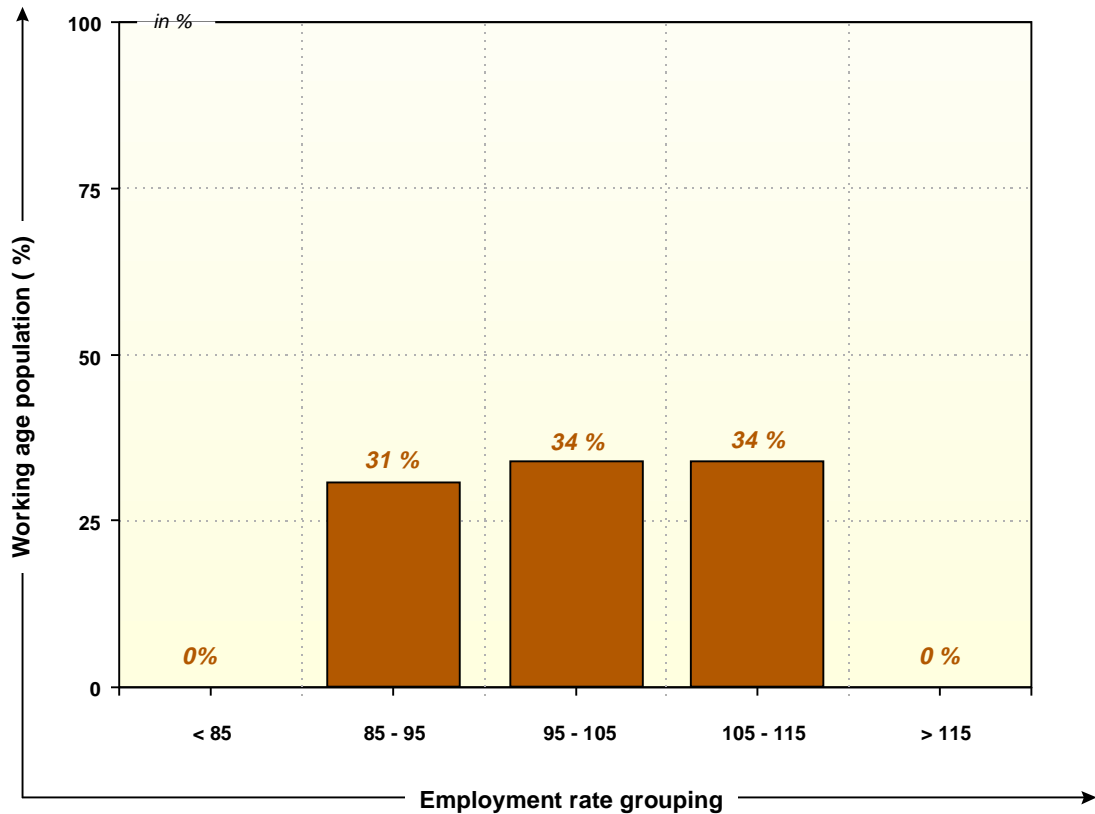


**BE 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)**

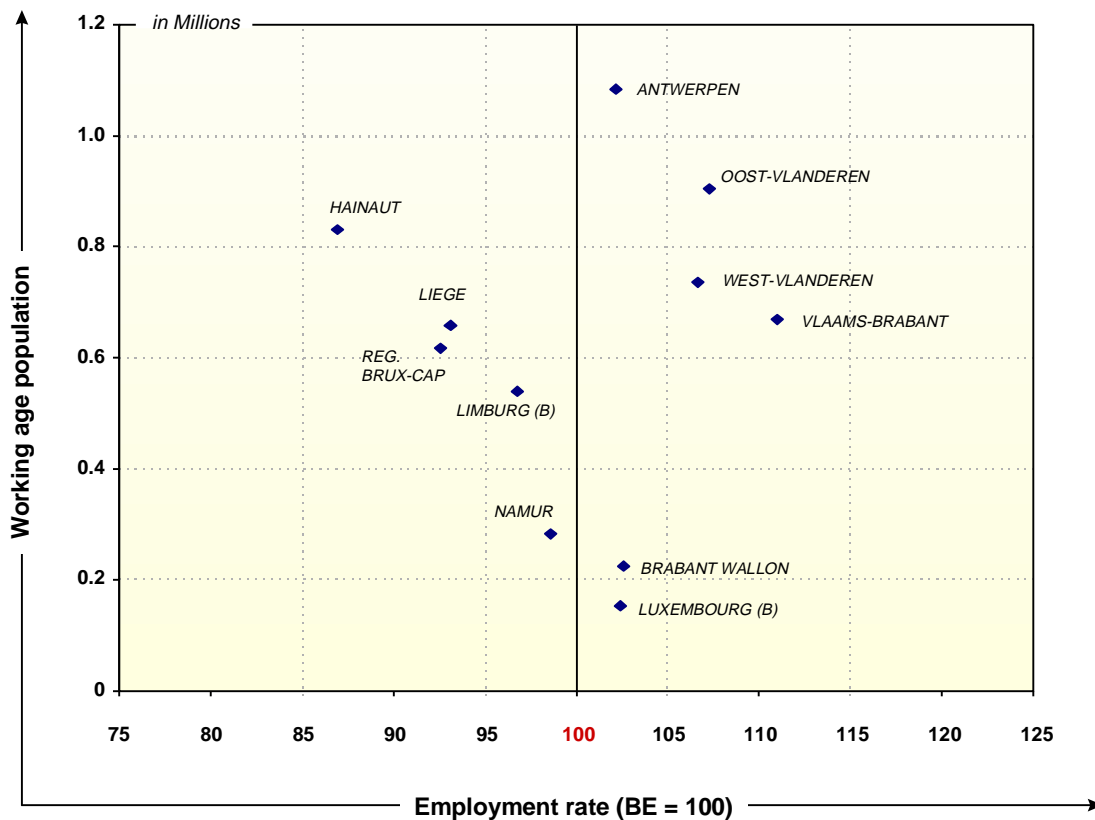


### BE 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### BE 7 - Relative position of regions in terms of working age population size and employment rate 1997



## DE 1 - Employment scenarios 1997-2005

Deutschland - Annual employment growth rate : **0.6 %** - End Year **2005**

### a - Standard employment

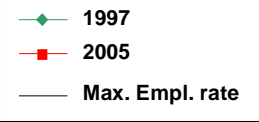
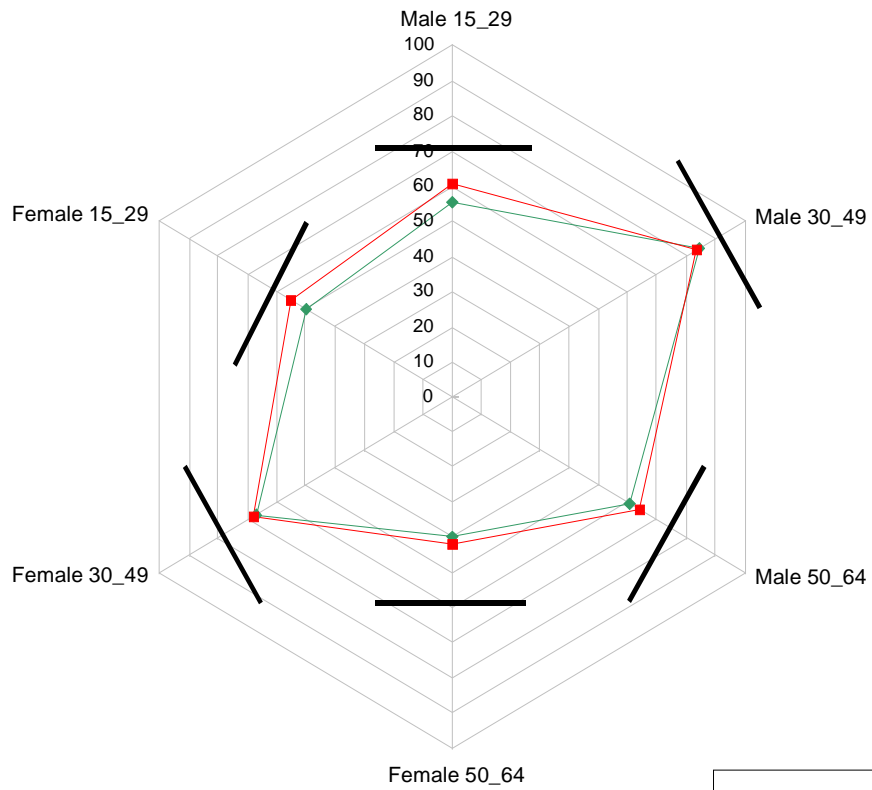
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	7999	4422	55,3	1221	7629	4626	60,6	757	70,6
Male 30_49	12935	10856	83,9	1021	13661	11356	83,1	1187	91,8
Male 50_64	7674	4665	60,8	1072	7620	4880	64,0	817	74,8
Female 15_29	7500	3734	49,8	971	7168	3932	54,9	565	62,7
Female 30_49	12245	8199	67,0	1482	12738	8634	67,8	1437	79,1
Female 50_64	7749	3070	39,6	1507	7744	3232	41,7	1341	59,1
Male 15_64	28608	19944	69,7	3314	28910	20862	72,2	2761	
Female 15_64	27495	15003	54,6	3960	27649	15798	57,1	3343	
<b>Total 15_64</b>	<b>56103</b>	<b>34947</b>	<b>62,3</b>	<b>7130</b>	<b>56559</b>	<b>36660</b>	<b>64,8</b>	<b>5759</b>	<b>75,0</b>
<i>Female as % of tot. empl. :</i>		<i>42,9</i>				<i>43,1</i>			

### b - Equivalent Full time

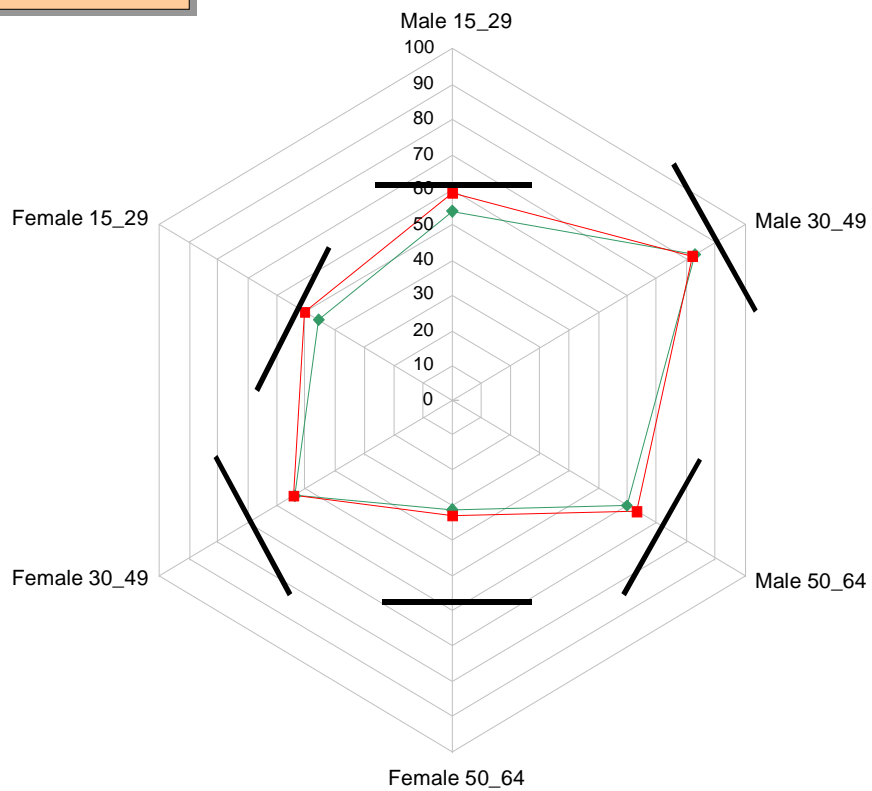
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	7999	4285	53,6	701	7629	4489	58,8	267	62,3
Male 30_49	12935	10703	82,7	959	13661	11214	82,1	1103	90,2
Male 50_64	7674	4580	59,7	933	7620	4799	63,0	676	71,8
Female 15_29	7500	3414	45,5	522	7168	3589	50,1	173	52,5
Female 30_49	12245	6564	53,6	1993	12738	6900	54,2	2002	69,9
Female 50_64	7749	2408	31,1	1354	7744	2531	32,7	1228	48,6
Male 15_64	28608	19568	68,4	2594	28910	20501	70,9	2046	
Female 15_64	27495	12386	45,0	3869	27649	13020	47,1	3403	
<b>Total 15_64</b>	<b>56103</b>	<b>31955</b>	<b>57,0</b>	<b>4512</b>	<b>56559</b>	<b>33521</b>	<b>59,3</b>	<b>3242</b>	<b>65,0</b>
<i>Female as % of tot. empl. :</i>		<i>38,8</i>				<i>38,8</i>			

## DE 2 - Employment rates per gender and age group Deutschland

a - Standard employment

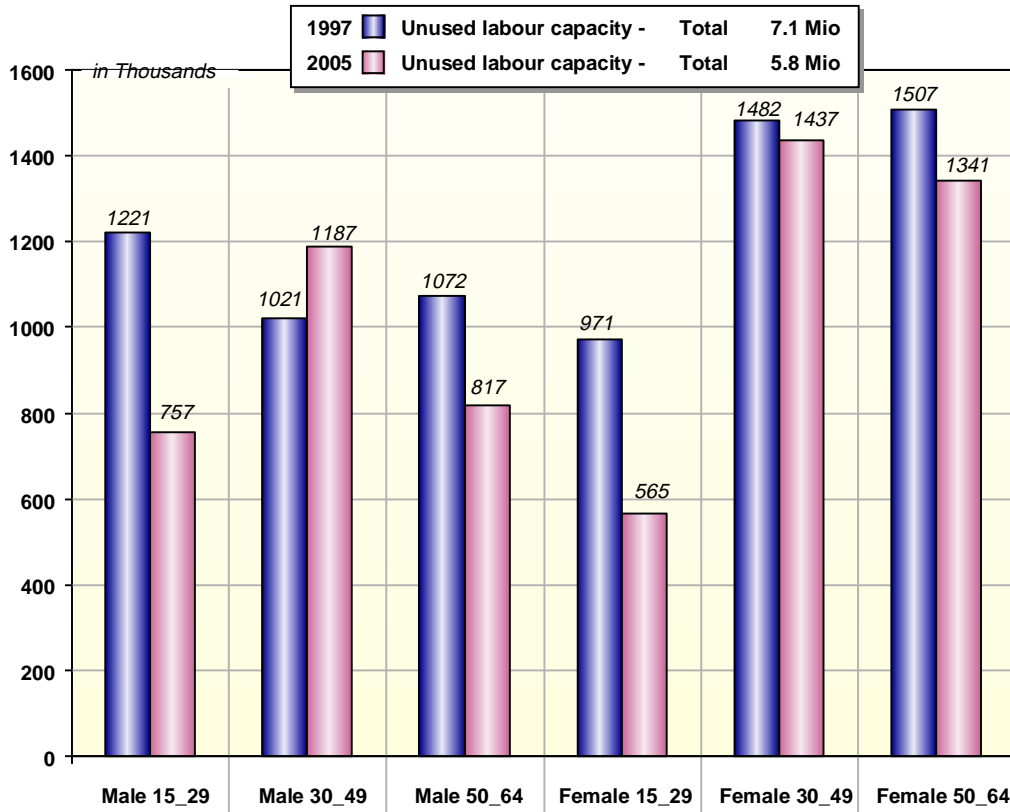


b - Equivalent Full time

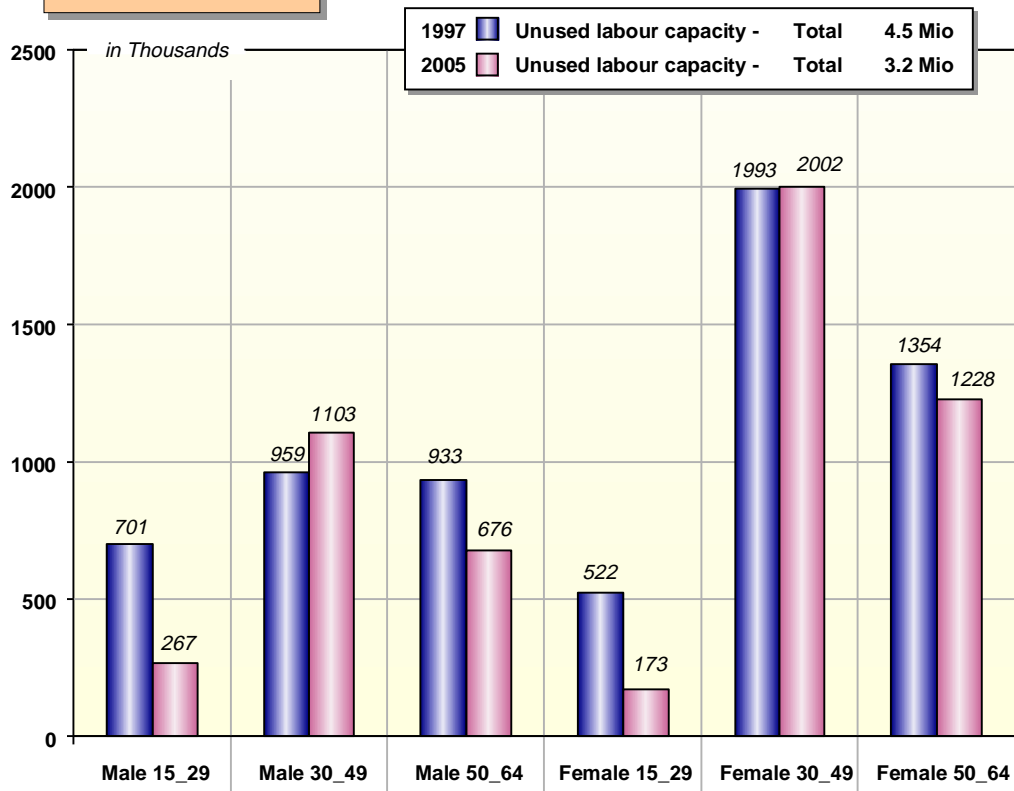


## DE 3 - Unused Labour capacity Deutschland

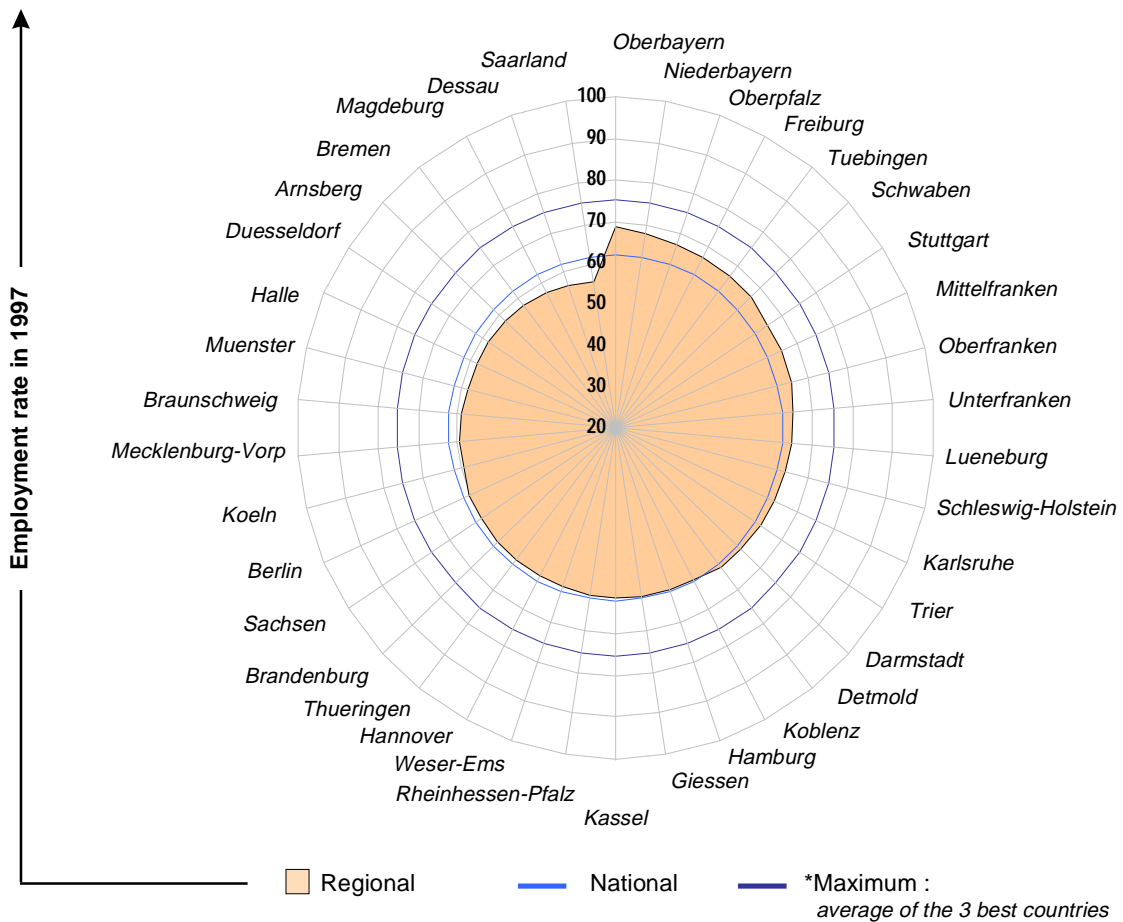
### a - Full time + Part time



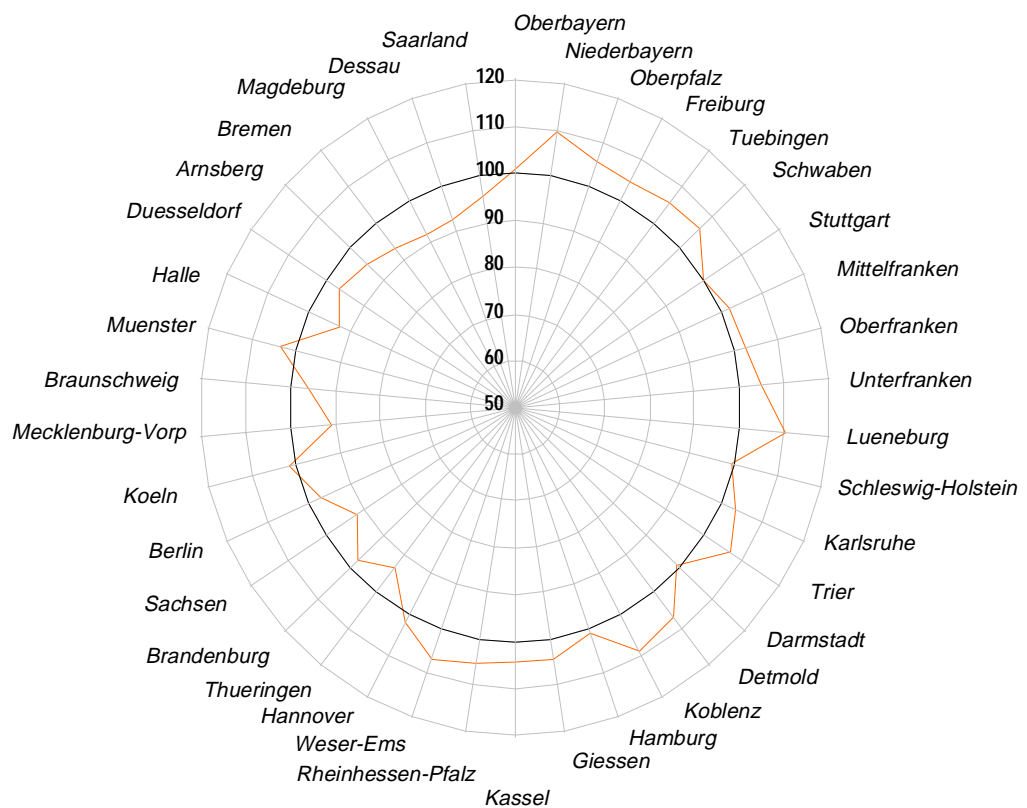
### b - Equivalent Full time



## DE 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Deutschland



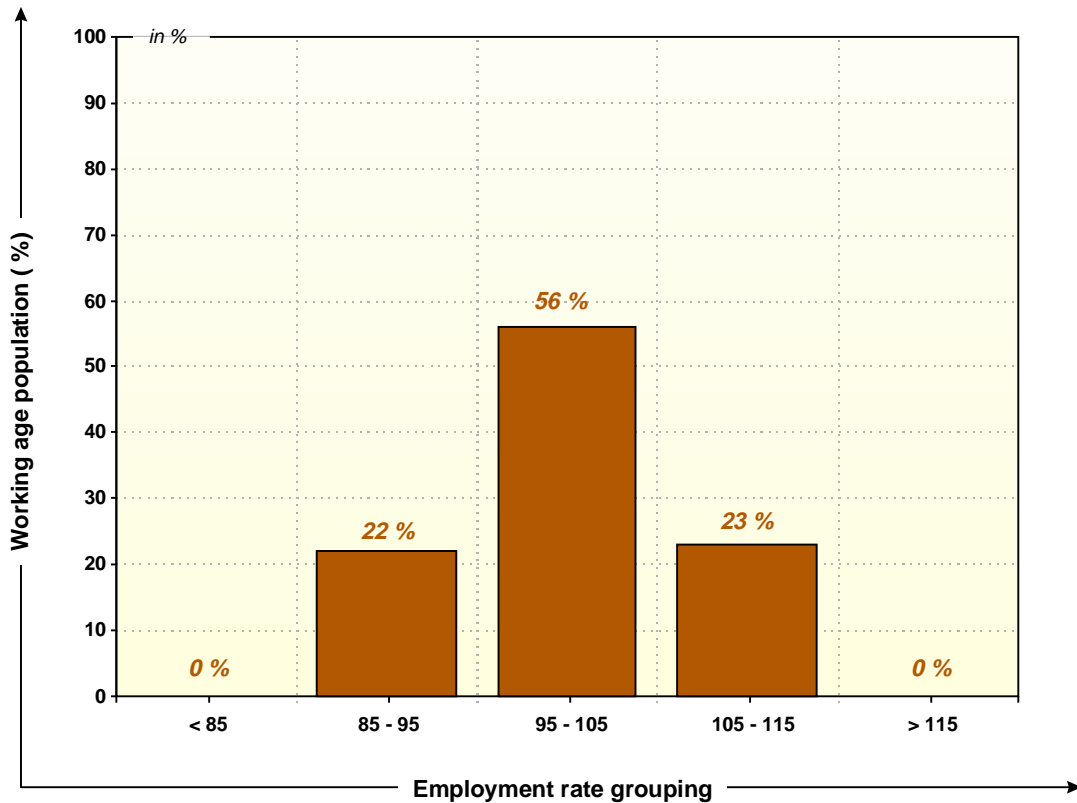
## DE 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)



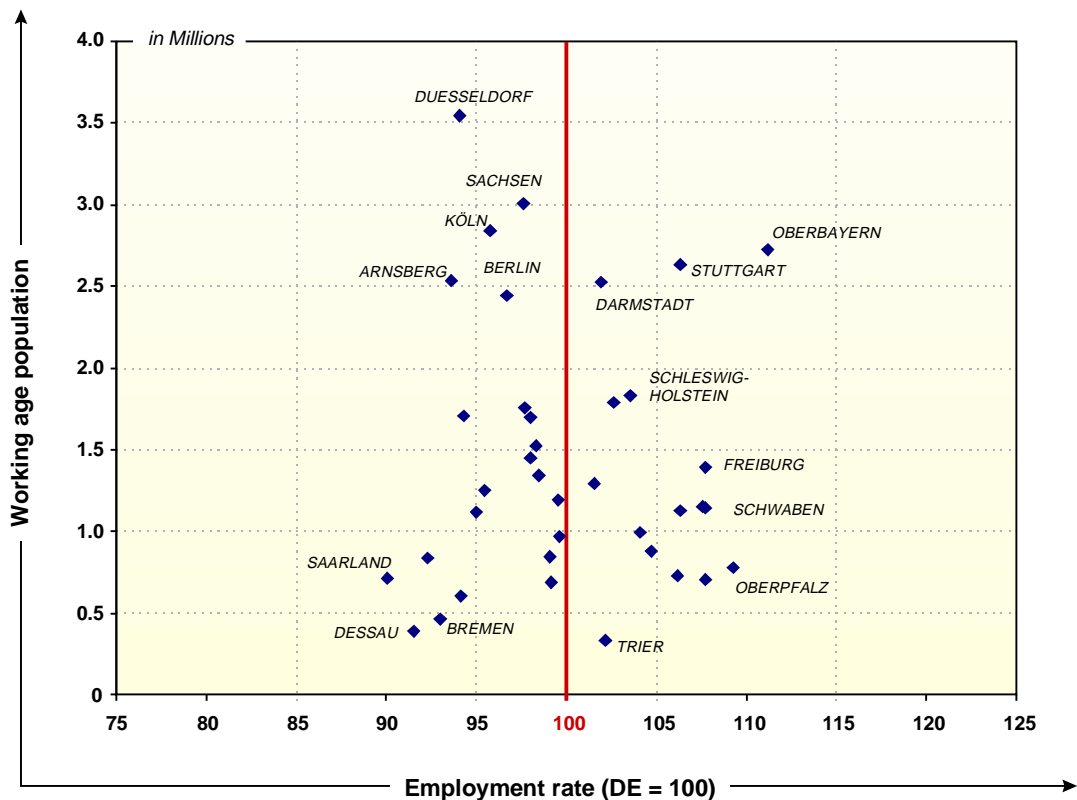


## DE 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



## DE 7 - Relative position of regions in terms of working age population size and employment rate - 1997



## DK 1 - Employment scenarios 1997-2005

Denmark - Annual employment growth rate : **0.7 %** - End Year **2005**

### a - Standard employment

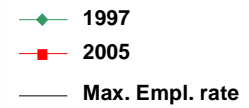
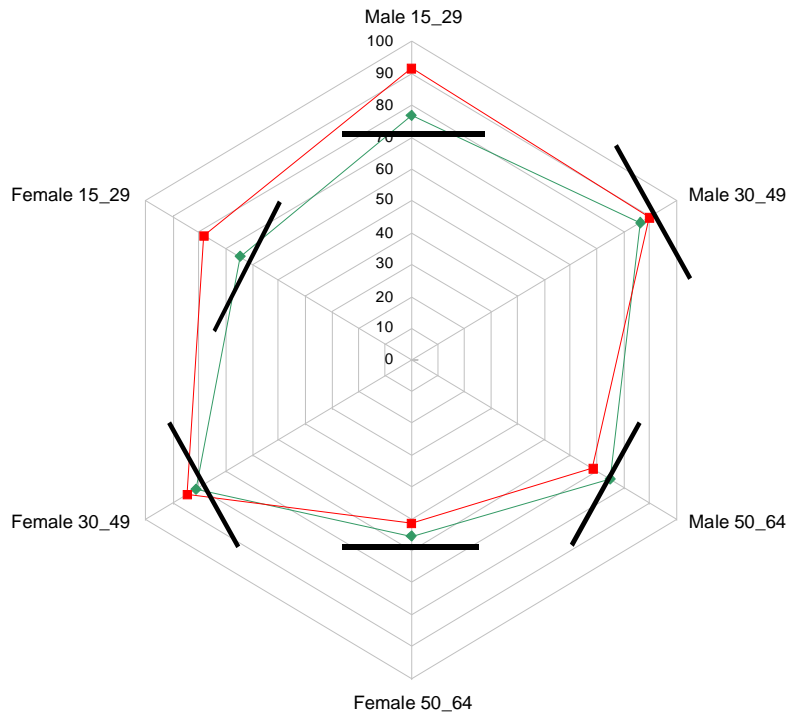
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	543	416	76,7	-33	481	439	91,3	-100	70,6
Male 30_49	792	682	86,2	45	804	720	89,5	19	91,8
Male 50_64	459	343	74,7	0	533	362	67,9	37	74,8
Female 15_29	521	335	64,3	-8	458	356	77,7	-69	62,7
Female 30_49	763	615	80,6	-12	773	653	84,5	-42	79,1
Female 50_64	462	256	55,5	17	531	272	51,2	42	59,1
Male 15_64	1794	1442	80,4	12	1818	1520	83,6	-44	
Female 15_64	1746	1207	69,1	-4	1761	1280	72,7	-69	
<b>Total 15_64</b>	<b>3540</b>	<b>2649</b>	<b>74,8</b>	<b>6</b>	<b>3579</b>	<b>2801</b>	<b>78,3</b>	<b>-117</b>	<b>75,0</b>
Female as % of tot. empl. :		45,6				45,7			

### b - Equivalent Full time

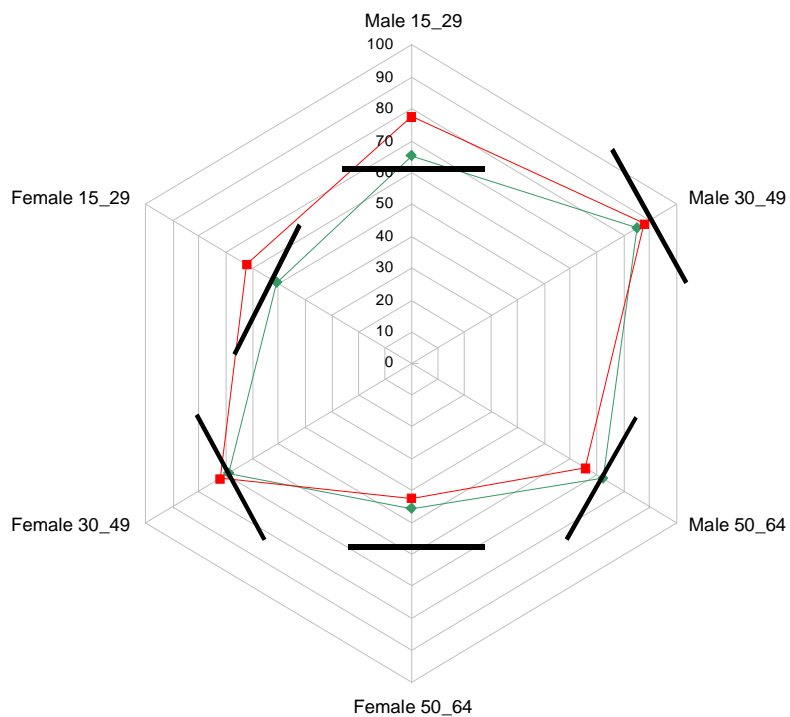
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	543	354	65,3	-16	481	372	77,5	-73	62,3
Male 30_49	792	671	84,7	44	804	705	87,6	21	90,2
Male 50_64	459	331	72,1	-1	533	348	65,3	35	71,8
Female 15_29	521	265	50,9	8	458	283	61,8	-43	52,5
Female 30_49	763	522	68,5	11	773	557	72,1	-17	69,9
Female 50_64	462	210	45,5	14	531	224	42,3	33	48,6
Male 15_64	1794	1356	75,6	26	1818	1425	78,4	-17	
Female 15_64	1746	998	57,2	33	1761	1064	60,4	-26	
<b>Total 15_64</b>	<b>3540</b>	<b>2354</b>	<b>66,5</b>	<b>-53</b>	<b>3579</b>	<b>2489</b>	<b>69,6</b>	<b>-163</b>	<b>65,0</b>
Female as % of tot. empl. :		42,4				42,8			

## DK 2 - Employment rates per gender and age group Denmark

a - Standard employment

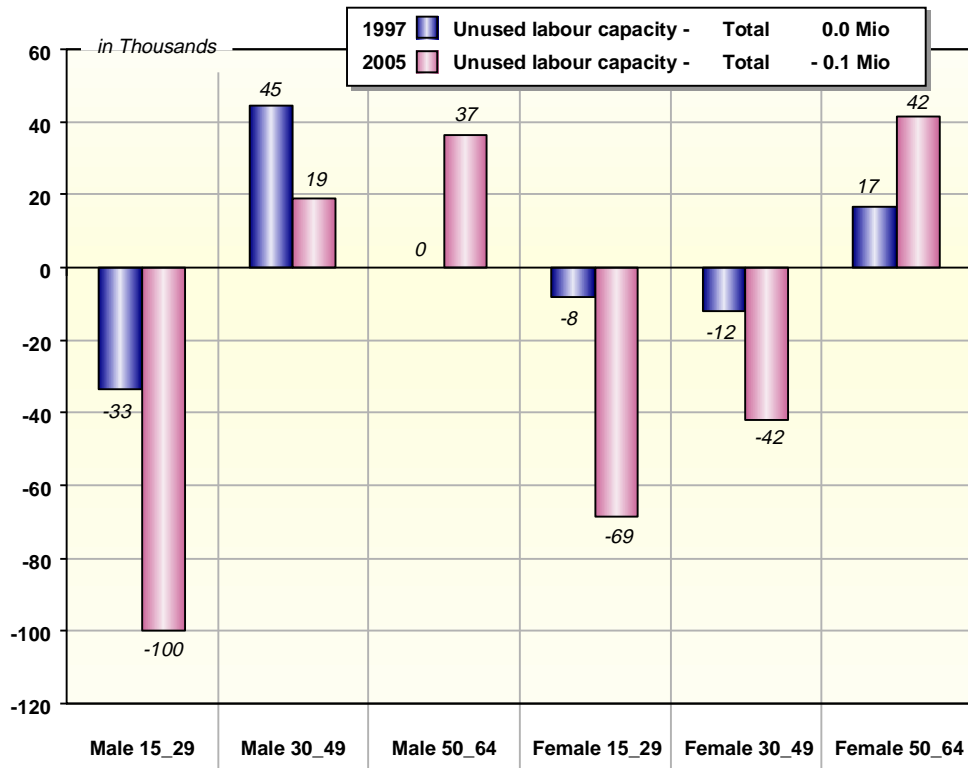


b - Equivalent Full time

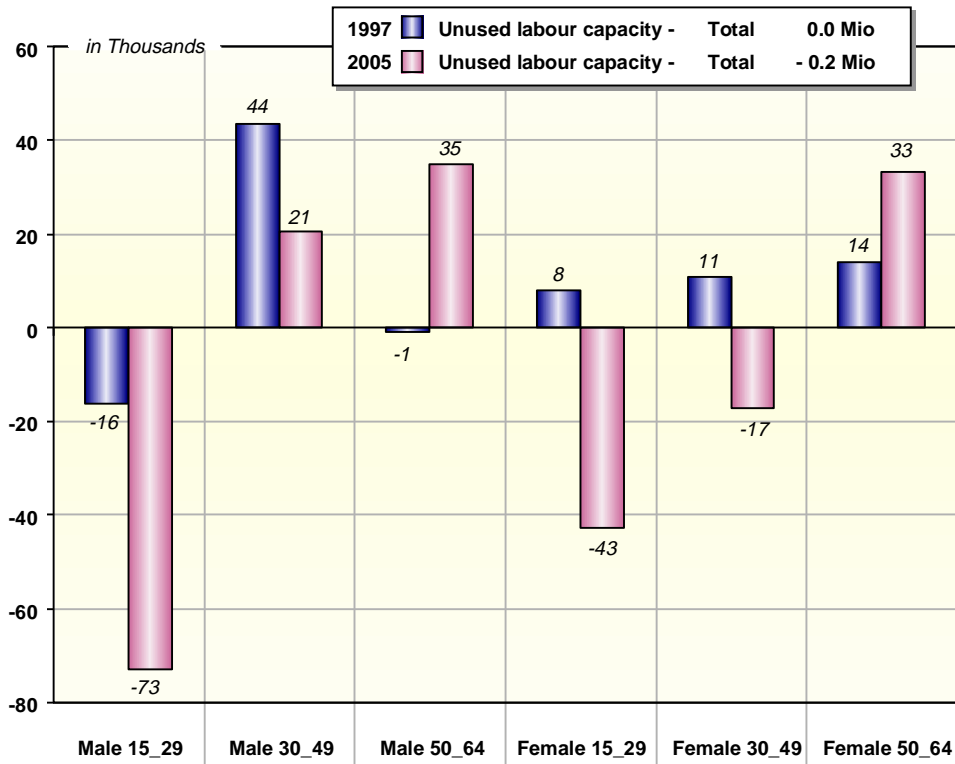


## DK 3 - Unused Labour capacity Denmark

### a - Full time + Part time



### b - Equivalent Full time



## ES 1 - Employment scenarios 1997-2005

Spain - Annual employment growth rate : **2.9 %** - End Year **2005**

### a - Standard employment

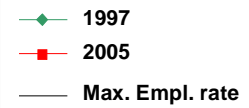
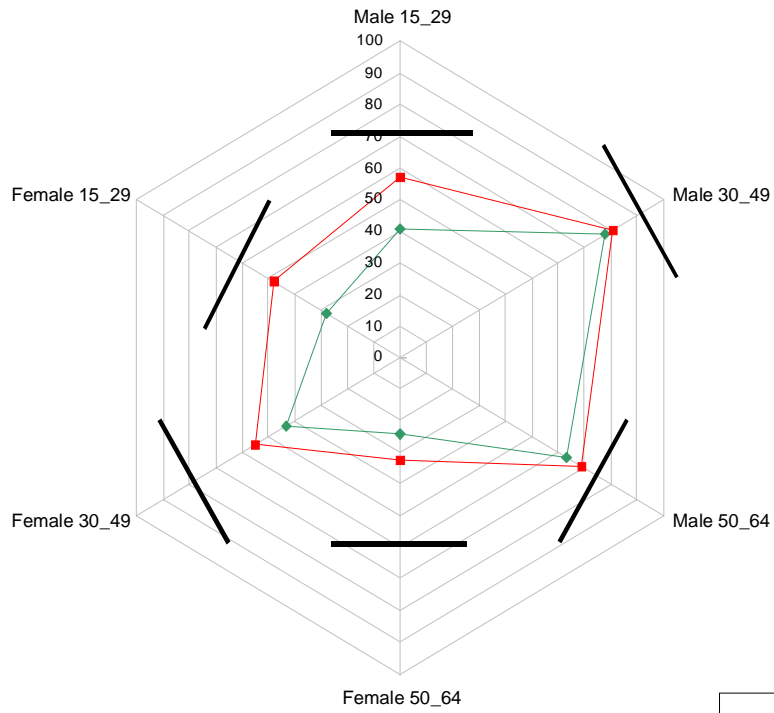
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	4872	1979	40,6	1459	4055	2309	56,9	552	70,6
Male 30_49	5520	4272	77,4	797	6206	4983	80,3	715	91,8
Male 50_64	3029	1917	63,3	347	3244	2236	68,9	189	74,8
Female 15_29	4681	1304	27,8	1633	3884	1856	47,8	581	62,7
Female 30_49	5501	2362	42,9	1987	6127	3362	54,9	1482	79,1
Female 50_64	3225	775	24,0	1130	3420	1104	32,3	917	59,1
Male 15_64	13421	8168	60,9	2603	13504	9528	70,6	1456	
Female 15_64	13408	4441	33,1	4750	13431	6321	47,1	2980	
<b>Total 15_64</b>	26829	12609	47,0	7513	26935	15849	58,8	4353	75,0
<i>Female as % of tot. empl. :</i>		35,2				39,9			

### b - Equivalent Full time

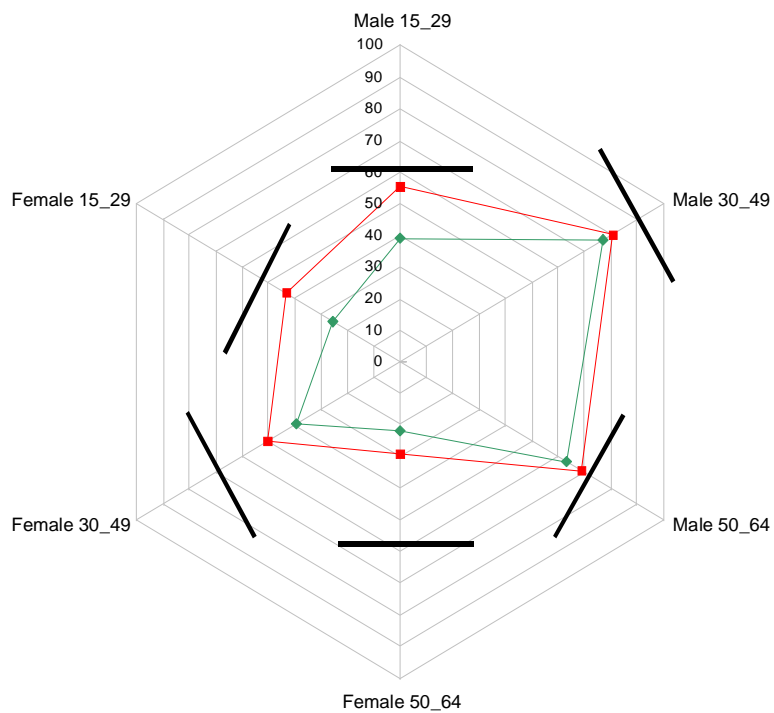
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	4872	1906	39,1	1131	4055	2244	55,3	284	62,3
Male 30_49	5520	4230	76,6	747	6206	4981	80,3	614	90,2
Male 50_64	3029	1895	62,6	281	3244	2231	68,8	99	71,8
Female 15_29	4681	1182	25,3	1274	3884	1672	43,0	366	52,5
Female 30_49	5501	2170	39,5	1674	6127	3069	50,1	1212	69,9
Female 50_64	3225	703	21,8	864	3420	993	29,0	667	48,6
Male 15_64	13421	8030	59,8	2160	13504	9456	70,0	997	
Female 15_64	13408	4055	30,2	3812	13431	5735	42,7	2245	
<b>Total 15_64</b>	26829	12085	45,0	5354	26935	15191	56,4	2317	65,0
<i>Female as % of tot. empl. :</i>		33,6				37,8			

## ES 2 - Employment rates per gender and age group Spain

a - Standard employment

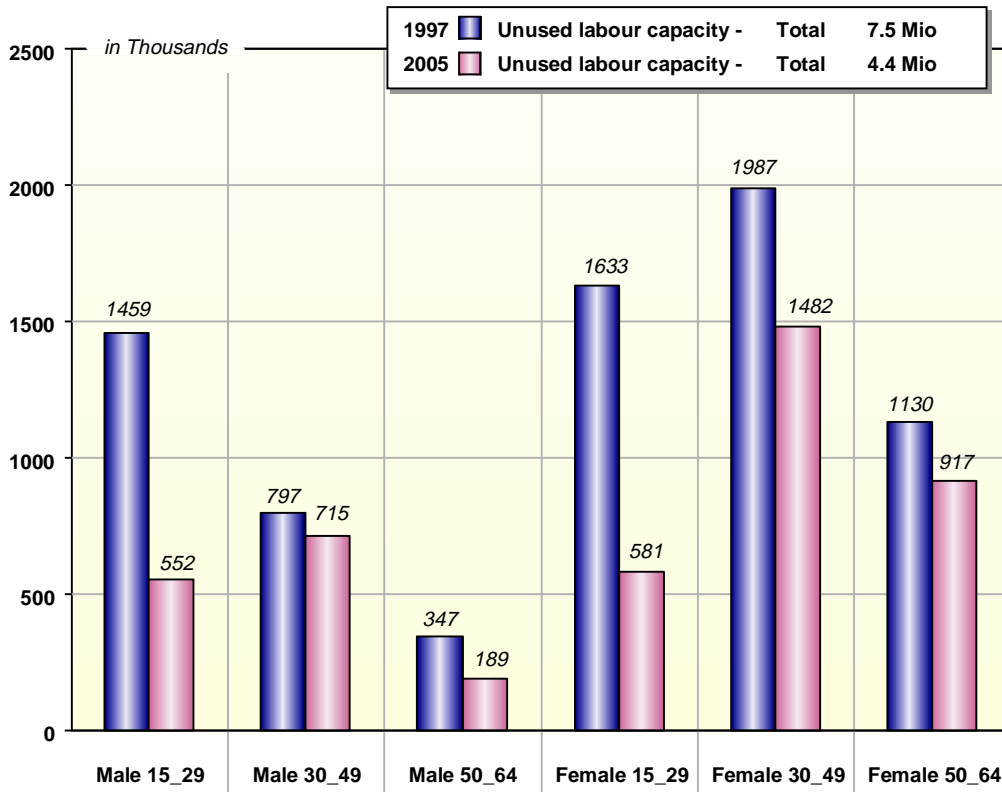


b - Equivalent Full time

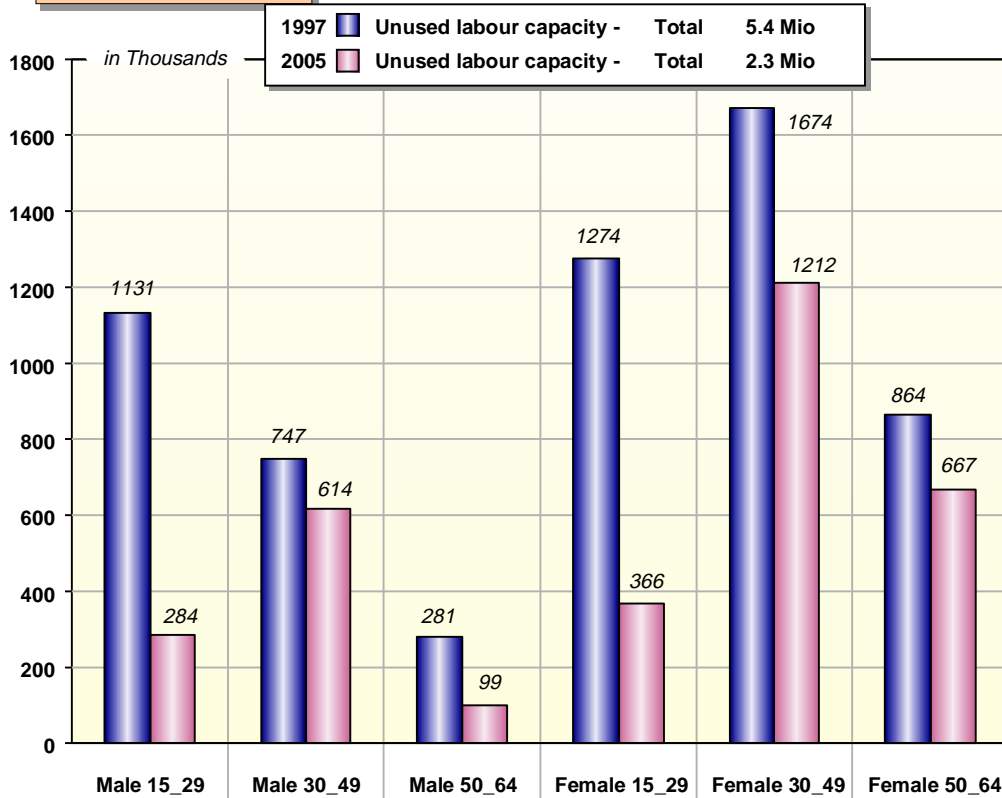


## ES 3 - Unused Labour capacity Spain

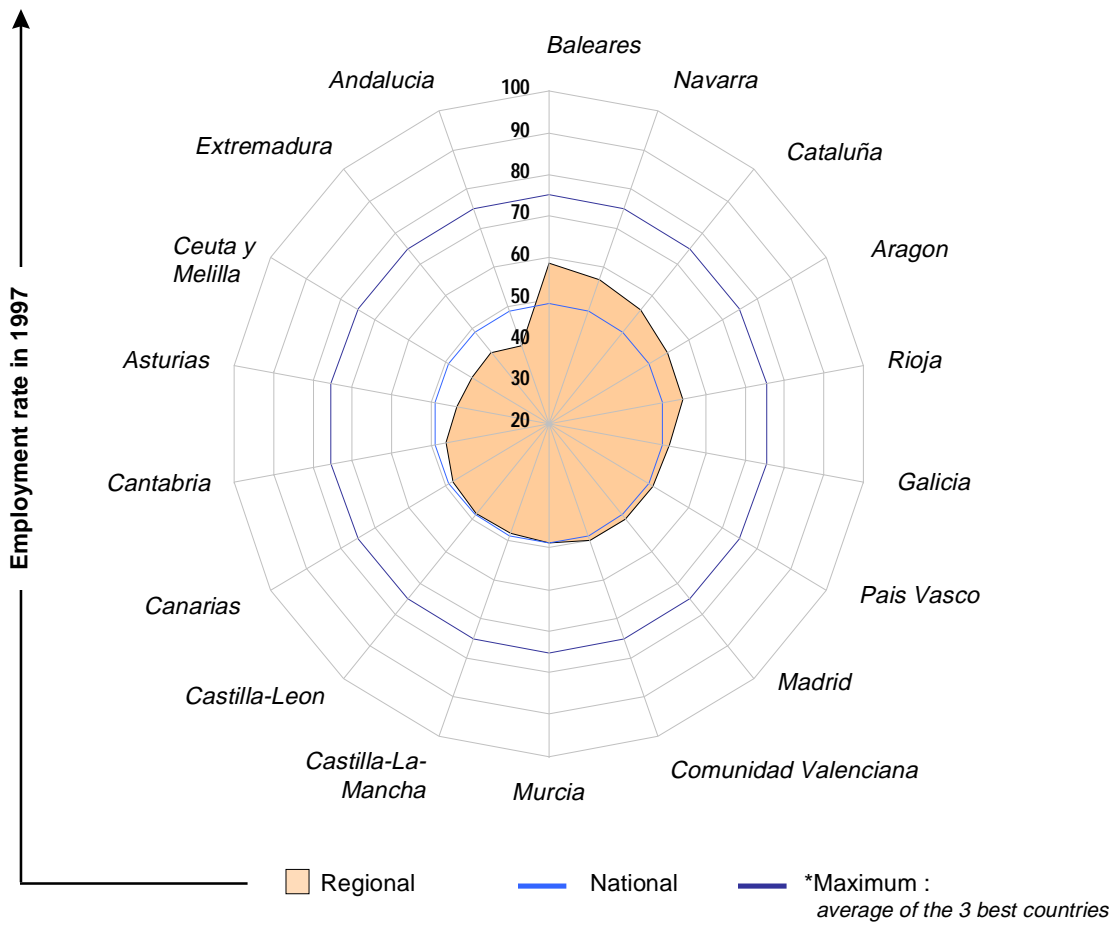
a - Full time + Part time



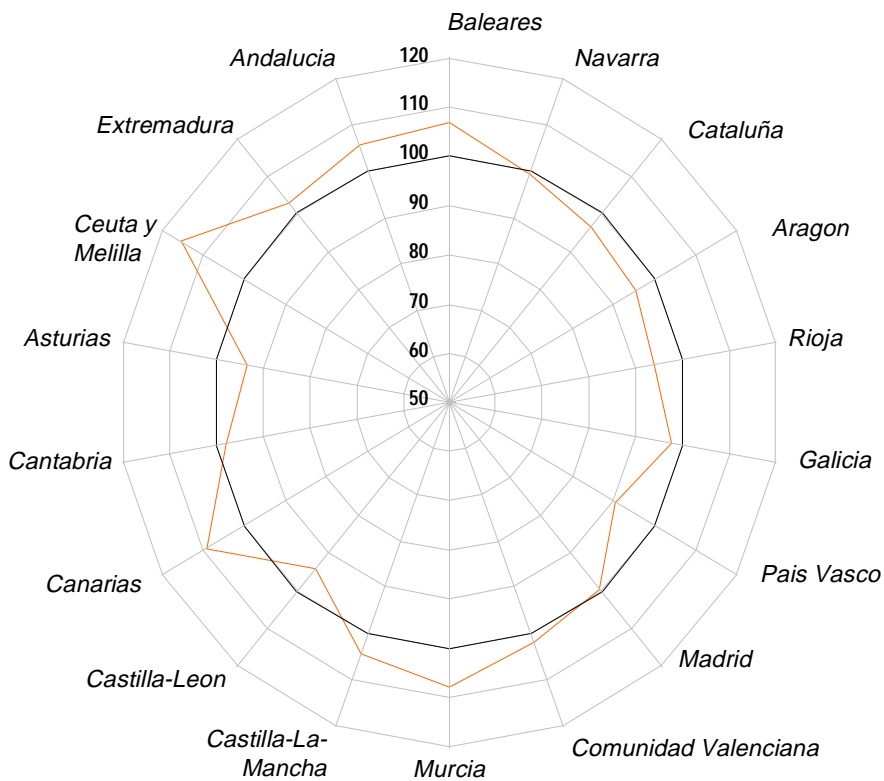
b - Equivalent Full time



**ES 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Spain**



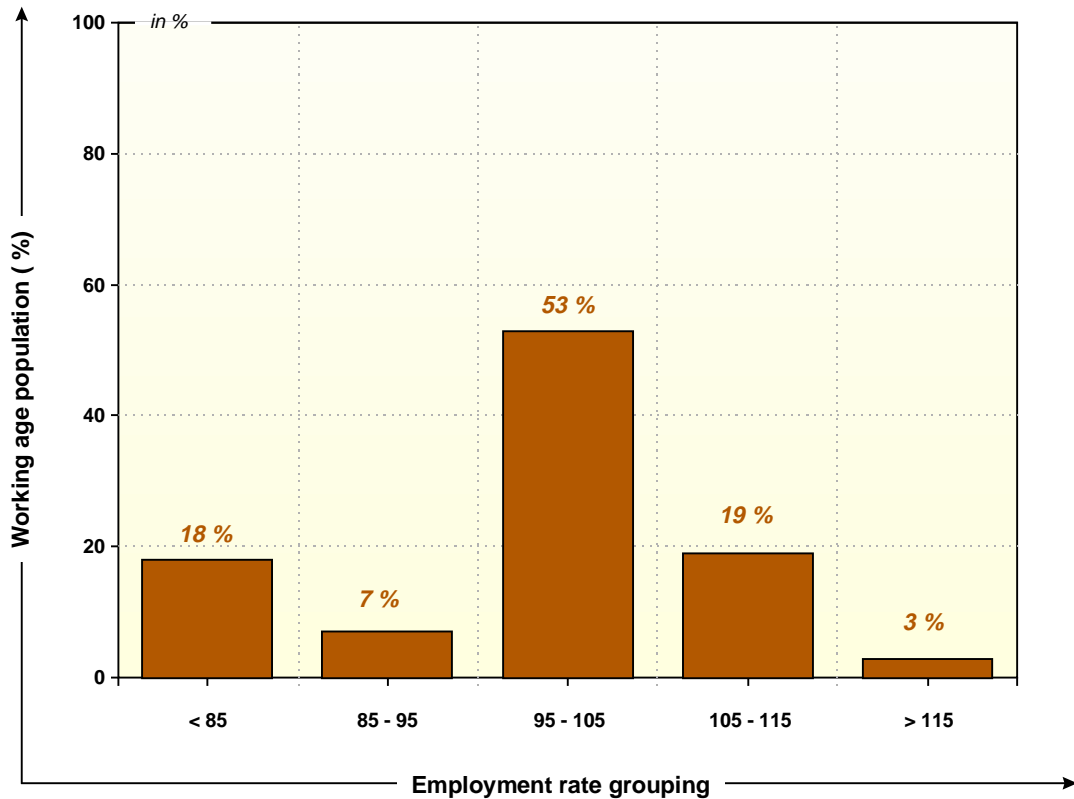
**ES 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)**



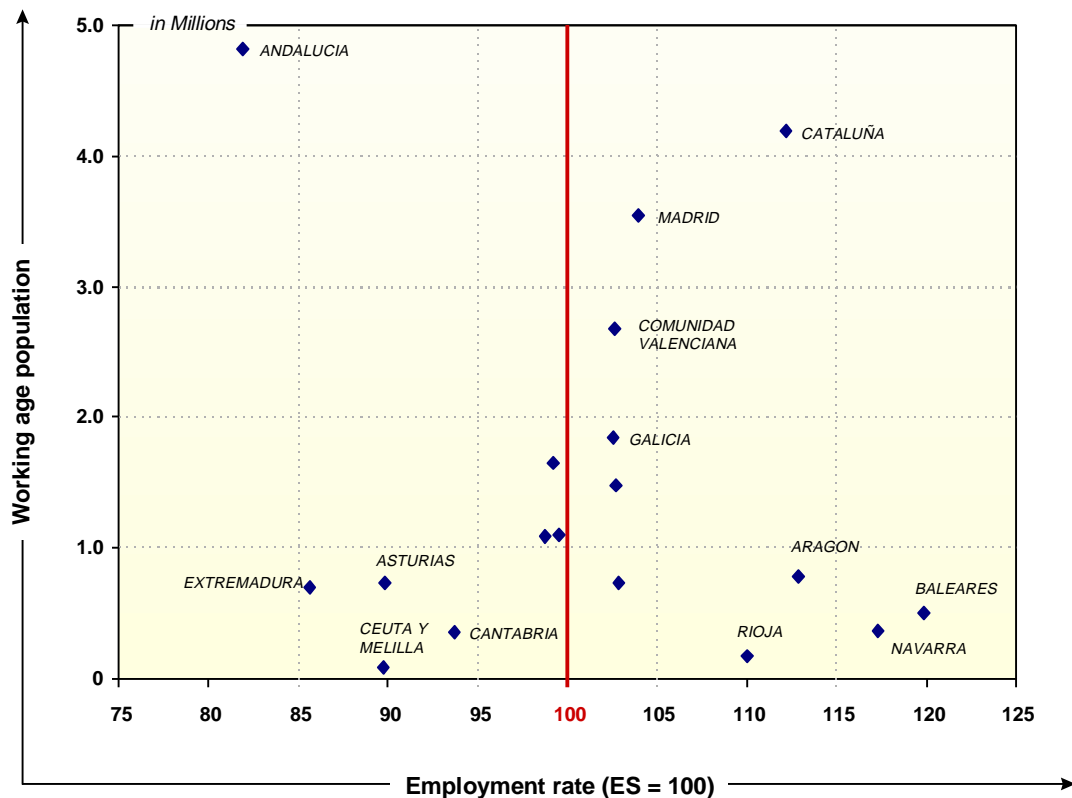


### ES 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### ES 7 - Relative position of regions in terms of working age population size and employment rate 1997



## FI 1 - Employment scenarios 1997-2005

Finland - Annual employment growth rate : **1.3 %** - End Year **2005**

### a - Standard employment

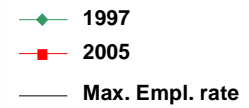
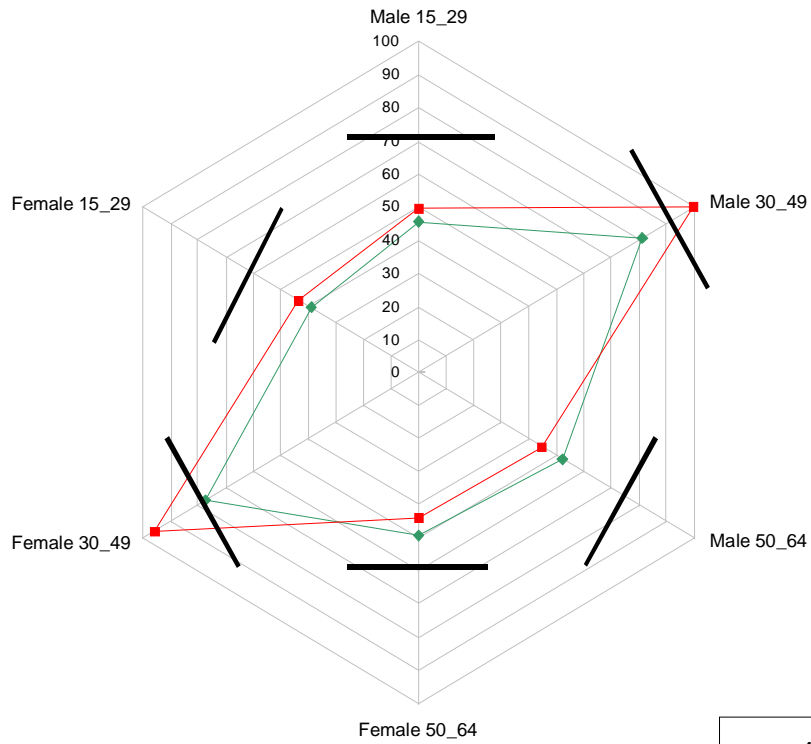
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	496	225	45,3	125	500	247	49,4	106	70,6
Male 30_49	810	657	81,1	86	724	723	99,7	-57	91,8
Male 50_64	423	220	52,0	96	539	241	44,8	161	74,8
Female 15_29	475	186	39,1	112	479	208	43,3	93	62,7
Female 30_49	780	601	77,0	16	703	672	95,6	-117	79,1
Female 50_64	437	215	49,2	43	546	241	44,1	82	59,1
Male 15_64	1728	1101	63,7	308	1763	1211	68,7	210	
Female 15_64	1693	1002	59,2	171	1729	1121	64,8	58	
<b>Total 15_64</b>	3421	2103	61,5	463	3492	2332	66,8	287	75,0
<i>Female as % of tot. empl. :</i>		47,6				48,1			

### b - Equivalent Full time

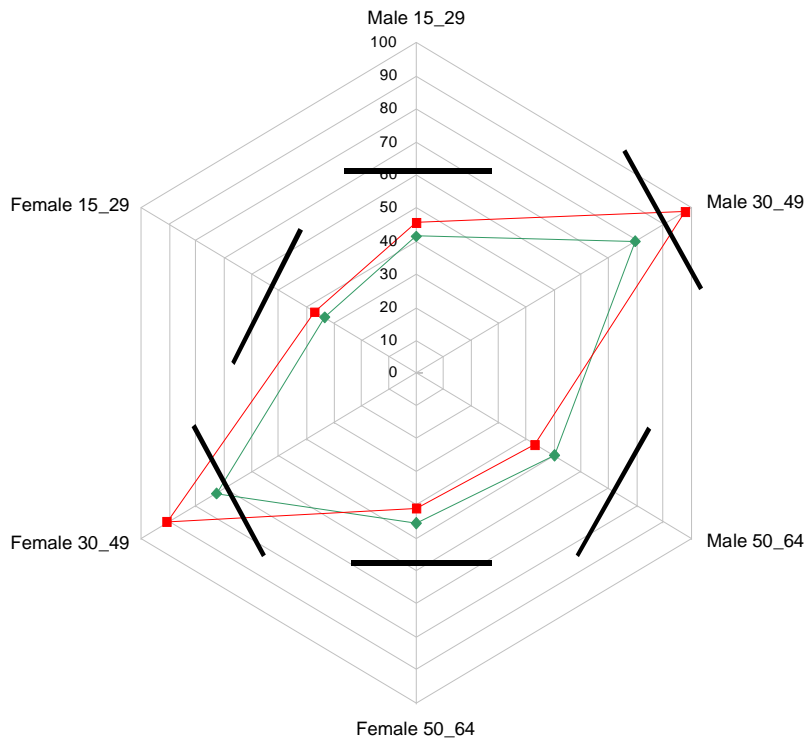
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	496	206	41,6	103	500	226	45,3	85	62,3
Male 30_49	810	643	79,5	87	724	707	97,6	-54	90,2
Male 50_64	423	211	49,9	93	539	232	43,0	155	71,8
Female 15_29	475	157	33,1	92	479	176	36,7	76	52,5
Female 30_49	780	565	72,4	-20	703	633	90,0	-142	69,9
Female 50_64	437	200	45,6	13	546	224	40,9	42	48,6
Male 15_64	1728	1061	61,4	282	1763	1165	66,1	187	
Female 15_64	1693	922	54,5	85	1729	1033	59,7	-25	
<b>Total 15_64</b>	3421	1982	57,9	241	3492	2198	62,9	72	65,0
<i>Female as % of tot. empl. :</i>		46,5				47,0			

## FI 2 - Employment rates per gender and age group Finland

a - Standard employment

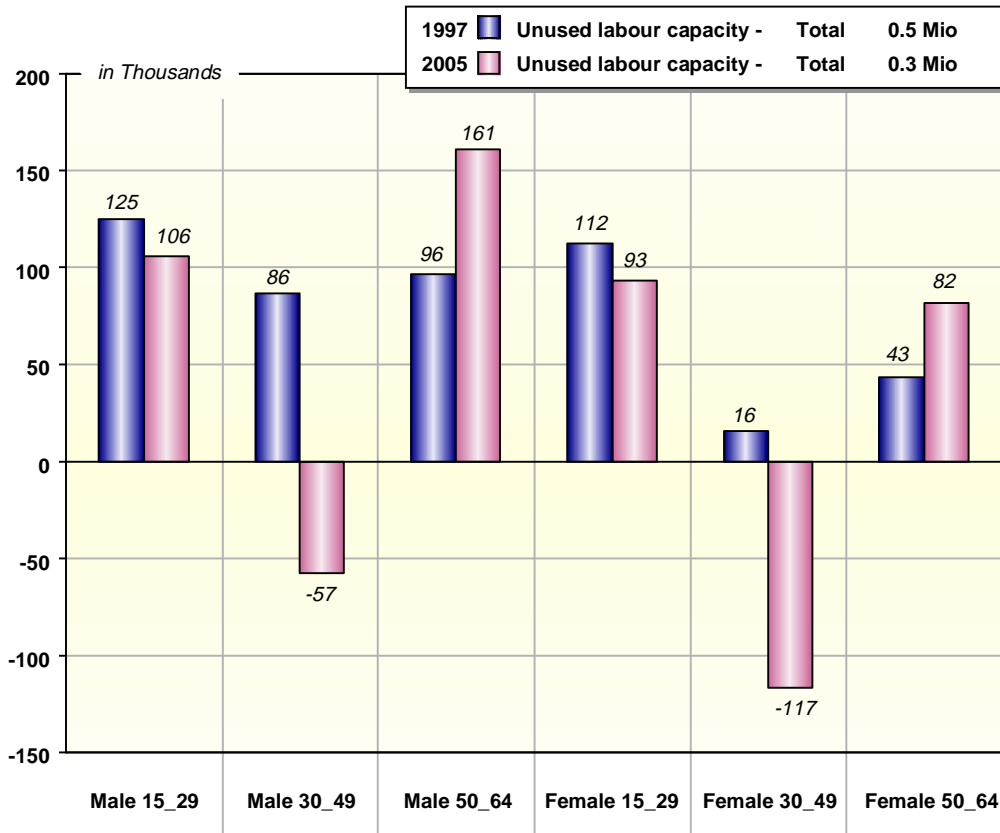


b - Equivalent Full time

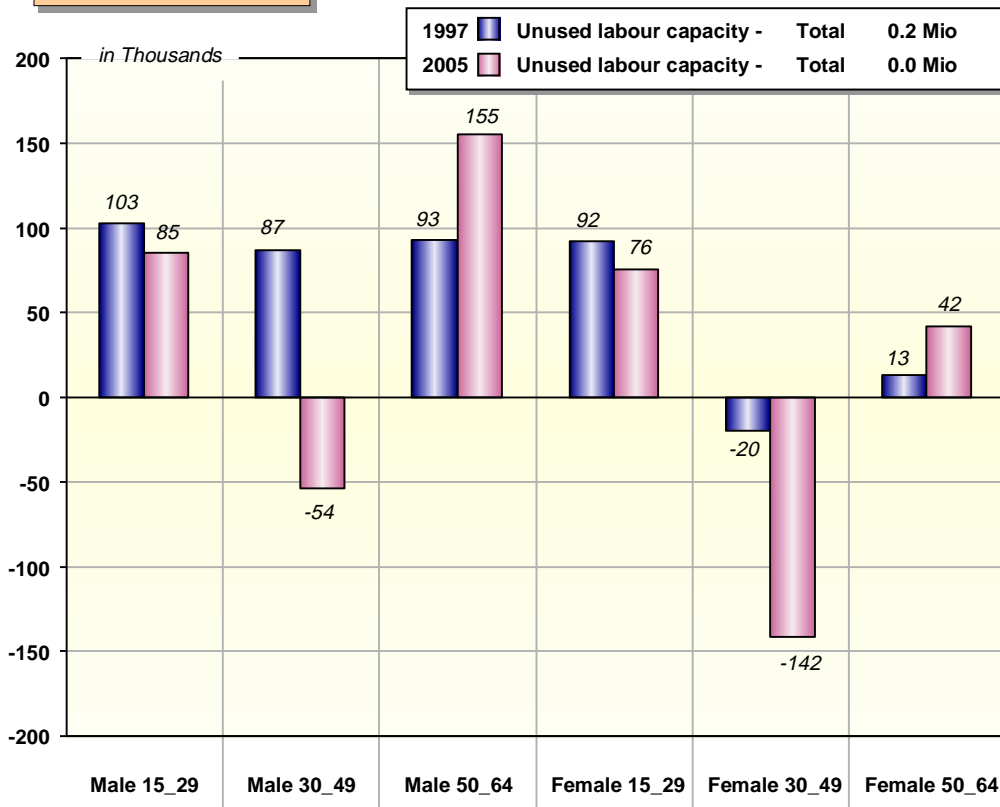


### FI 3 - Unused Labour capacity Finland

a - Full time + Part time



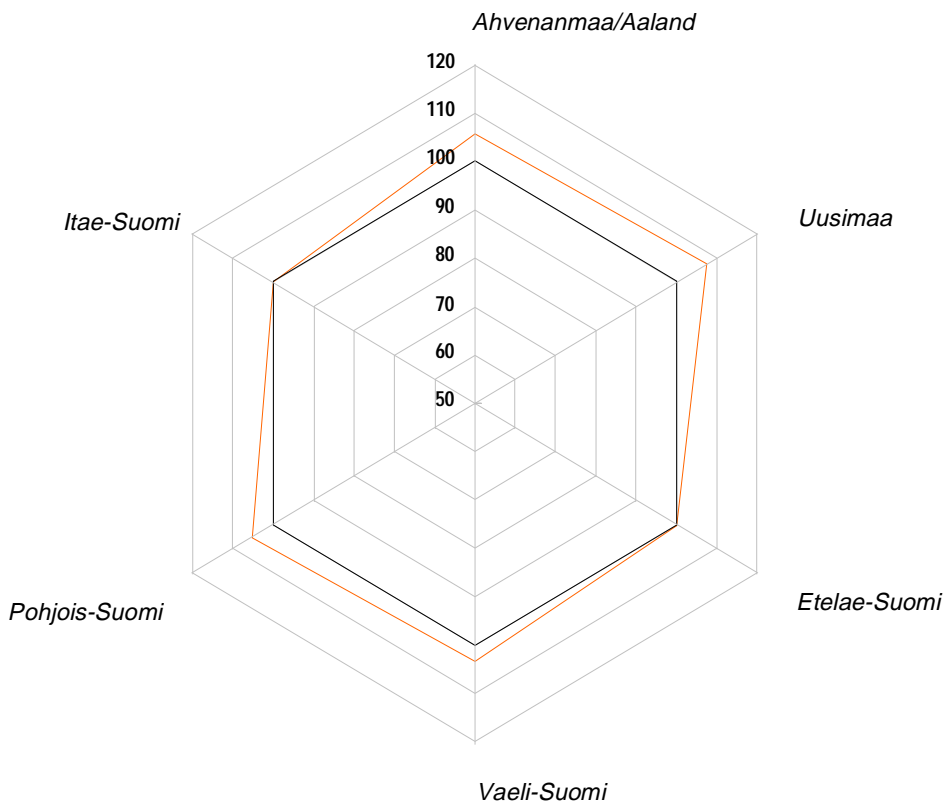
b - Equivalent Full time



**FI 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Finland**

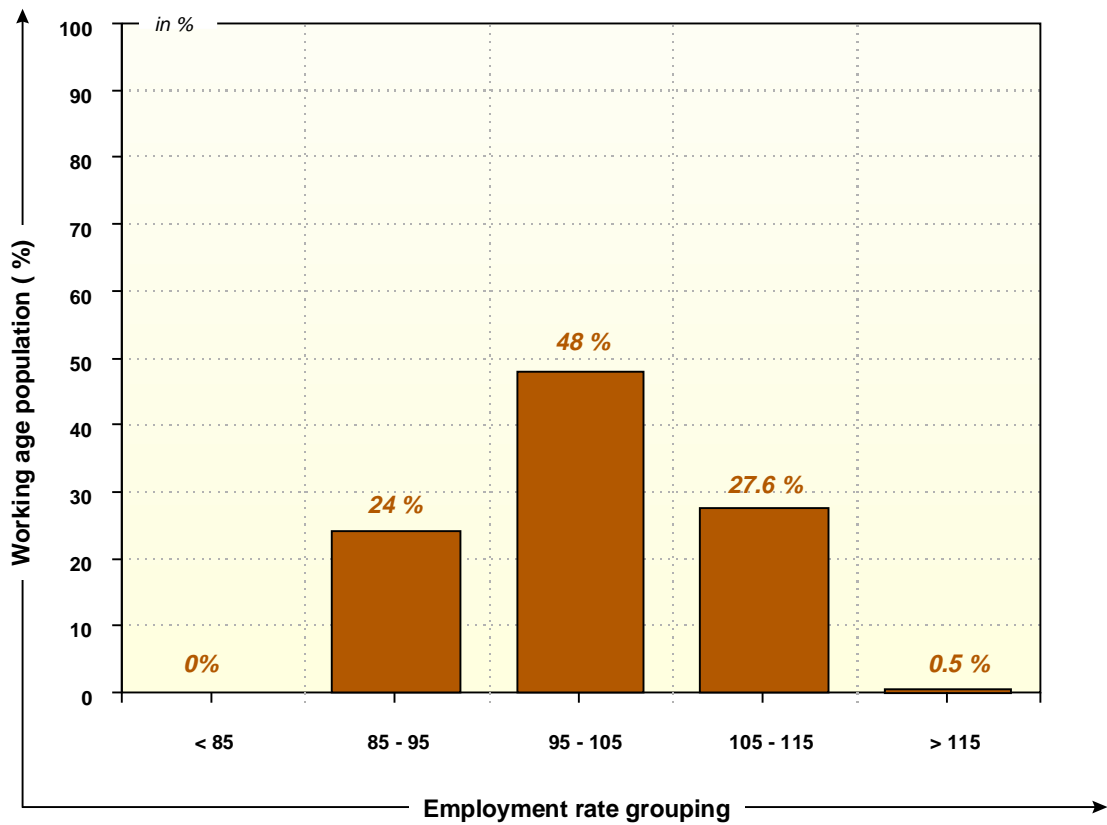


**FI 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)**

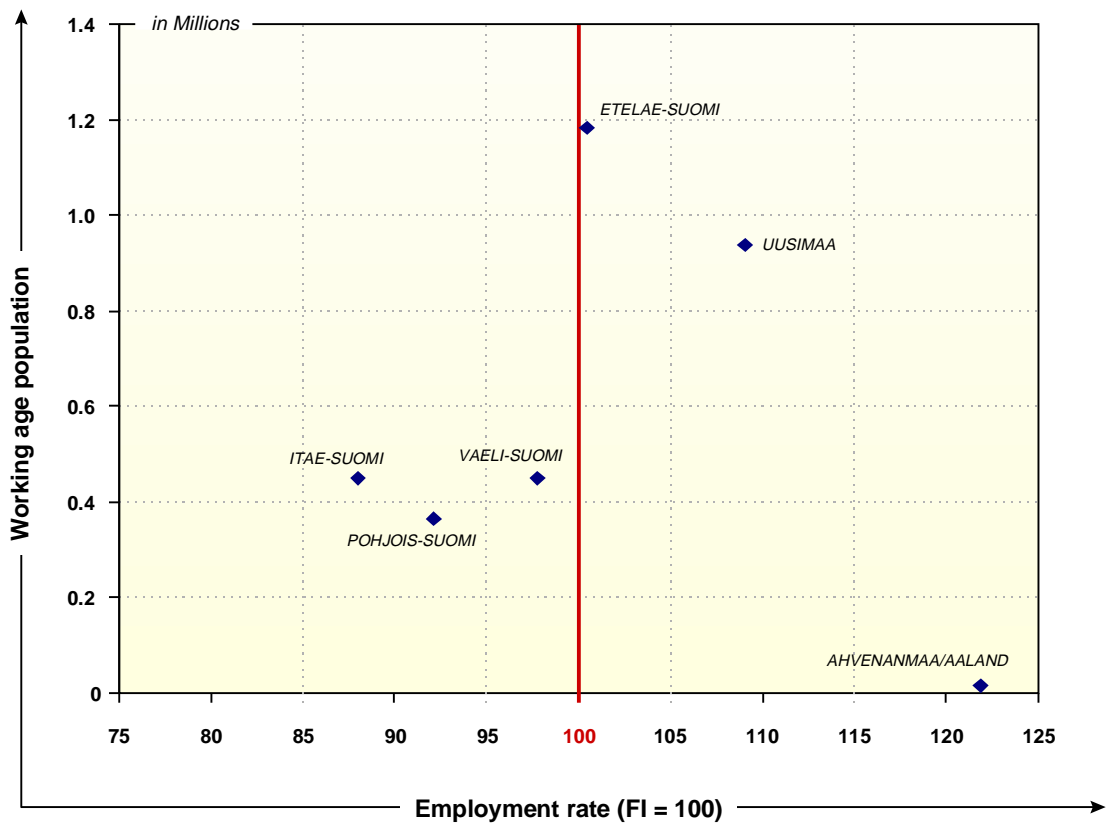


### FI 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### FI 7 - Relative position of regions in terms of working age population size and employment rate 1997



## FR 1 - Employment scenarios 1997-2005

France - Annual employment growth rate : **1.1 %** - End Year **2005**

### a - Standard employment

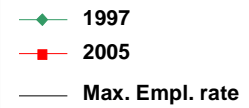
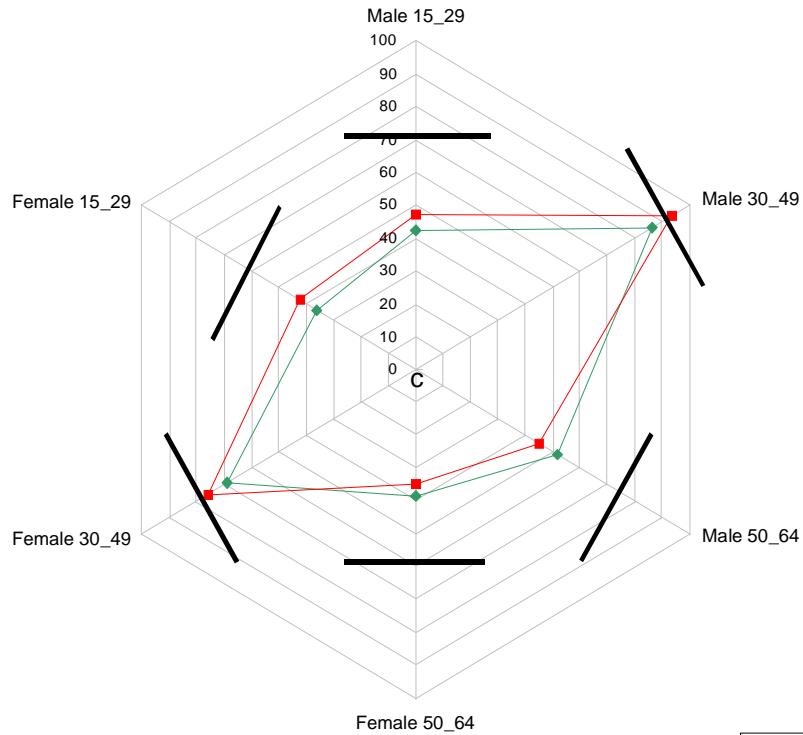
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	6211	2611	42,0	1771	5958	2815	47,3	1388	70,6
Male 30_49	8625	7411	85,9	508	8581	7990	93,1	-111	91,8
Male 50_64	4289	2207	51,4	1000	5256	2379	45,3	1551	74,8
Female 15_29	6043	2184	36,1	1607	5726	2420	42,3	1172	62,7
Female 30_49	8665	5919	68,3	932	8636	6559	75,9	269	79,1
Female 50_64	4442	1717	38,6	907	5433	1902	35,0	1307	59,1
Male 15_64	19125	12229	63,9	3279	19795	13184	66,6	2828	
Female 15_64	19150	9819	51,3	3446	19795	10881	55,0	2748	
<b>Total 15_64</b>	38274	22048	57,6	6658	39590	24064	60,8	5628	75,0
<i>Female as % of tot. empl. :</i>		44,5				45,2			

### b - Equivalent Full time

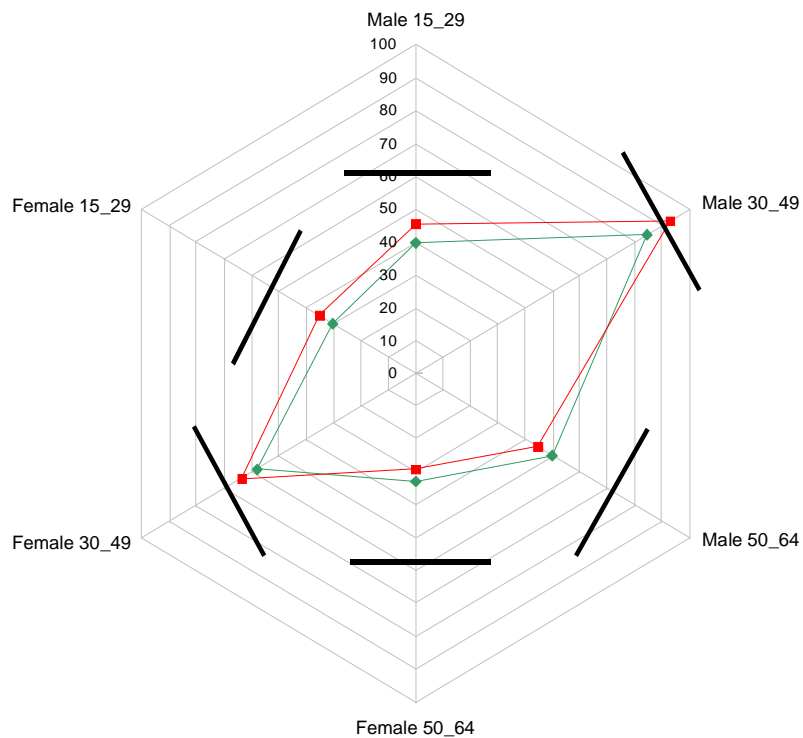
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	6211	2482	40,0	1390	5958	2705	45,4	1008	62,3
Male 30_49	8625	7289	84,5	487	8581	7946	92,6	-209	90,2
Male 50_64	4289	2136	49,8	946	5256	2328	44,3	1448	71,8
Female 15_29	6043	1840	30,5	1331	5726	2012	35,1	993	52,5
Female 30_49	8665	5007	57,8	1049	8636	5474	63,4	561	69,9
Female 50_64	4442	1454	32,7	702	5433	1590	29,3	1048	48,6
Male 15_64	19125	11906	62,3	2823	19795	12980	65,6	2247	
Female 15_64	19150	8301	43,3	3082	19795	9076	45,8	2602	
<b>Total 15_64</b>	38274	20208	52,8	4671	39590	22056	55,7	3678	65,0
<i>Female as % of tot. empl. :</i>		41,1				41,2			

## FR 2 - Employment rates per gender and age group France

**a - Standard employment**



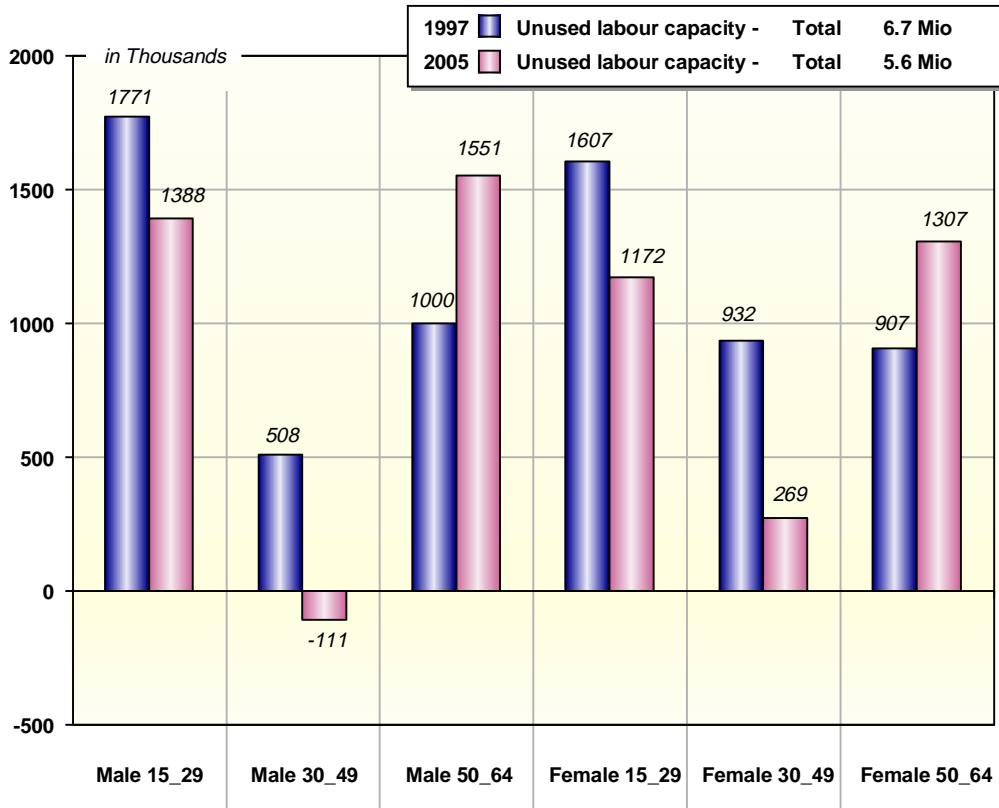
**b - Equivalent Full time**



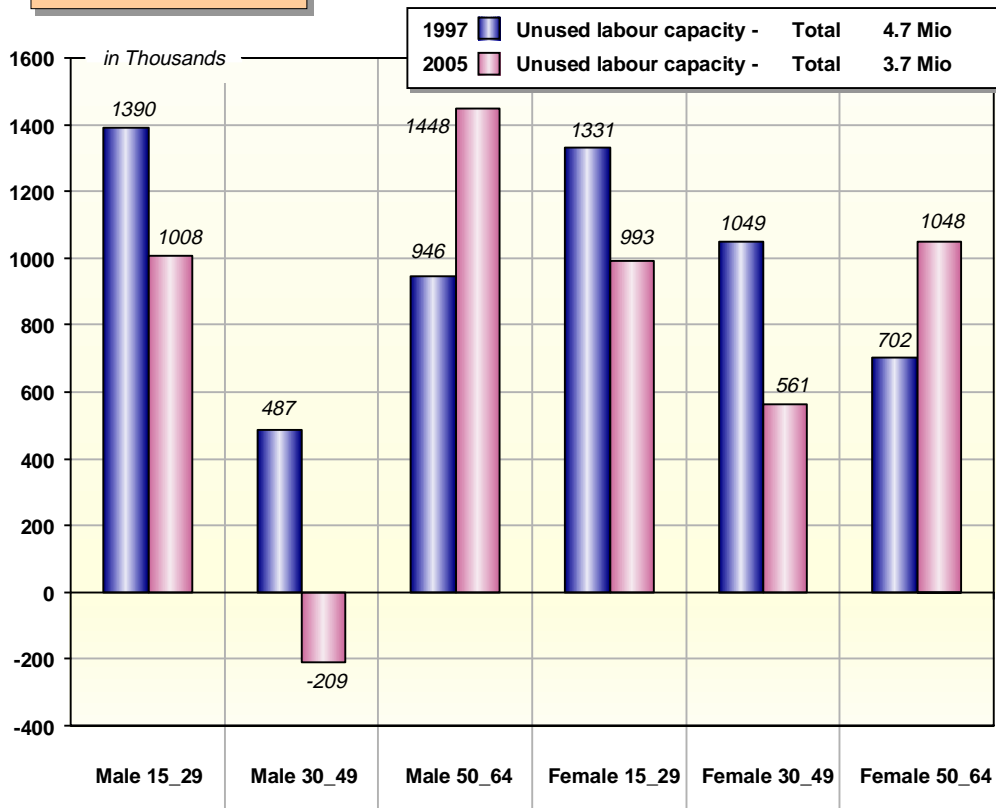


## FR 3 - Unused Labour capacity France

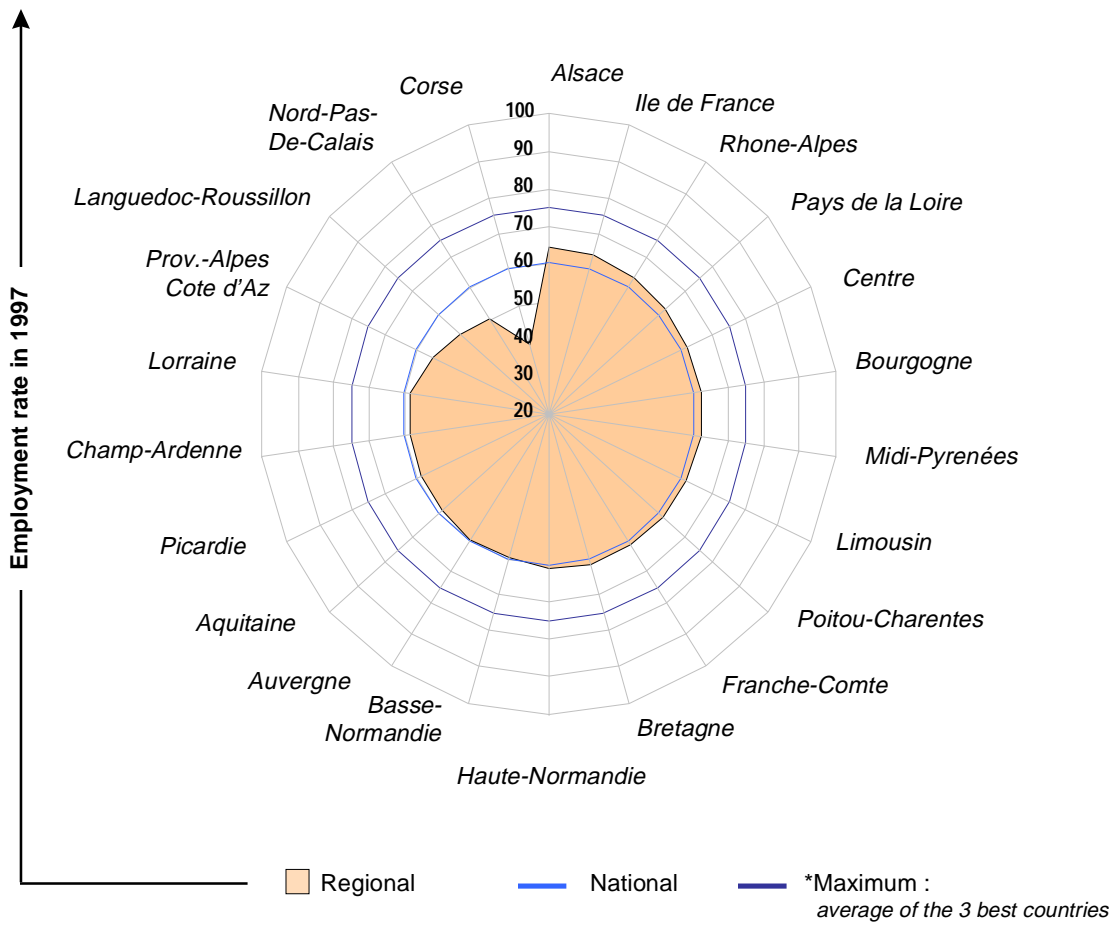
### a - Full time + Part time



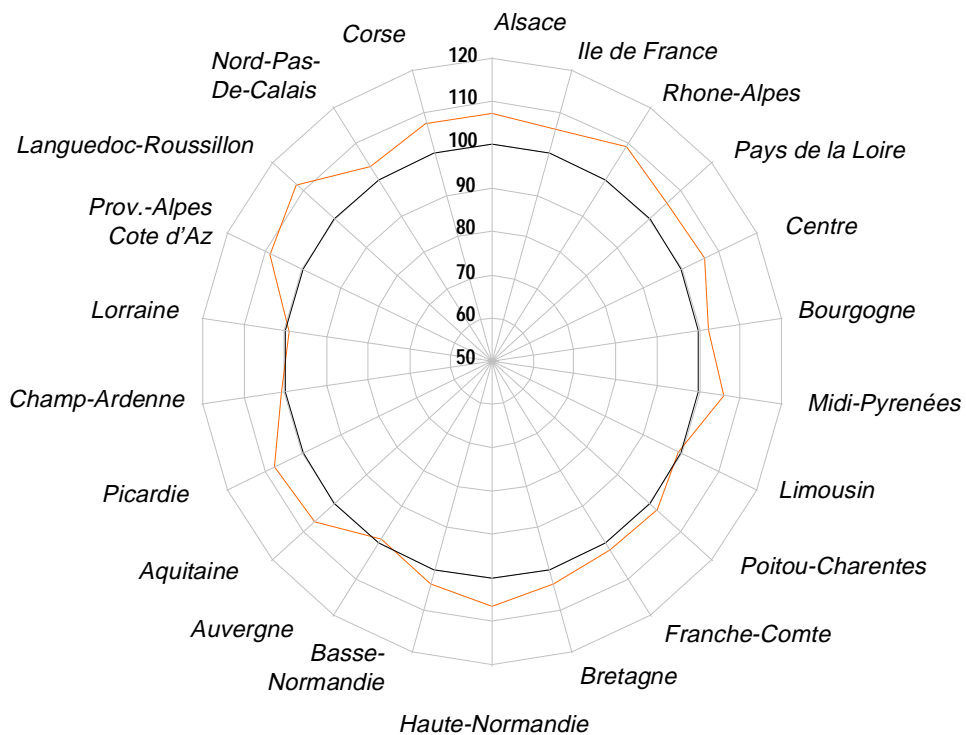
### b - Equivalent Full time



**FR 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - France**

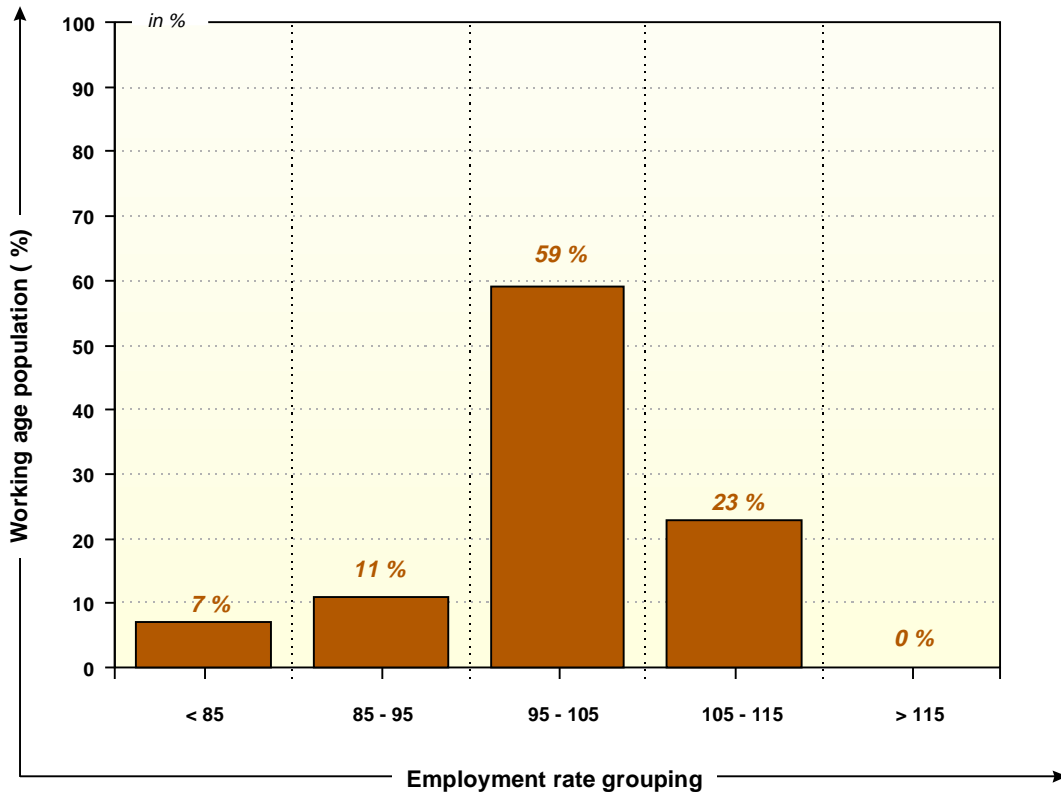


**FR 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)**

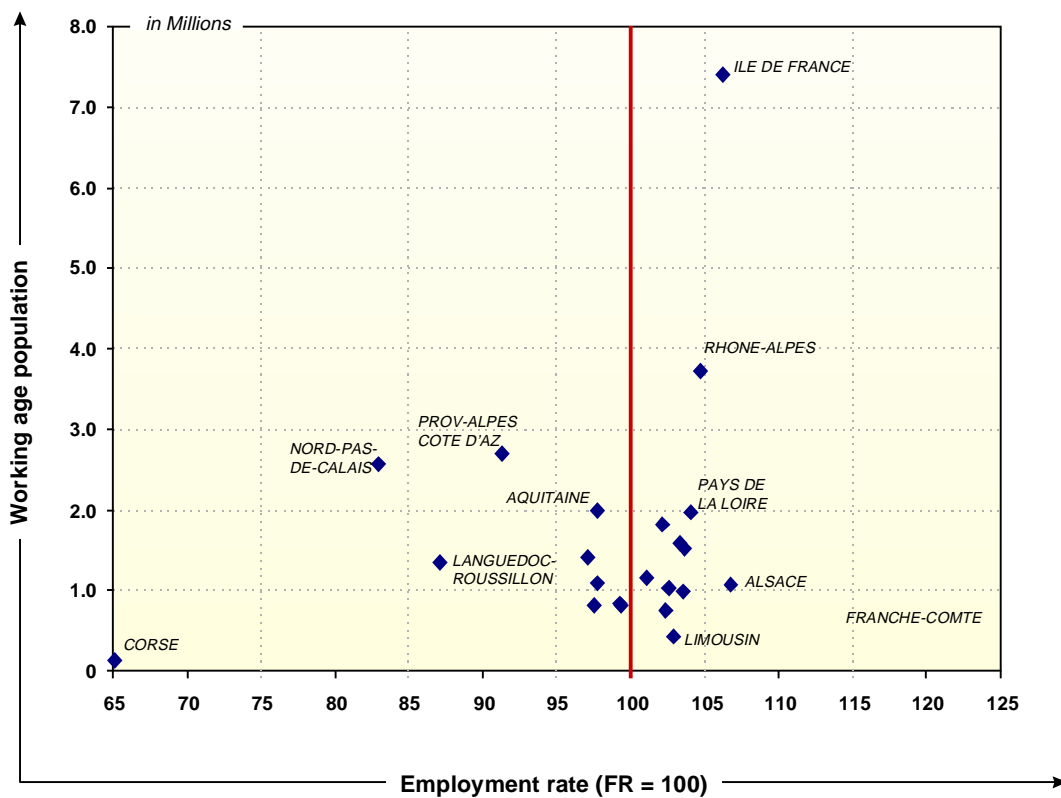


### FR 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### FR 7 - Relative position of regions in terms of working age population size and employment rate - 1997



## GR 1 - Employment scenarios 1997-2005

Greece - Annual employment growth rate : **1.2 %** - End Year **2005**

### a - Standard employment

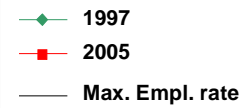
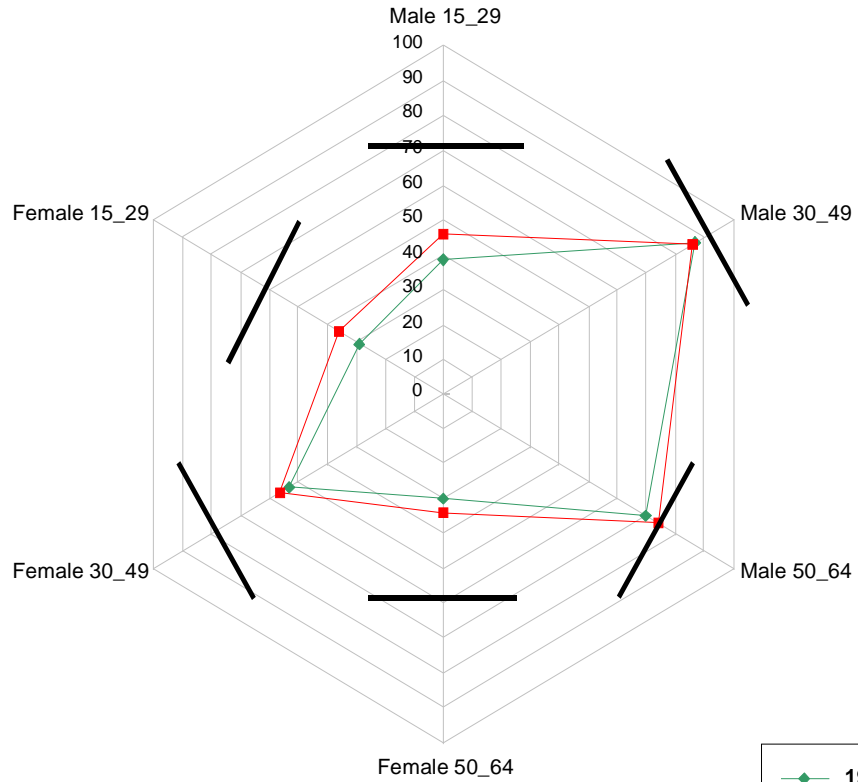
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	1202	462	38,5	386	1085	500	46,1	265	70,6
Male 30_49	1446	1249	86,4	78	1573	1350	85,9	94	91,8
Male 50_64	909	634	69,7	46	927	685	73,9	8	74,8
Female 15_29	1146	327	28,5	392	1025	370	36,1	273	62,7
Female 30_49	1443	765	53,0	376	1549	867	55,9	358	79,1
Female 50_64	957	287	30,0	278	958	325	33,9	241	59,1
Male 15_64	3557	2346	65,9	510	3585	2536	70,7	367	
Female 15_64	3547	1379	38,9	1046	3533	1562	44,2	872	
<b>Total 15_64</b>	7104	3725	52,4	1603	7117	4098	57,6	1240	75,0
<i>Female as % of tot. empl. :</i>		37,0				38,1			

### b - Equivalent Full time

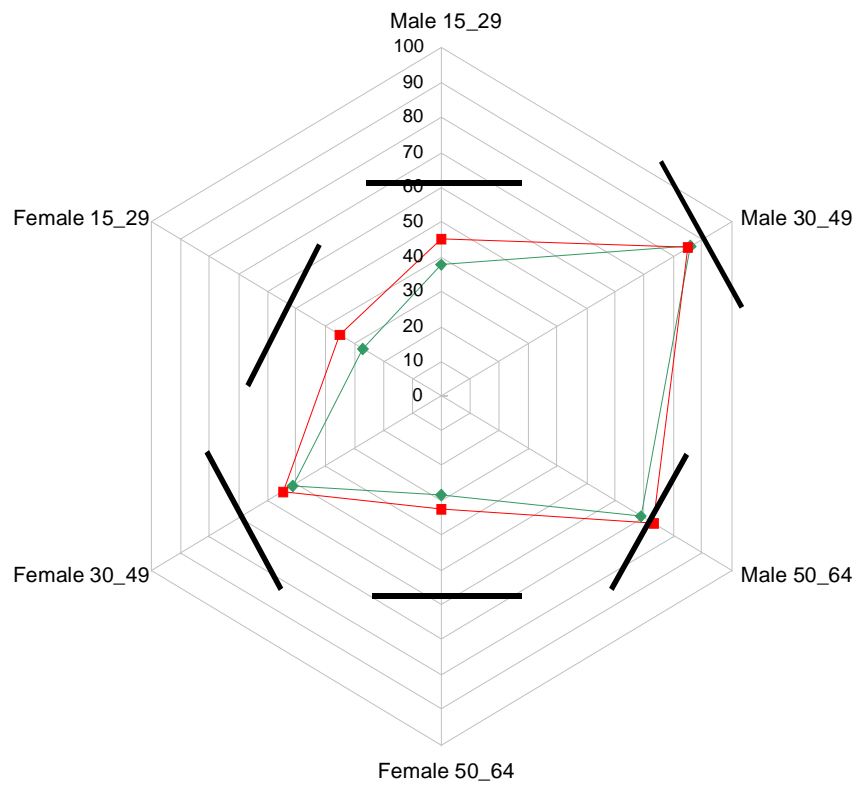
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	1202	453	37,7	296	1085	488	45,0	188	62,3
Male 30_49	1446	1239	85,7	65	1573	1335	84,9	83	90,2
Male 50_64	909	628	69,0	26	927	676	72,9	-10	71,8
Female 15_29	1146	312	27,2	290	1025	355	34,7	183	52,5
Female 30_49	1443	742	51,4	266	1549	846	54,6	237	69,9
Female 50_64	957	272	28,5	192	958	310	32,4	155	48,6
Male 15_64	3557	2319	65,2	387	3585	2499	69,7	262	
Female 15_64	3547	1326	37,4	749	3533	1512	42,8	574	
<b>Total 15_64</b>	7104	3646	51,3	972	7117	4011	56,4	616	65,0
<i>Female as % of tot. empl. :</i>		36,4				37,7			

## GR 2 - Employment rates per gender and age group Greece

a - Standard employment

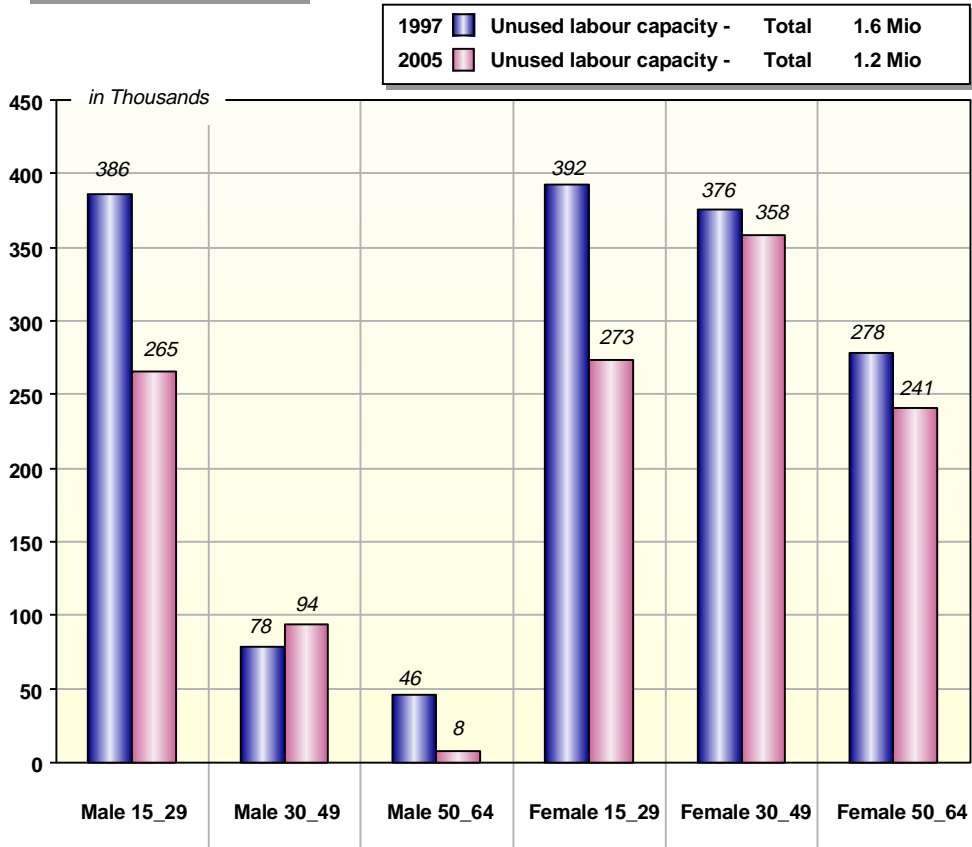


b - Equivalent Full time

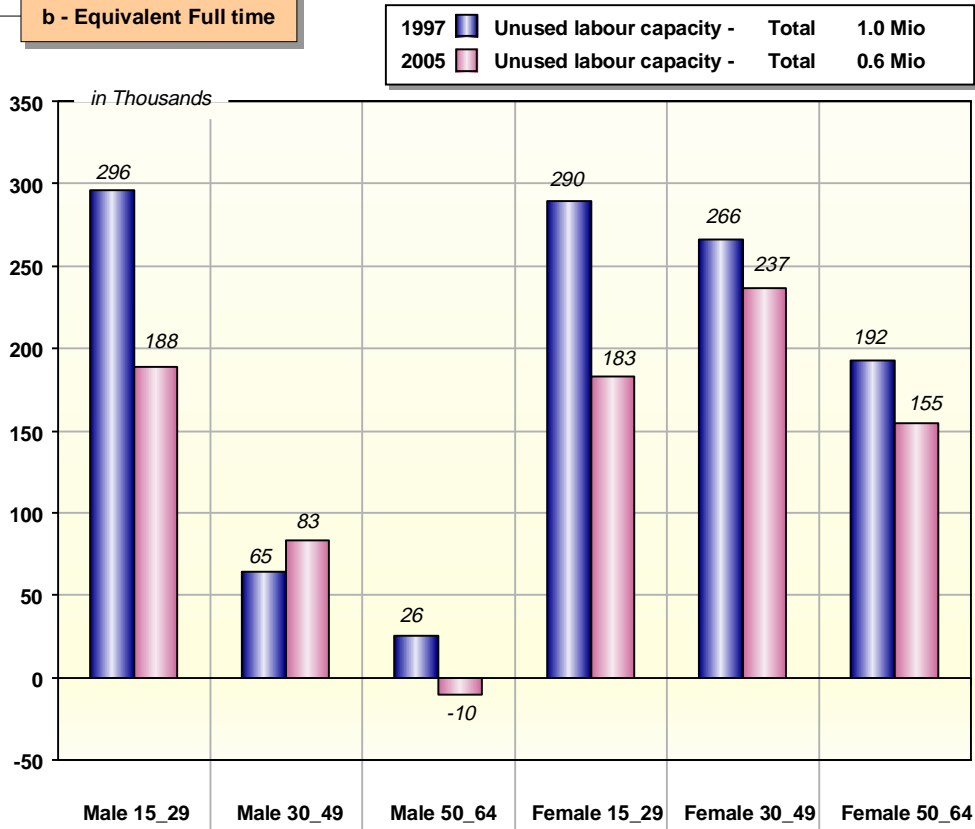


## GR 3 - Unused Labour capacity Greece

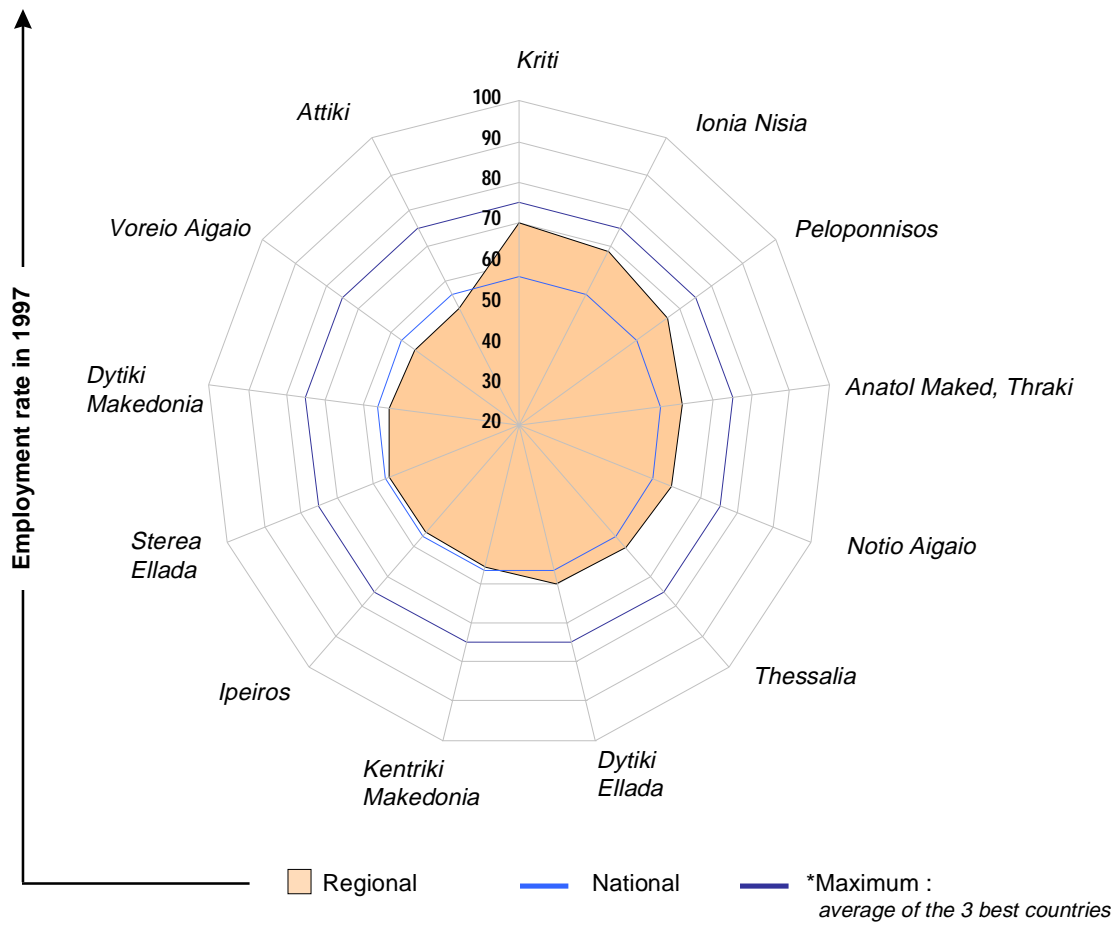
a - Full time + Part time



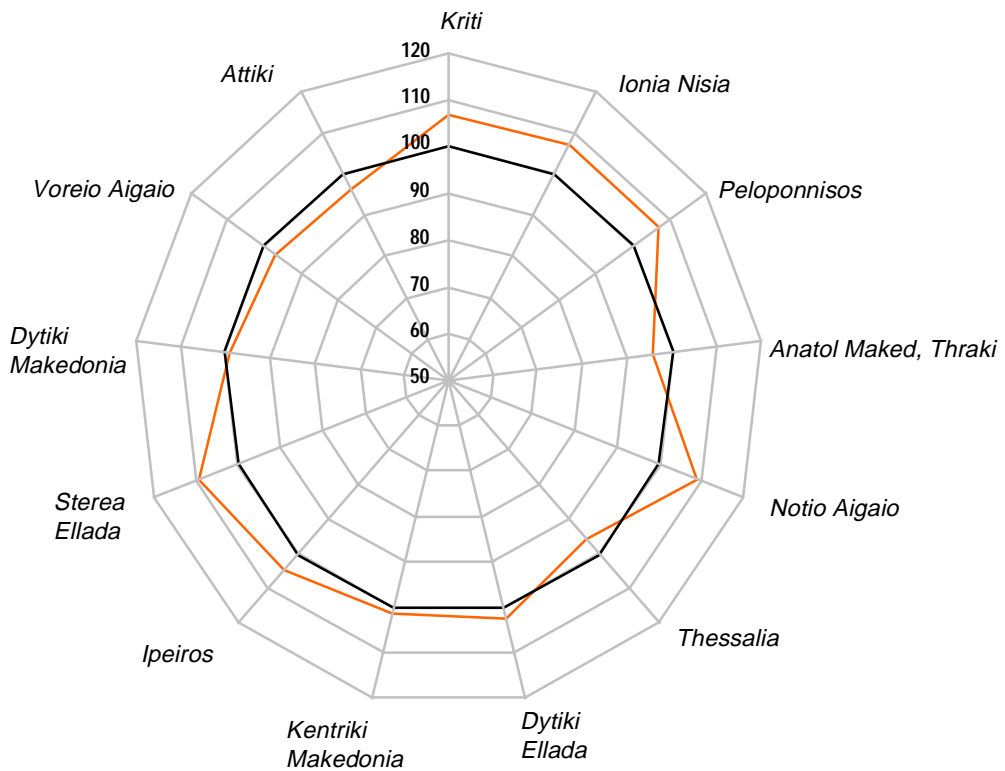
b - Equivalent Full time



**GR 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Greece**

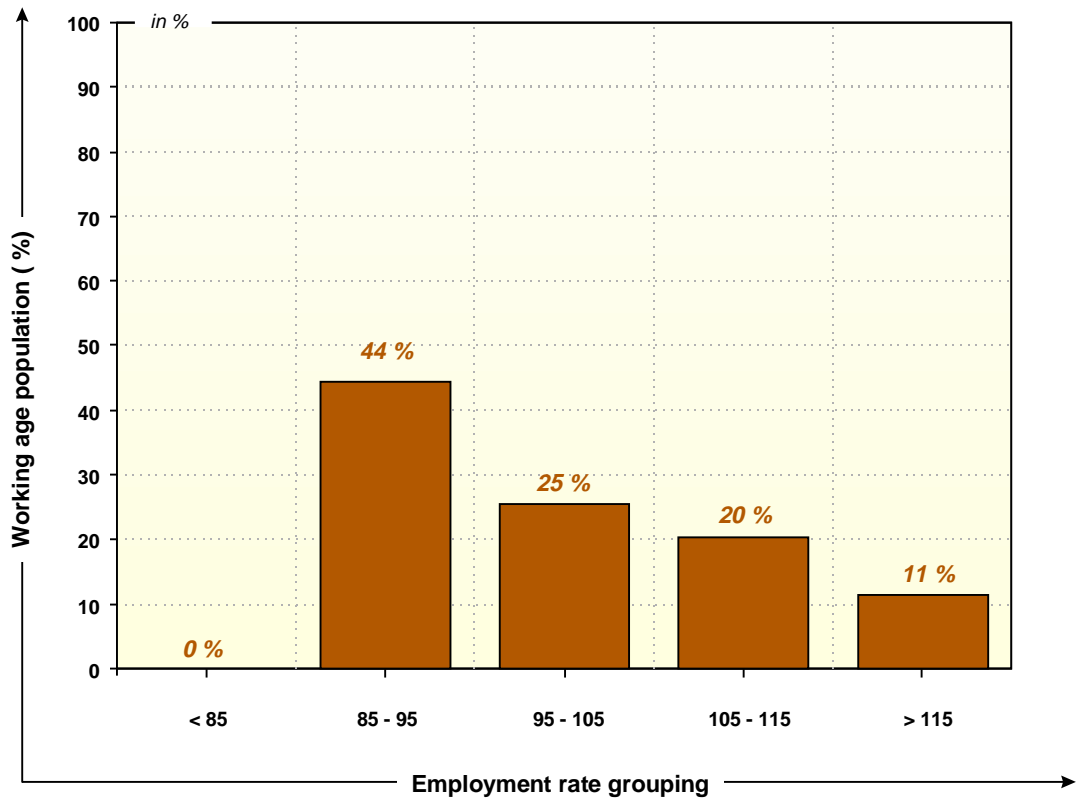


**GR 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)**

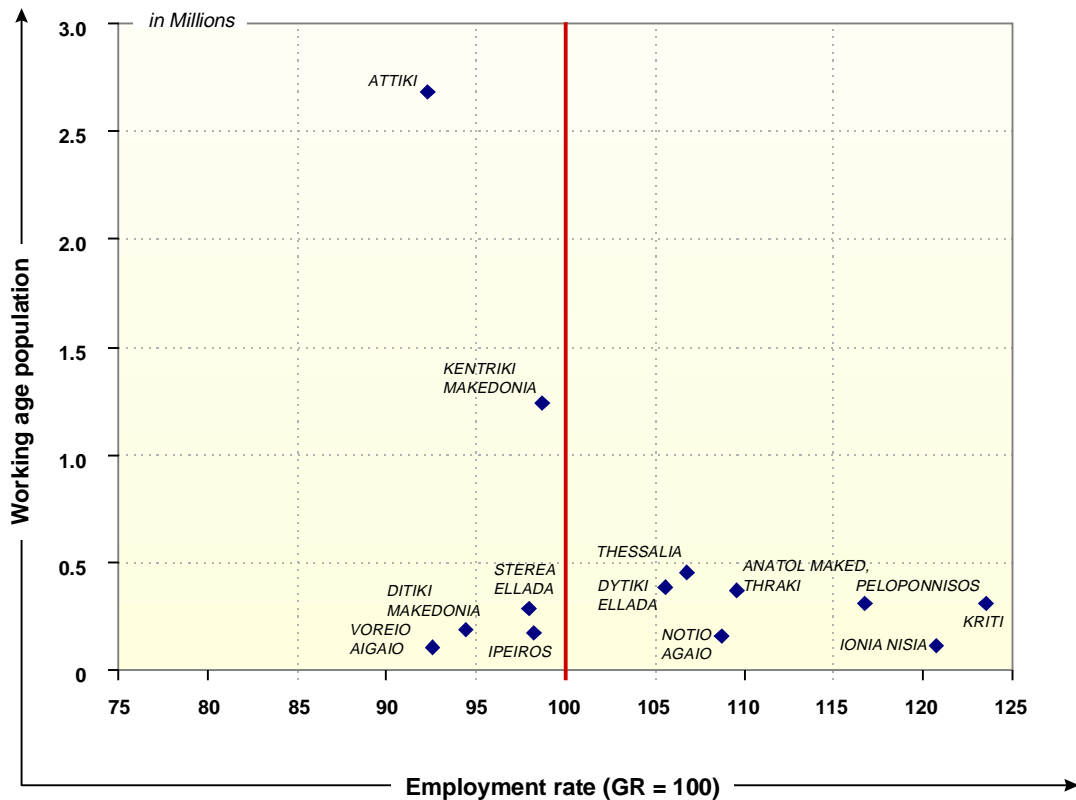


### GR 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### GR 7 - Relative position of regions in terms of working age population size and employment rate 1997





## IE 1 - Employment scenarios 1997-2005

Ireland - Annual employment growth rate : **1.2 %** - End Year **2005**

### a - Standard employment

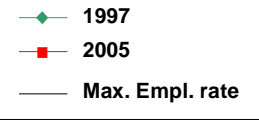
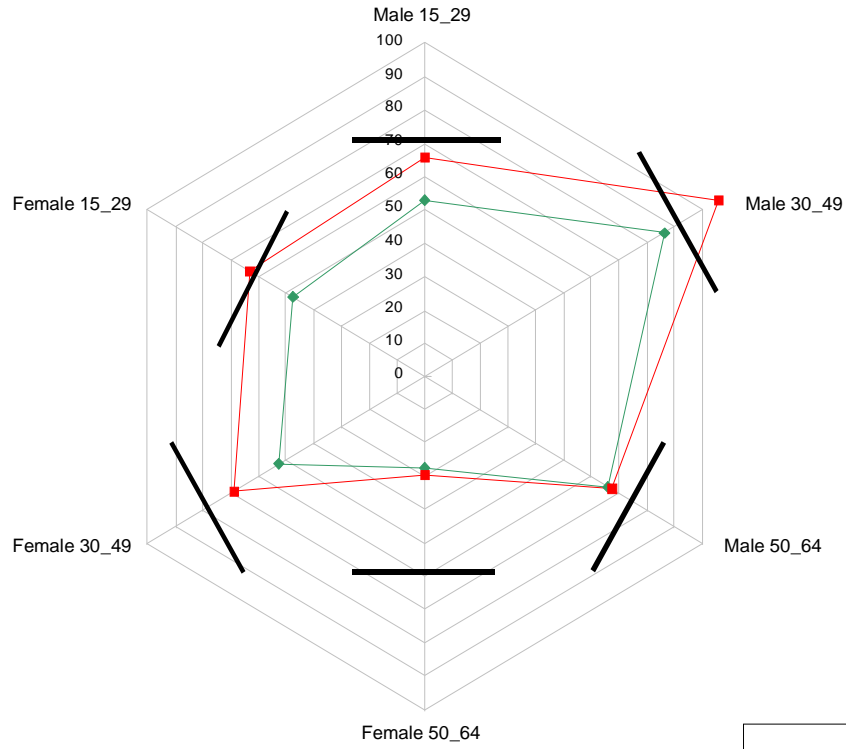
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	456	242	53,0	80	464	304	65,6	23	70,6
Male 30_49	475	409	86,1	27	489	514	105,2	-65	91,8
Male 50_64	245	161	65,8	22	301	203	67,3	22	74,8
Female 15_29	438	207	47,2	68	443	280	63,3	-2	62,7
Female 30_49	487	256	52,4	130	502	346	69,0	50	79,1
Female 50_64	242	66	27,4	77	304	90	29,7	89	59,1
Male 15_64	1175	812	69,1	129	1255	1021	81,4	-20	
Female 15_64	1168	529	45,3	274	1249	717	57,4	137	
<b>Total 15_64</b>	2343	1341	57,2	417	2503	1738	69,4	139	75,0
<i>Female as % of tot. empl. :</i>		39,4				41,2			

### b - Equivalent Full time

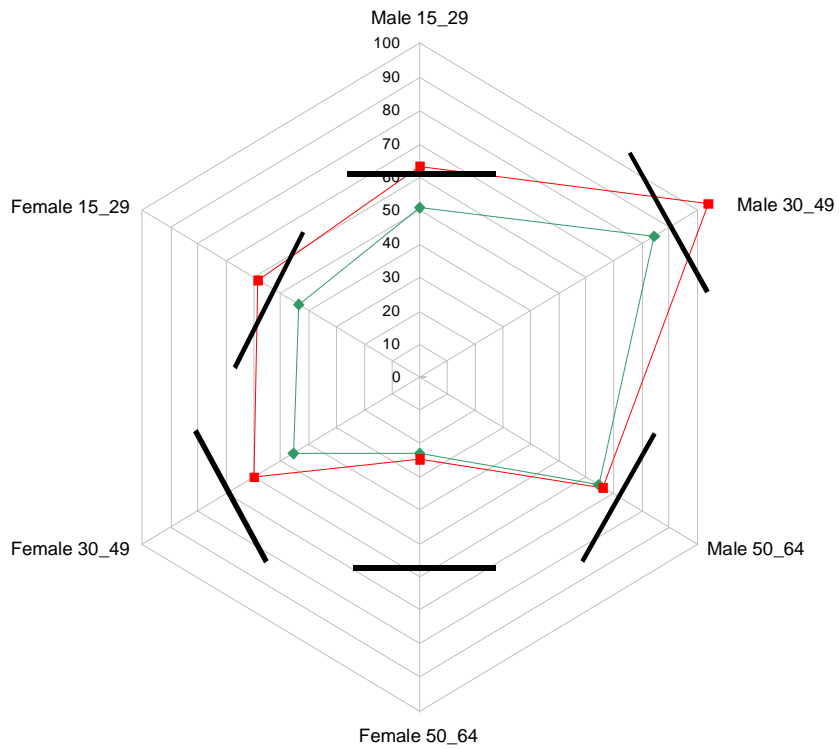
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	456	232	50,8	53	464	293	63,1	-3	62,3
Male 30_49	475	401	84,6	26	489	507	103,7	-66	90,2
Male 50_64	245	157	64,2	19	301	199	66,0	18	71,8
Female 15_29	438	191	43,5	39	443	258	58,2	-25	52,5
Female 30_49	487	222	45,5	119	502	300	59,7	51	69,9
Female 50_64	242	55	22,8	62	304	75	24,6	73	48,6
Male 15_64	1175	790	67,2	98	1255	999	79,6	-52	
Female 15_64	1168	468	40,0	220	1249	632	50,6	98	
<b>Total 15_64</b>	2343	1258	53,7	265	2503	1631	65,2	-4	65,0
<i>Female as % of tot. empl. :</i>		37,2				38,8			

## IE 2 - Employment rates per gender and age group Ireland

**a - Standard employment**

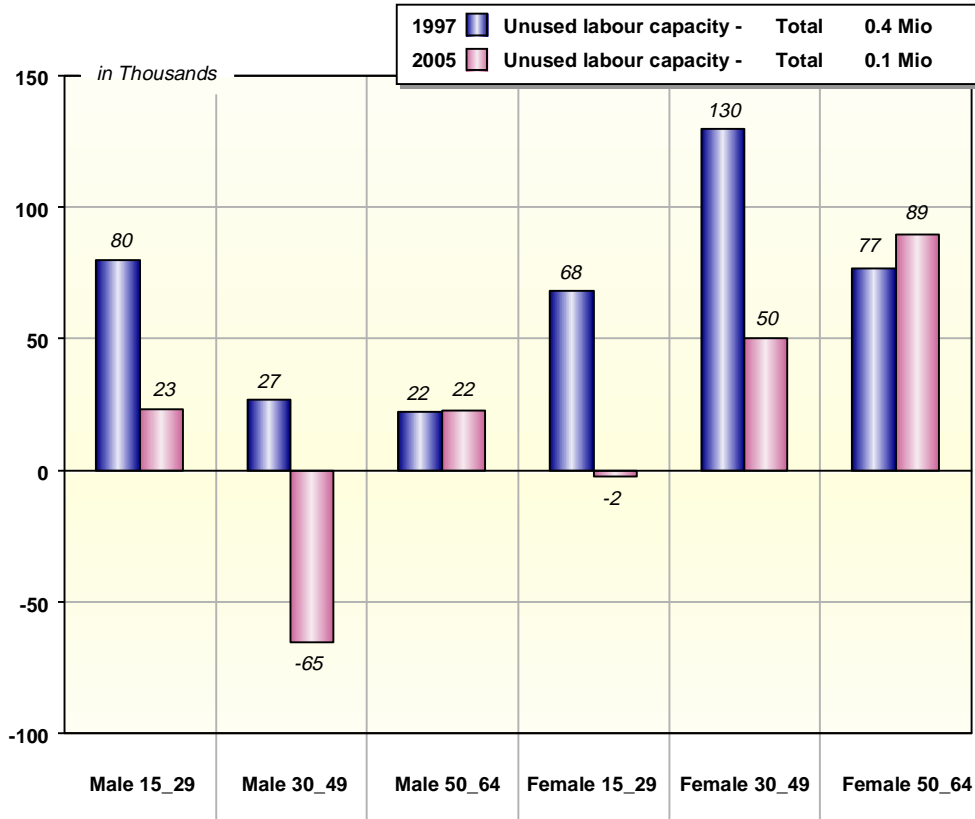


**b - Equivalent Full time**

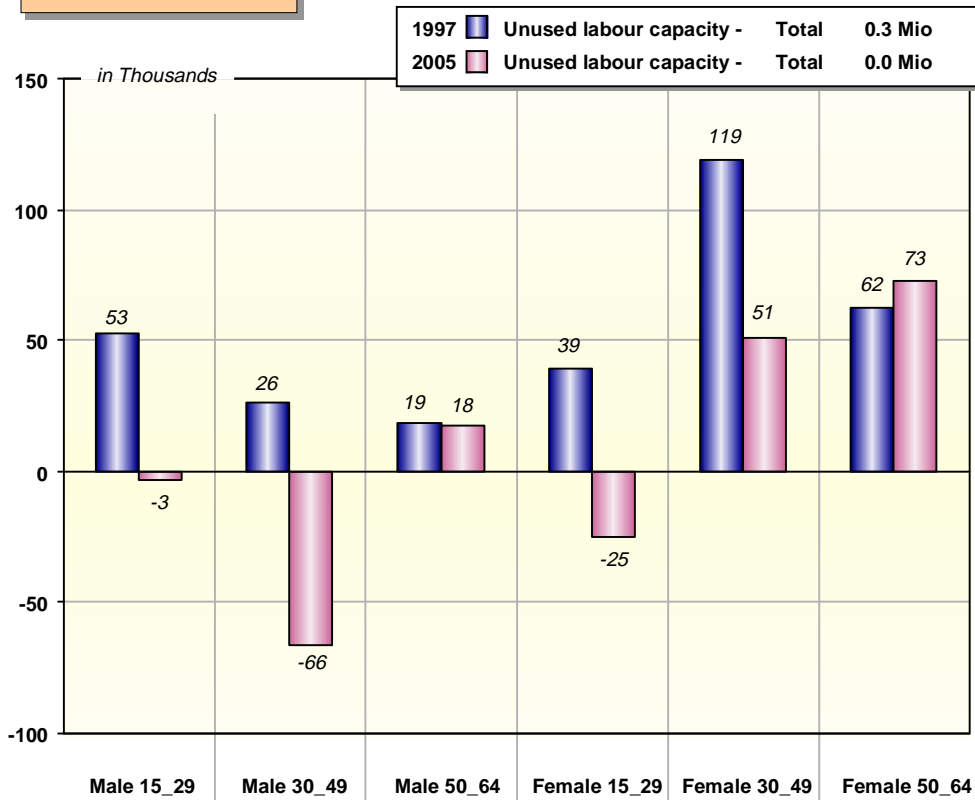


### IE 3 - Unused Labour capacity Ireland

#### a - Full time + Part time



#### b - Equivalent Full time



## IT 1 - Employment scenarios 1997-2005

Italy - Annual employment growth rate : **0.7 %** - End Year **2005**

### a - Standard employment

	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	6210	2872	46,2	1510	4958	2932	59,1	567	70,6
Male 30_49	8263	7126	86,2	461	8855	7275	82,2	856	91,8
Male 50_64	4986	2590	51,9	1138	5194	2643	50,9	1239	74,8
Female 15_29	6001	1941	32,3	1823	4753	2178	45,8	804	62,7
Female 30_49	8280	4101	49,5	2445	8760	4601	52,5	2324	79,1
Female 50_64	5324	1101	20,7	2043	5482	1235	22,5	2003	59,1
Male 15_64	19459	12588	64,7	3108	19006	12850	67,6	2662	
Female 15_64	19605	7144	36,4	6311	18995	8014	42,2	5131	
<b>Total 15_64</b>	39064	19731	50,5	9566	38001	20864	54,9	7637	75,0
<i>Female as % of tot. empl. :</i>		36,2				38,4			

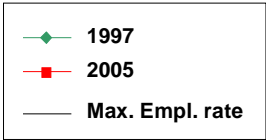
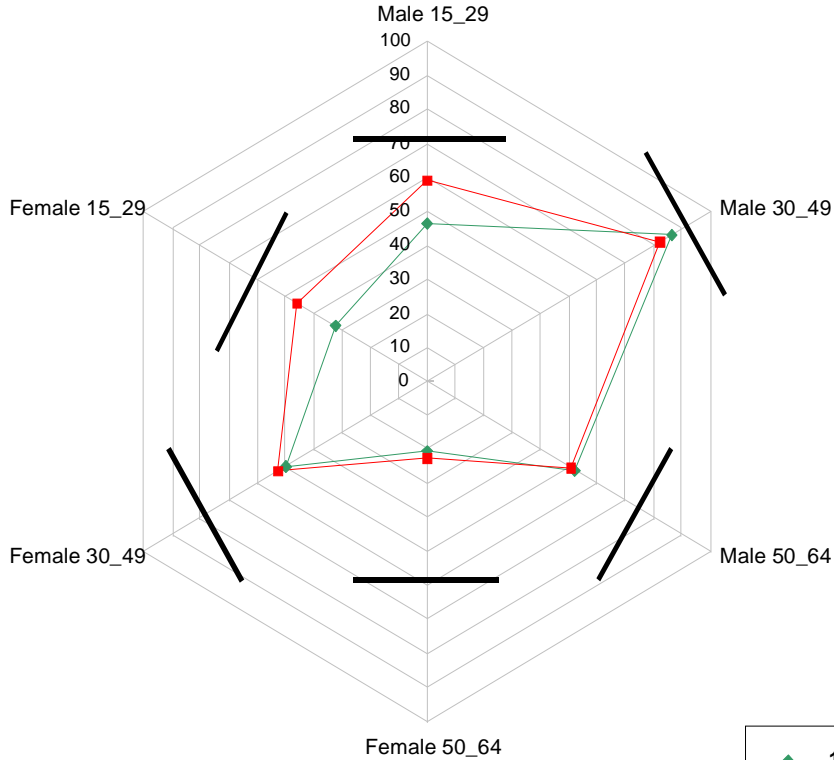
### b - Equivalent Full time

	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	6210	2812	45,3	1059	4958	2886	58,2	204	62,3
Male 30_49	8263	7036	85,1	415	8855	7221	81,6	762	90,2
Male 50_64	4986	2548	51,1	1034	5194	2615	50,4	1116	71,8
Female 15_29	6001	1804	30,1	1345	4753	2012	42,3	482	52,5
Female 30_49	8280	3819	46,1	1968	8760	4258	48,6	1863	69,9
Female 50_64	5324	1032	19,4	1553	5482	1151	21,0	1511	48,6
Male 15_64	19459	12395	63,7	2508	19006	12722	66,9	2083	
Female 15_64	19605	6655	33,9	4865	18995	7421	39,1	3856	
<b>Total 15_64</b>	39064	19050	48,8	6341	38001	20143	53,0	4557	65,0
<i>Female as % of tot. empl. :</i>		34,9				36,8			

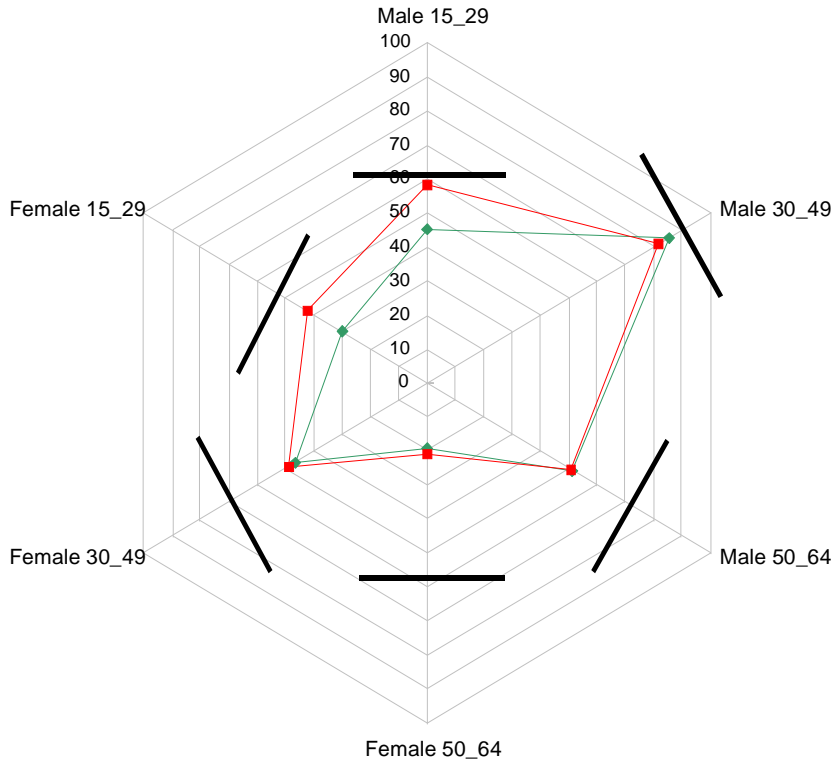
# IT 2 - Employment rates per gender and age group

Italy

**a - Standard employment**

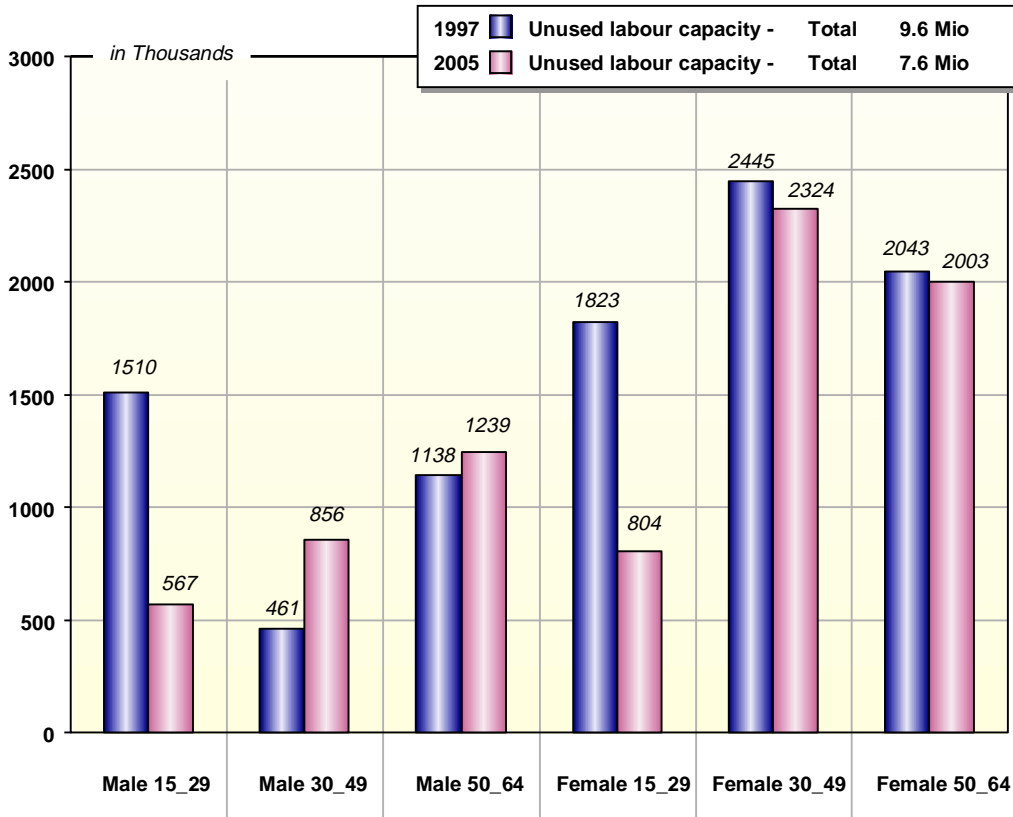


**b - Equivalent Full time**

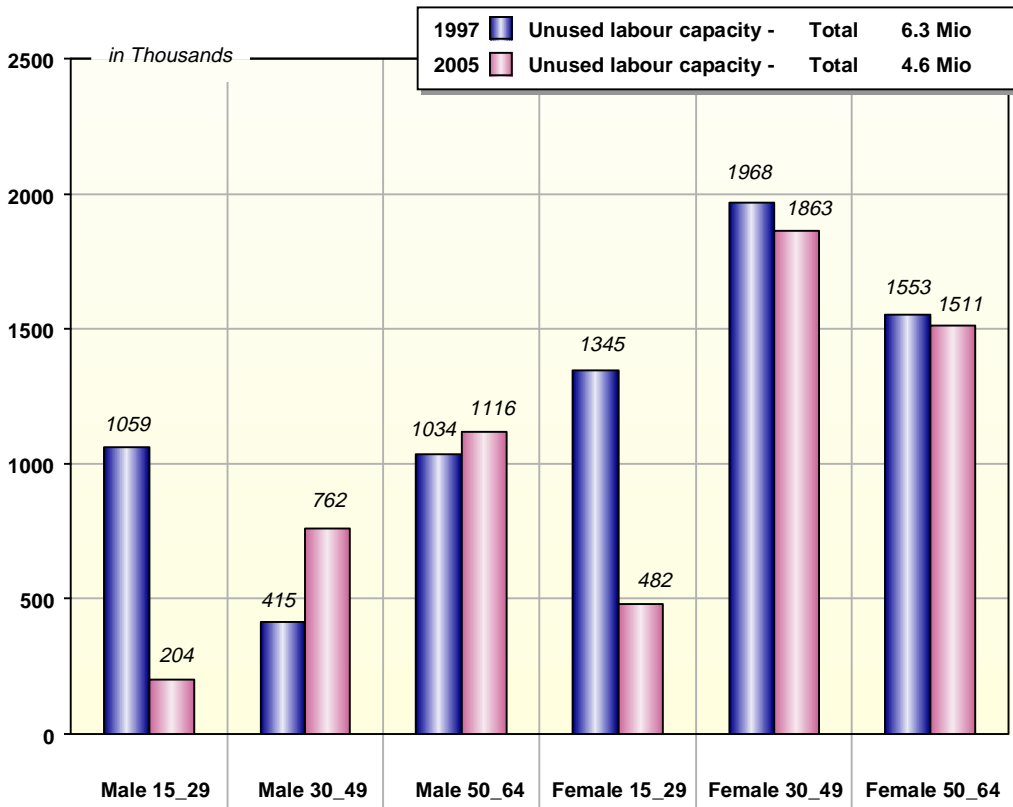


### IT 3 - Unused Labour capacity Italy

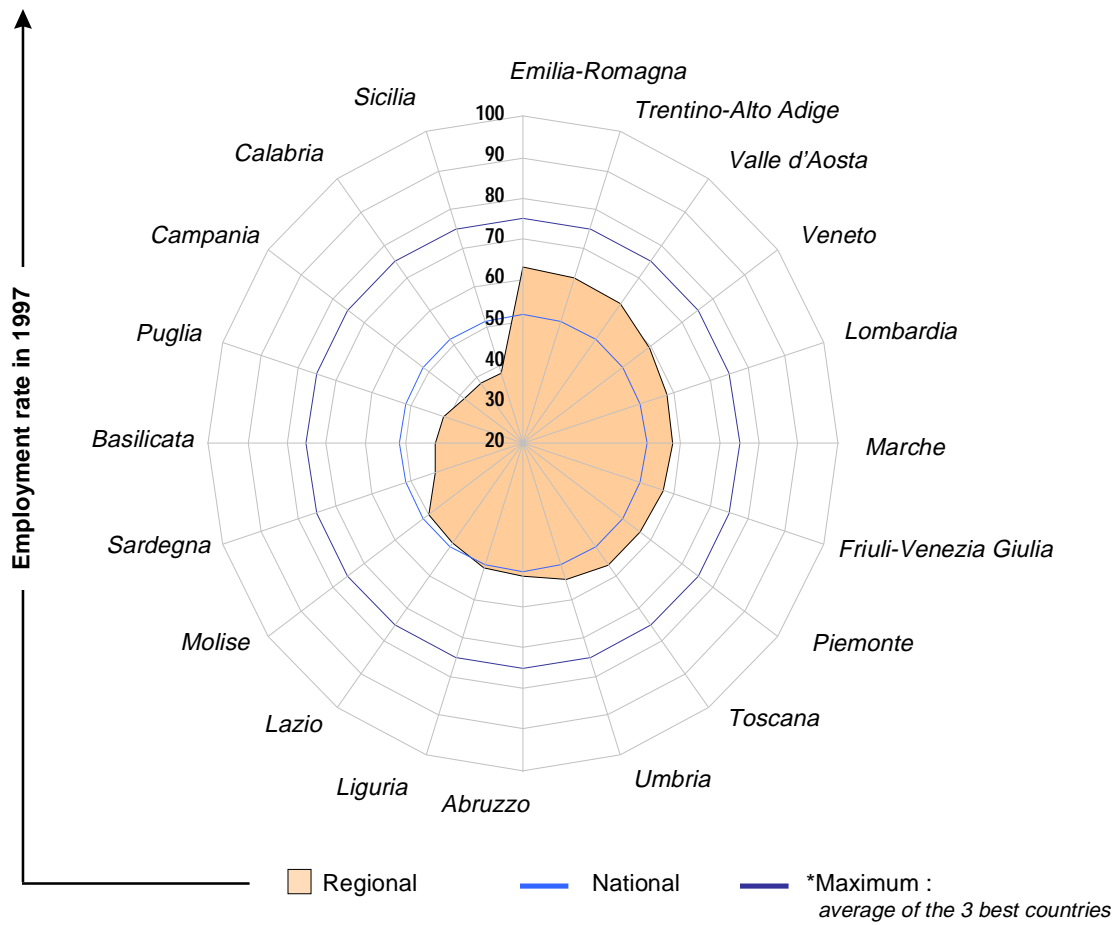
a - Full time + Part time



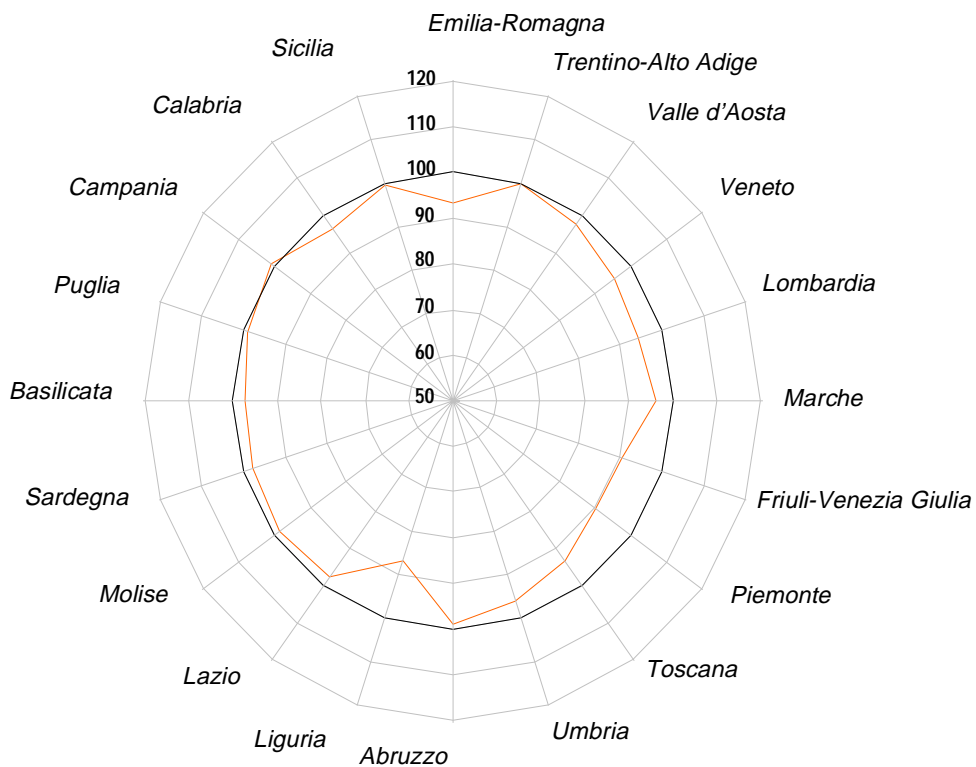
b - Equivalent Full time



**IT 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Italy**

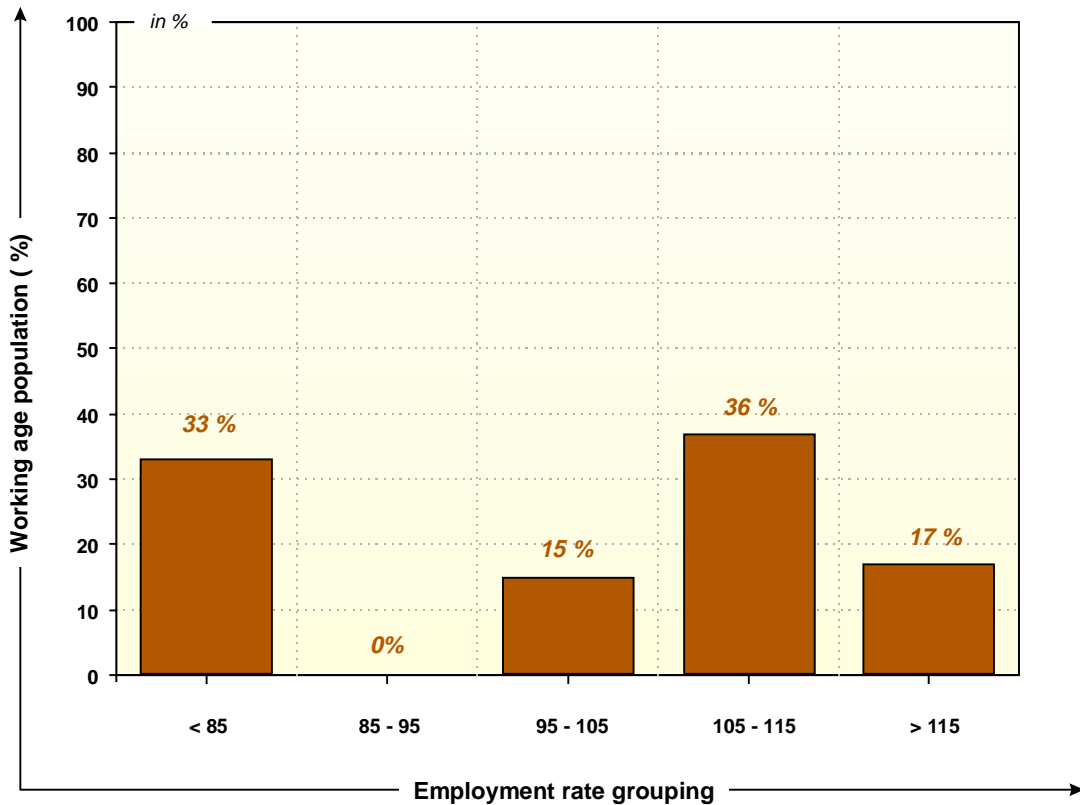


**IT 5 - Regional changes in the working age population size between 1997 - 2010** - 15-64 age group in 2010 (index 100 = 1997)

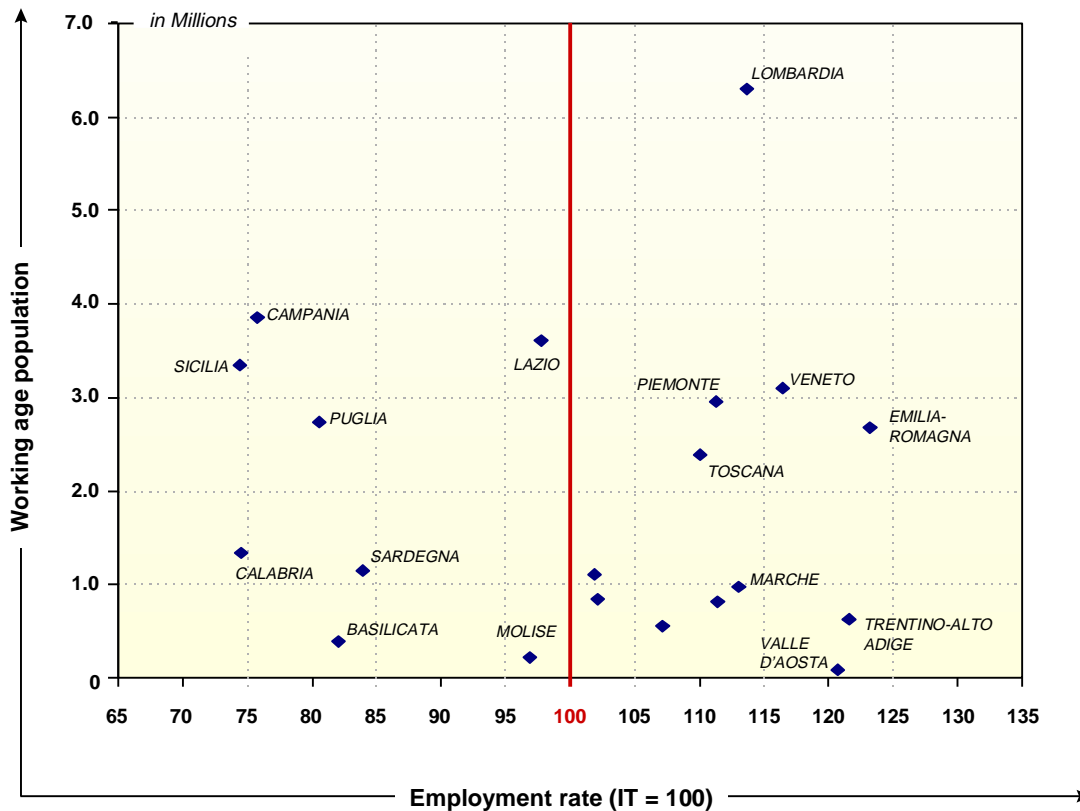


### IT 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### IT 7 - Relative position of regions in terms of working age population size and employment rate 1997





## LU 1 - Employment scenarios 1997-2005

Luxembourg - Annual employment growth rate : **2.7 %** - End Year **2005**

### a - Standard employment

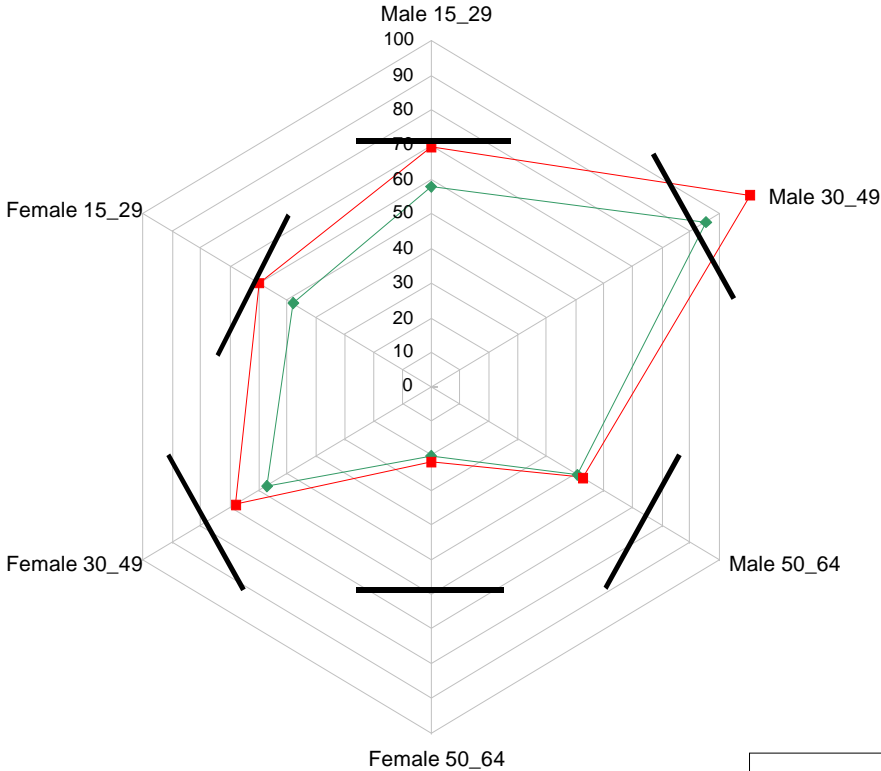
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	41	24	57,7	5	42	29	69,3	1	70,6
Male 30_49	68	64	95,0	-2	71	79	110,2	-13	91,8
Male 50_64	33	17	50,4	8	39	21	52,3	9	74,8
Female 15_29	40	19	48,0	6	41	24	59,5	1	62,7
Female 30_49	65	37	57,0	14	69	47	67,8	8	79,1
Female 50_64	34	7	20,1	13	39	8	21,8	15	59,1
Male 15_64	143	105	73,7	11	153	129	84,0	-4	
Female 15_64	139	63	45,4	33	148	79	53,4	24	
<b>Total 15_64</b>	281	168	59,7	43	301	208	68,9	18	75,0
<i>Female as % of tot. empl. :</i>		37,5				38,1			

### b - Equivalent Full time

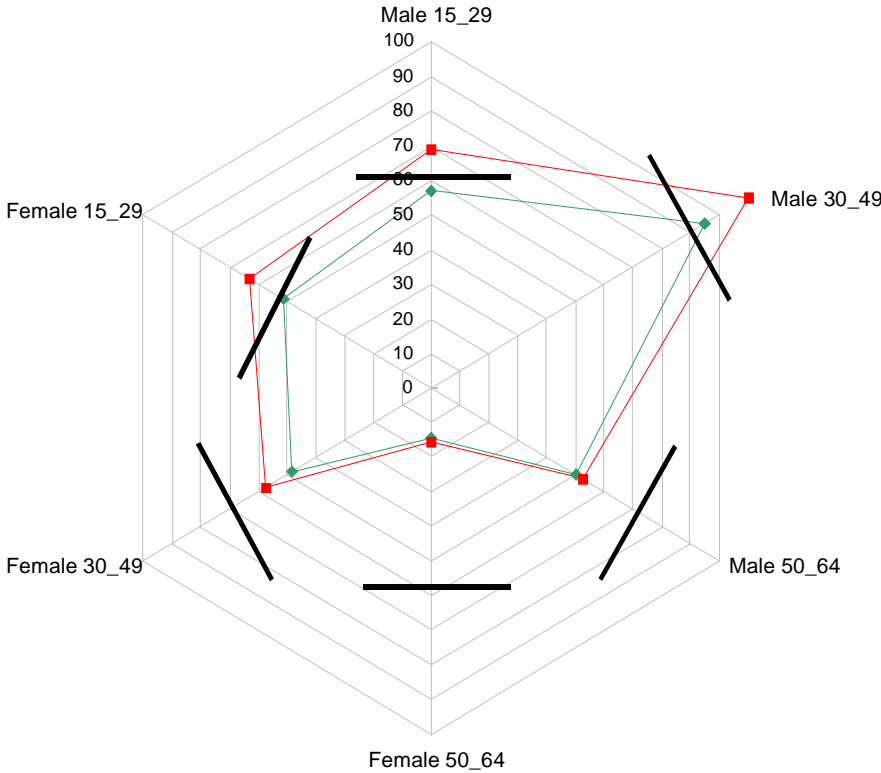
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	41	24	57,2	2	42	29	68,8	-3	62,3
Male 30_49	68	64	94,7	-3	71	79	110,0	-14	90,2
Male 50_64	33	17	50,2	7	39	21	52,3	8	71,8
Female 15_29	40	20	51,1	1	41	26	63,2	-4	52,5
Female 30_49	65	31	48,3	14	69	39	57,3	9	69,9
Female 50_64	34	5	14,4	12	39	6	15,5	13	48,6
Male 15_64	143	104	73,3	6	153	128	83,8	-9	
Female 15_64	139	57	40,9	26	148	71	47,9	17	
<b>Total 15_64</b>	281	161	57,3	22	301	199	66,1	-3	65,0
<i>Female as % of tot. empl. :</i>		35,1				35,6			

# LU 2 - Employment rates per gender and age group Luxembourg

**a - Standard employment**

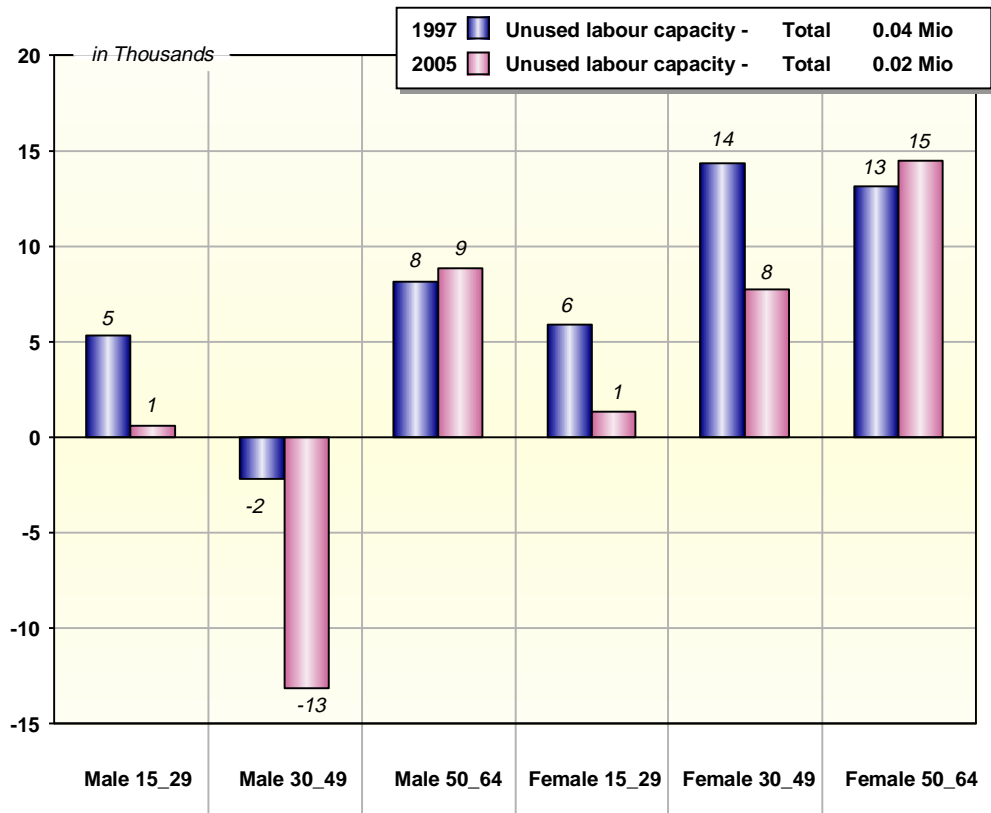


**b - Equivalent Full time**

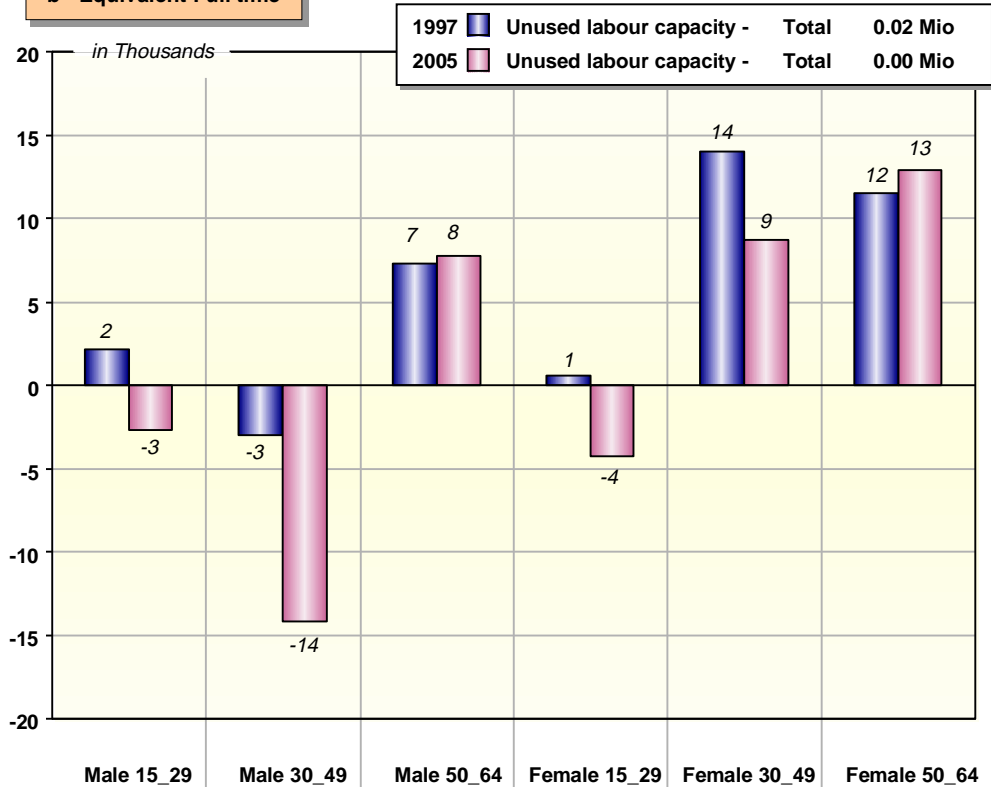


## LU 3 - Unused Labour capacity Luxembourg

### a - Full time + Part time



### b - Equivalent Full time



## NL 1 - Employment scenarios 1997-2005

Netherlands - Annual employment growth rate : **1.8 %** - End Year **2005**

### a - Standard employment

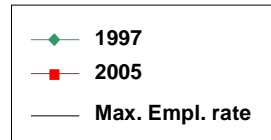
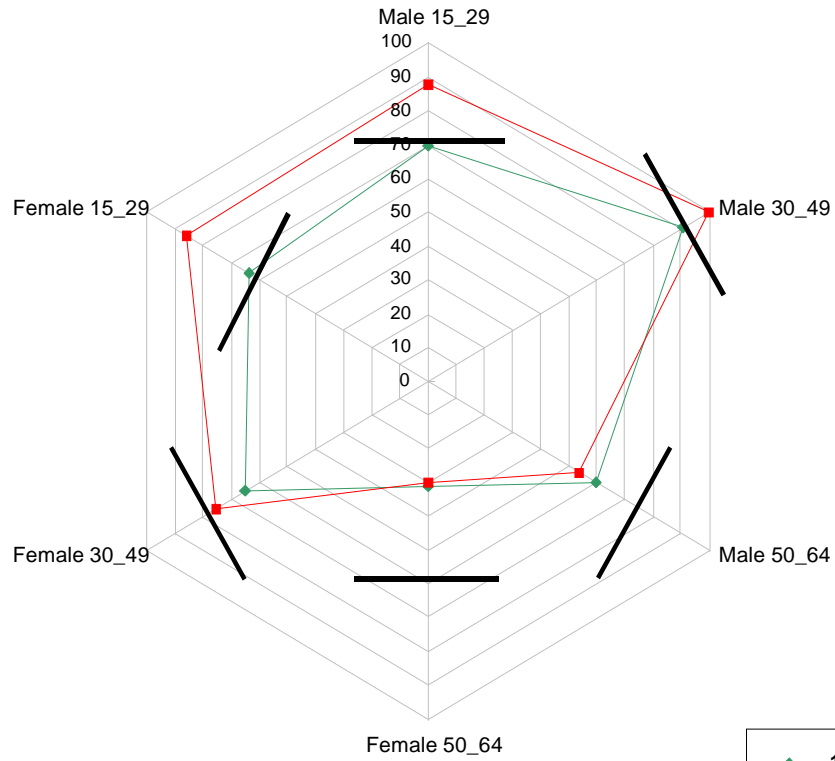
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	1649	1150	69,8	13	1476	1293	87,6	-251	70,6
Male 30_49	2508	2275	90,7	28	2569	2558	99,6	-199	91,8
Male 50_64	1246	743	59,6	188	1552	836	53,8	325	74,8
Female 15_29	1586	1010	63,7	-15	1410	1206	85,5	-322	62,7
Female 30_49	2410	1563	64,8	342	2470	1867	75,6	86	79,1
Female 50_64	1231	385	31,2	343	1526	459	30,1	442	59,1
Male 15_64	5403	4168	77,2	229	5598	4687	83,7	-125	
Female 15_64	5227	2958	56,6	670	5406	3533	65,3	206	
<b>Total 15_64</b>	10630	7126	67,0	847	11004	8219	74,7	34	75,0
<i>Female as % of tot. empl. :</i>		41,5				43,0			

### b - Equivalent Full time

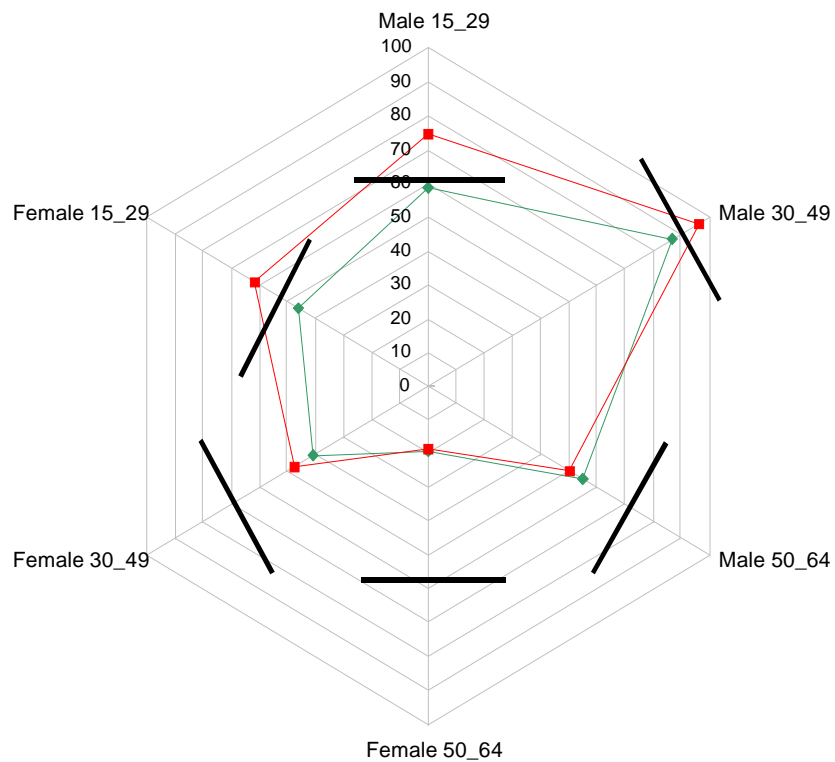
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	1649	968	58,7	60	1476	1101	74,5	-180	62,3
Male 30_49	2508	2170	86,5	92	2569	2467	96,0	-150	90,2
Male 50_64	1246	685	55,0	210	1552	779	50,2	336	71,8
Female 15_29	1586	731	46,1	102	1410	866	61,4	-126	52,5
Female 30_49	2410	979	40,6	705	2470	1161	47,0	565	69,9
Female 50_64	1231	238	19,4	359	1526	283	18,5	458	48,6
Male 15_64	5403	3823	70,8	362	5598	4346	77,6	6	
Female 15_64	5227	1948	37,3	1166	5406	2310	42,7	897	
<b>Total 15_64</b>	10630	5771	54,3	1139	11004	6656	60,5	496	65,0
<i>Female as % of tot. empl. :</i>		33,8				34,7			

## NL 2 - Employment rates per gender and age group Netherlands

a - Standard employment

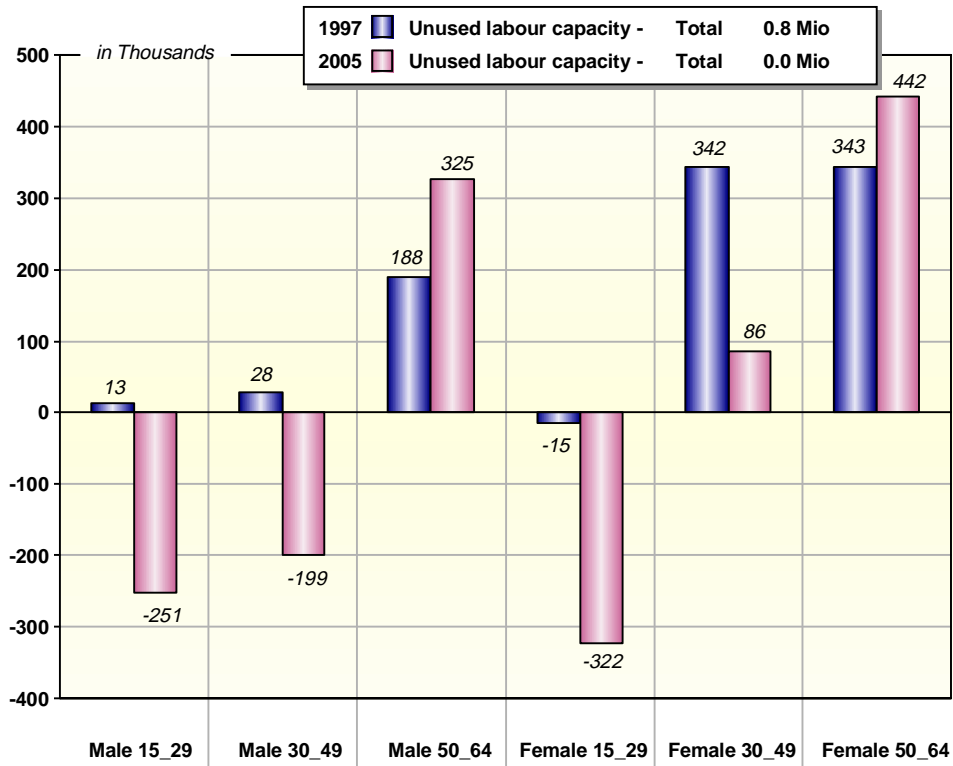


b - Equivalent Full time

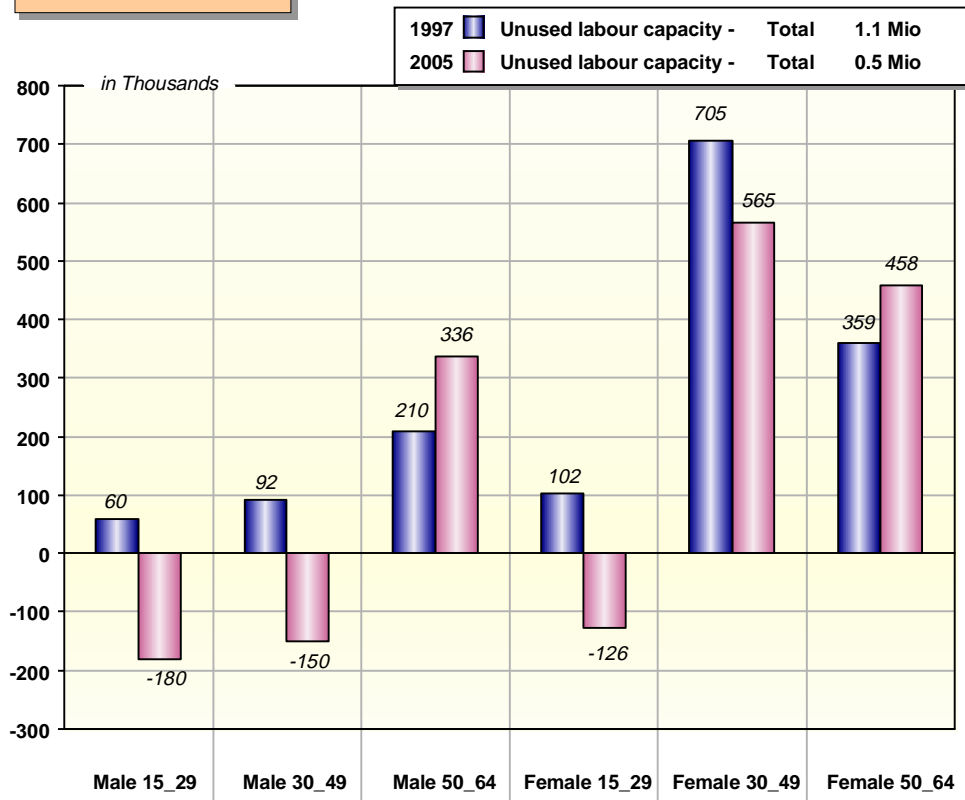


### NL 3 - Unused Labour capacity Netherlands

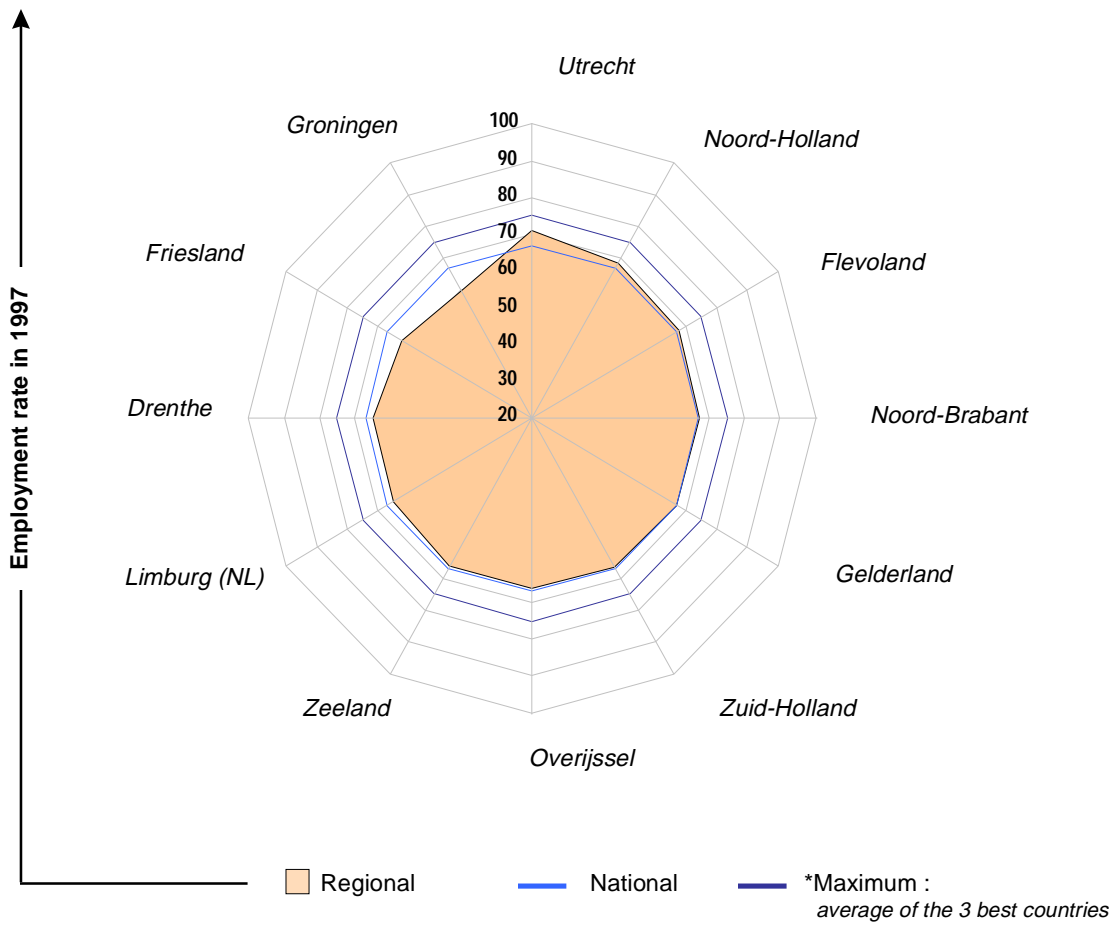
#### a - Full time + Part time



#### b - Equivalent Full time



**NL 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Netherlands**

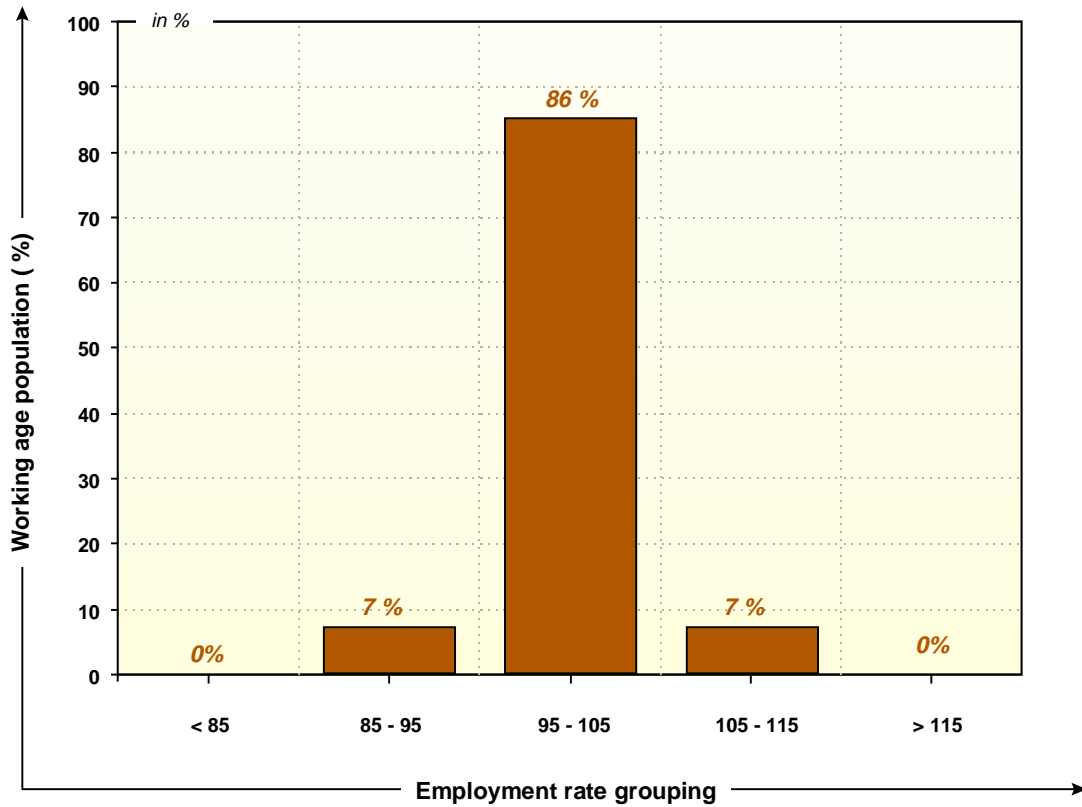


**NL 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)**

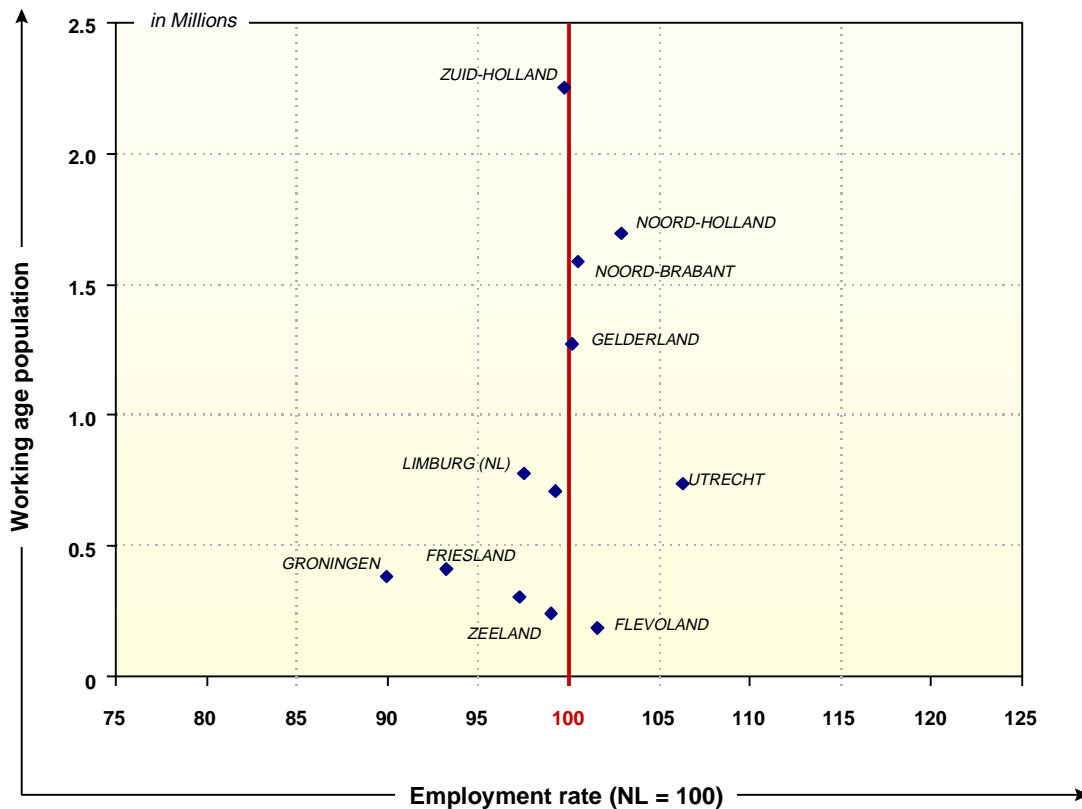


### NL 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### NL 7 - Relative position of regions in terms of working age population size and employment rate 1997





## PT 1 - Employment scenarios 1997-2005

Portugal - Annual employment growth rate : **1.0 %** - End Year **2005**

### a - Standard employment

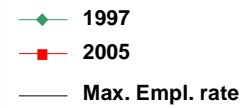
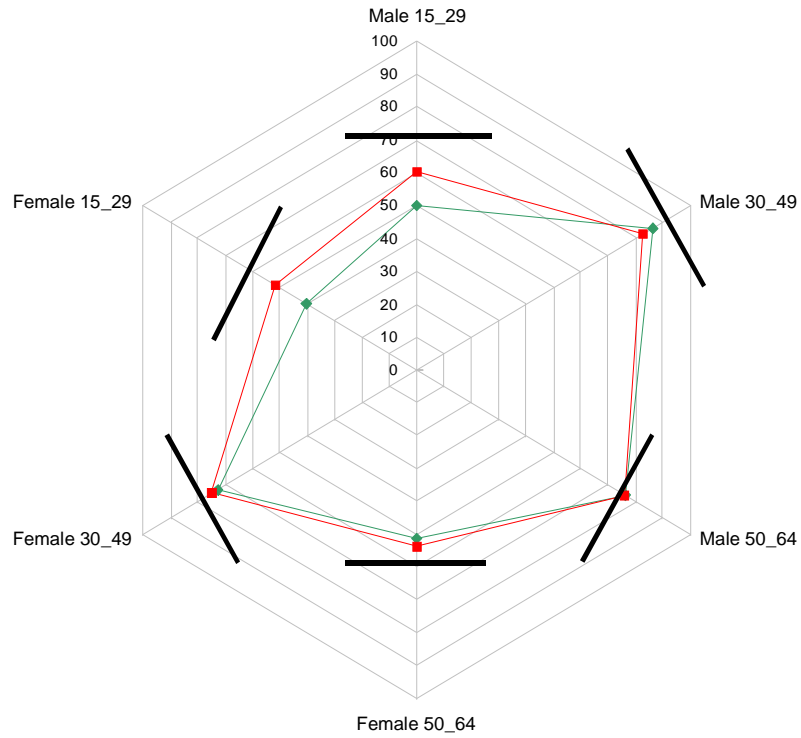
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	1198	597	49,8	249	1047	632	60,4	107	70,6
Male 30_49	1333	1145	85,9	79	1469	1212	82,6	136	91,8
Male 50_64	763	583	76,4	-13	816	617	75,7	-7	74,8
Female 15_29	1176	470	40,0	267	1015	522	51,5	114	62,7
Female 30_49	1396	1014	72,6	90	1507	1127	74,8	65	79,1
Female 50_64	871	446	51,2	69	919	495	53,9	48	59,1
Male 15_64	3294	2324	70,6	315	3331	2462	73,9	235	
Female 15_64	3443	1930	56,1	426	3441	2145	62,3	226	
<b>Total 15_64</b>	6737	4254	63,2	798	6772	4607	68,0	473	75,0
Female as % of tot. empl. :		45,4				46,6			

### b - Equivalent Full time

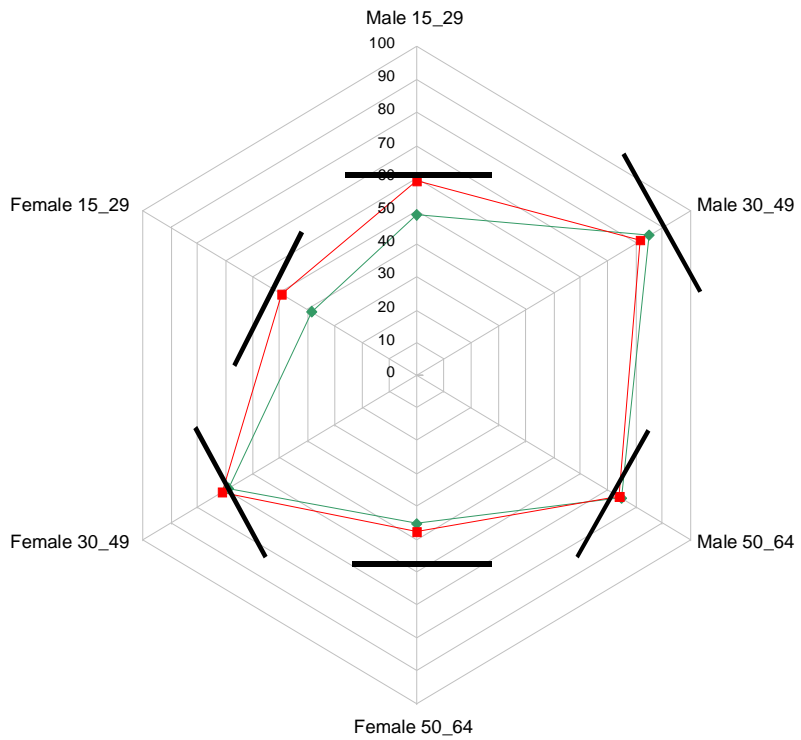
	1997				2005				Max empl. rate
	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	Popu-lation	Employ-ment	Employ-ment rate (%)	Unused Labour capacity	
Male 15_29	1198	584	48,7	163	1047	618	59,0	34	62,3
Male 30_49	1333	1131	84,8	71	1469	1198	81,5	127	90,2
Male 50_64	763	568	74,4	-20	816	601	73,7	-15	71,8
Female 15_29	1176	449	38,2	168	1015	500	49,3	33	52,5
Female 30_49	1396	960	68,8	16	1507	1069	70,9	-16	69,9
Female 50_64	871	393	45,2	30	919	438	47,6	8	48,6
Male 15_64	3294	2283	69,3	214	3331	2416	72,5	146	
Female 15_64	3443	1802	52,3	213	3441	2007	58,3	25	
<b>Total 15_64</b>	6737	4085	60,6	294	6772	4423	65,3	-21	65,0
Female as % of tot. empl. :		44,1				45,4			

## PT 2 - Employment rates per gender and age group Portugal

a - Standard employment

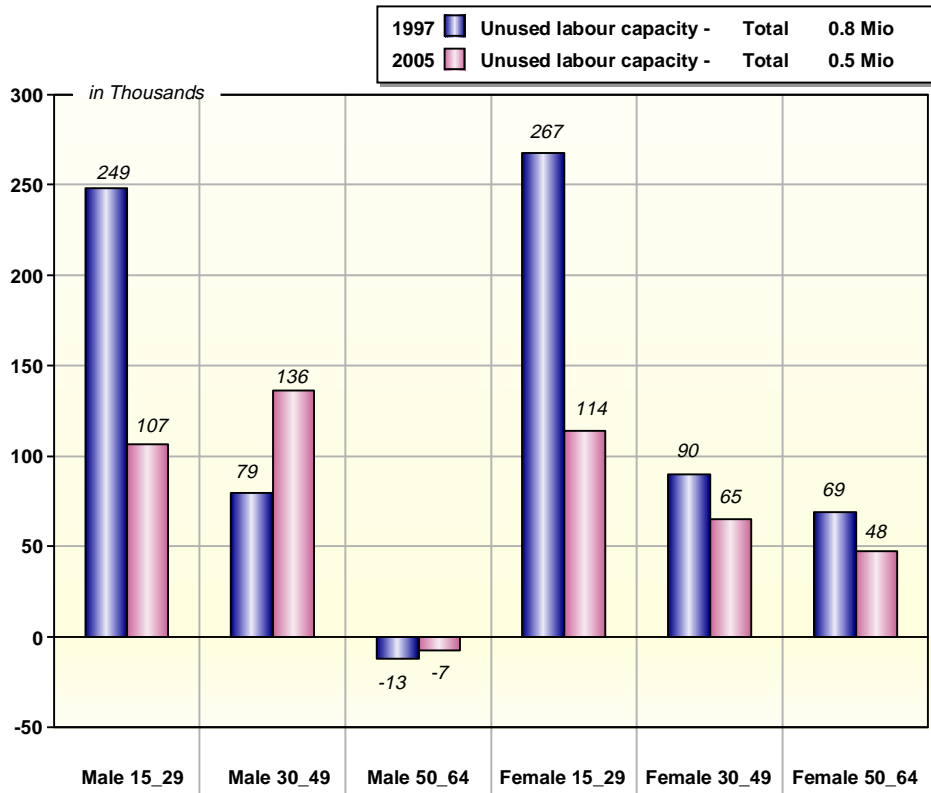


b - Equivalent Full time

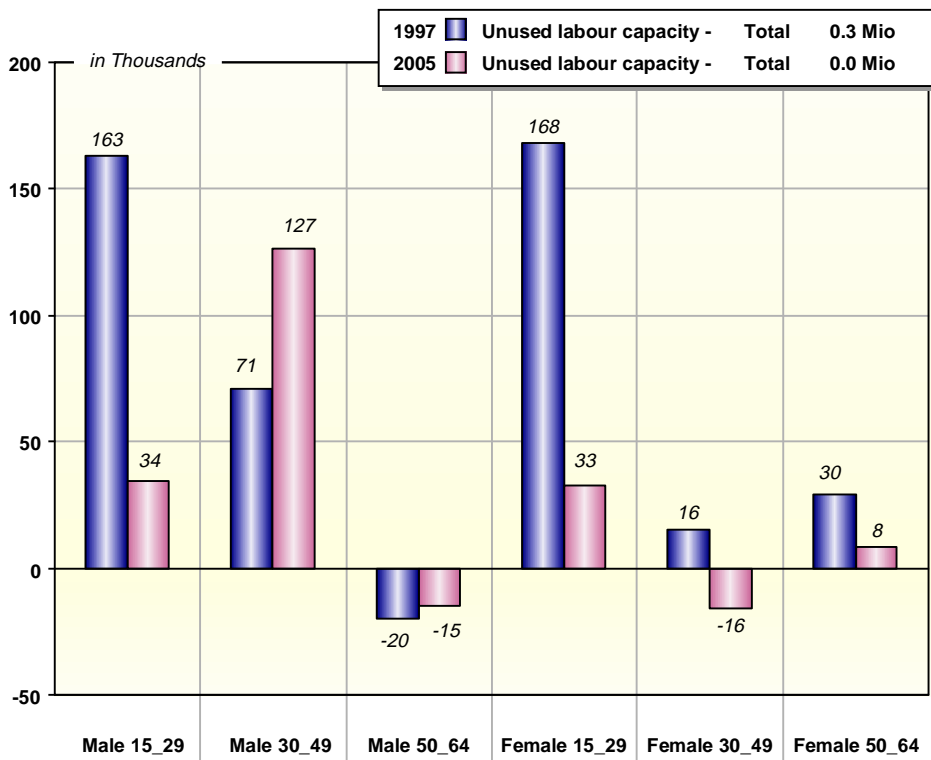


### PT 3 - Unused Labour capacity Portugal

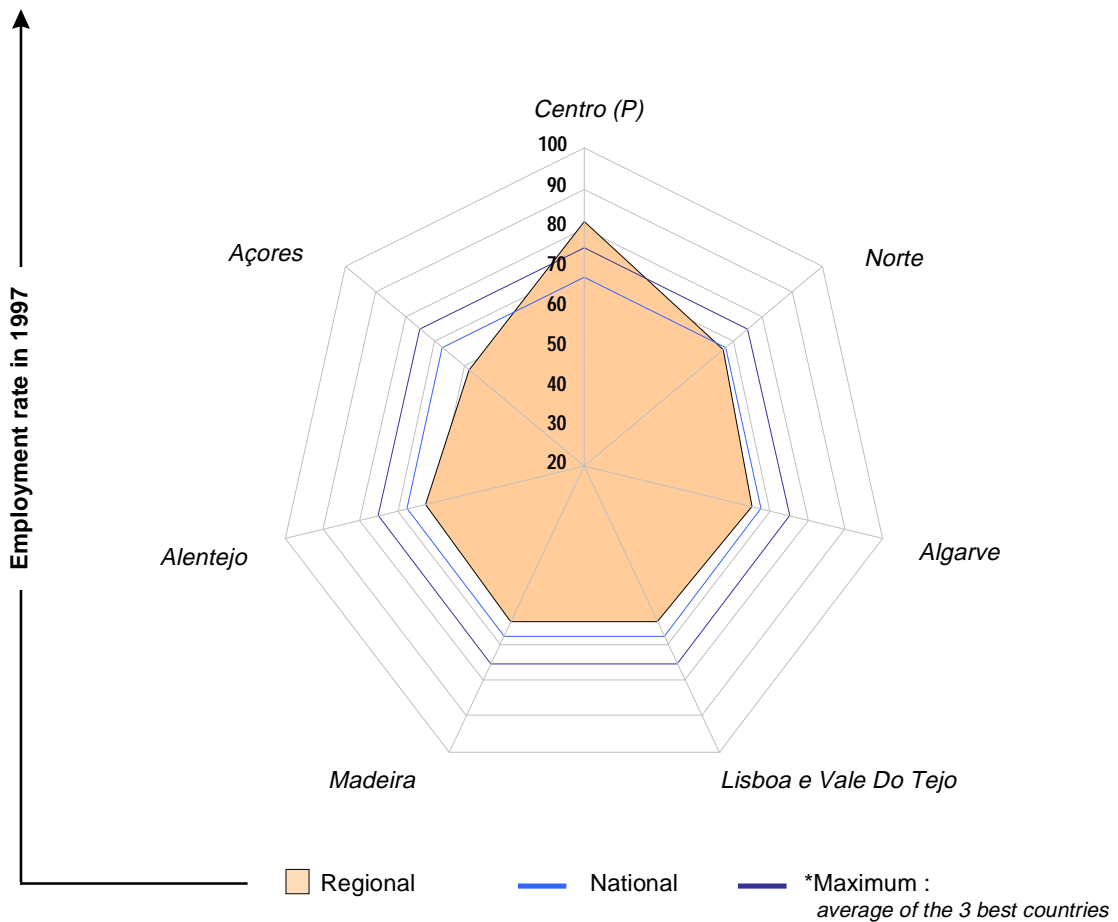
#### a - Full time + Part time



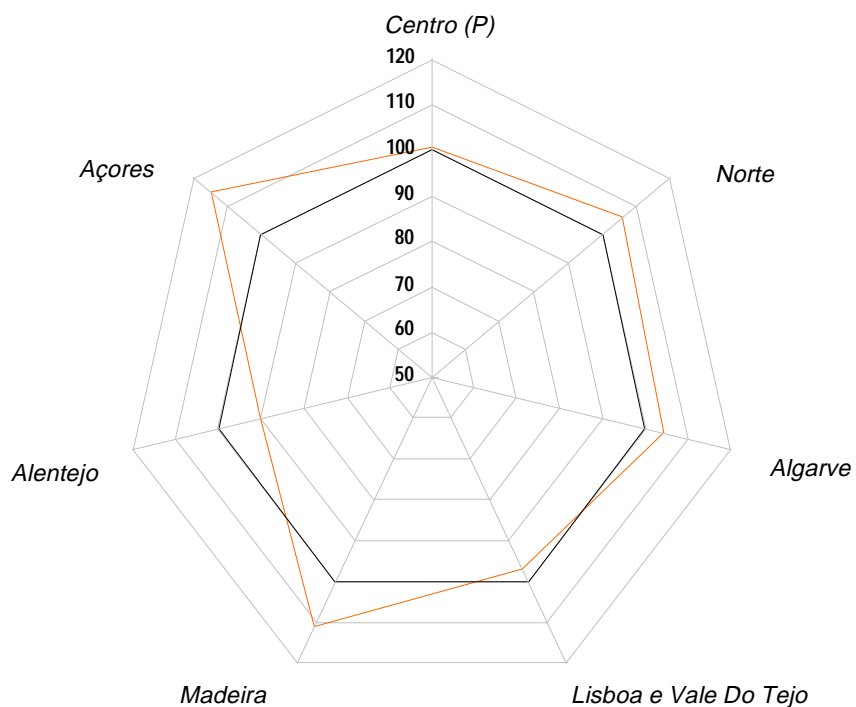
#### b - Equivalent Full time



**PT4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Portugal**

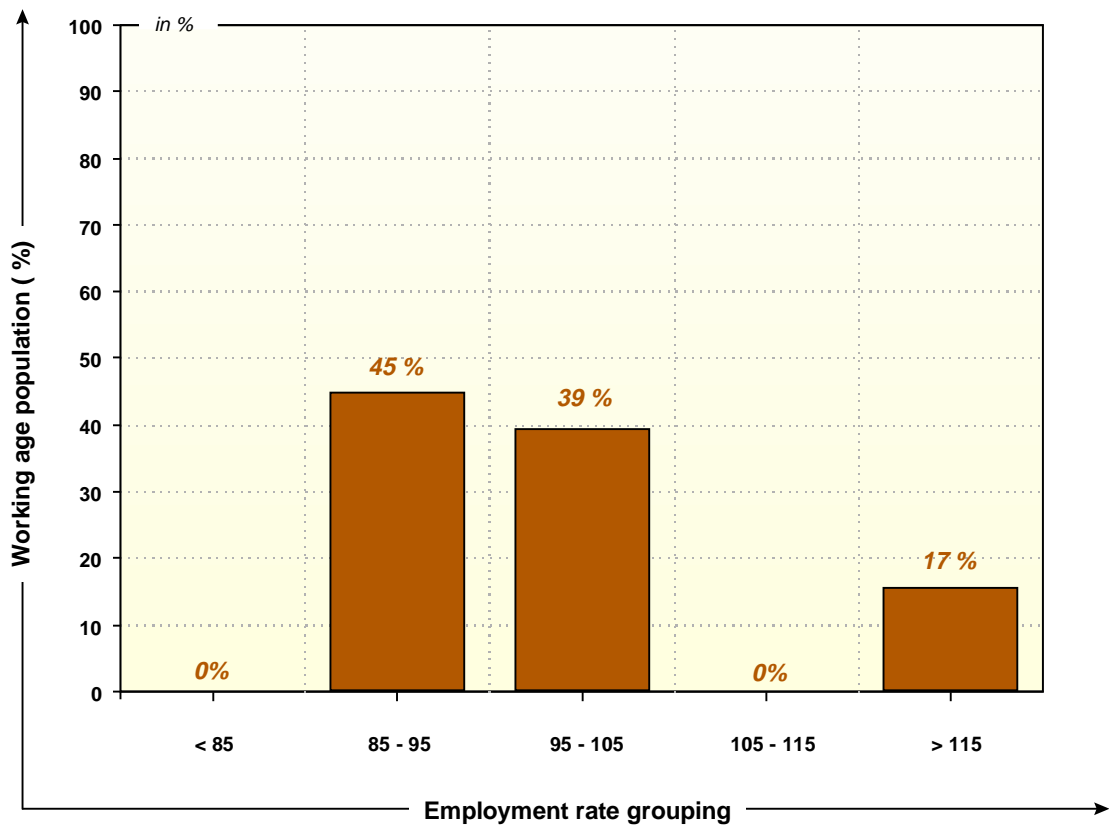


**PT 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)**

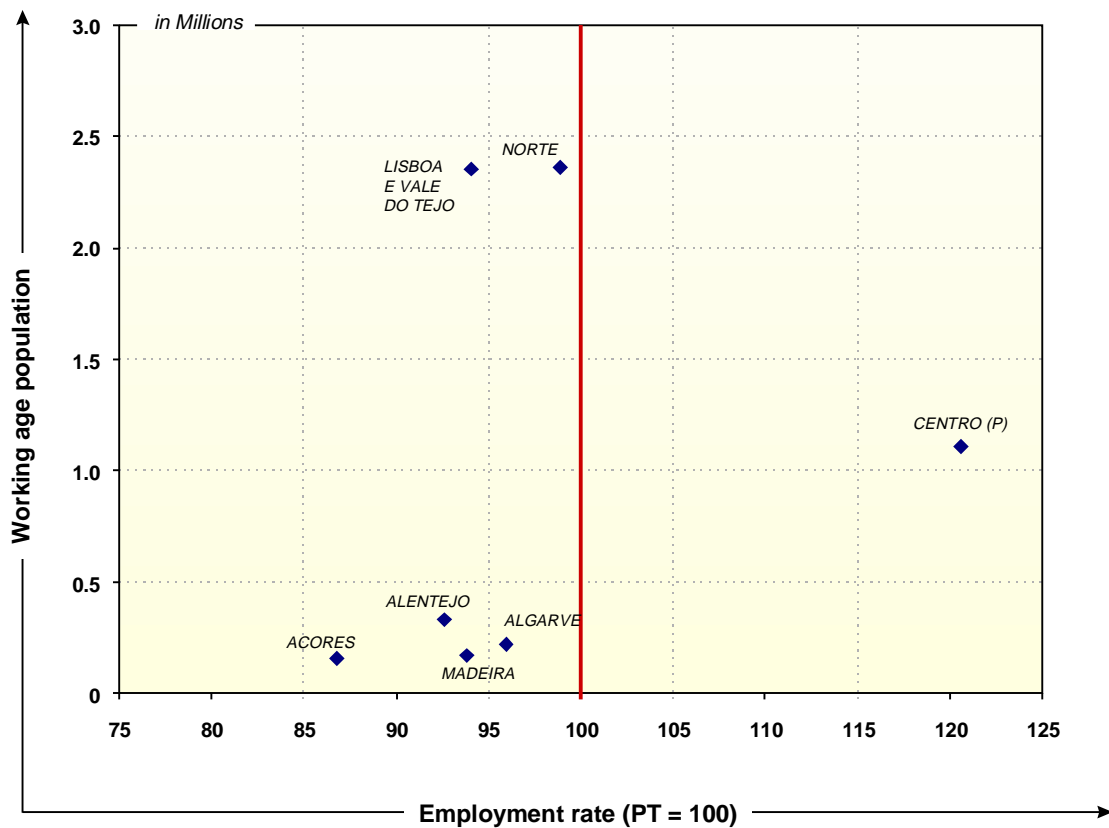


### PT 6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### PT 7 - Relative position of regions in terms of working age population size and employment rate 1997



## SE 1 - Employment scenarios 1997-2005

Sweden - Annual employment growth rate : **1.0 %** - End Year **2005**

### a - Standard employment

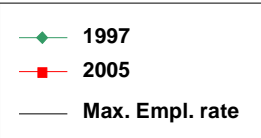
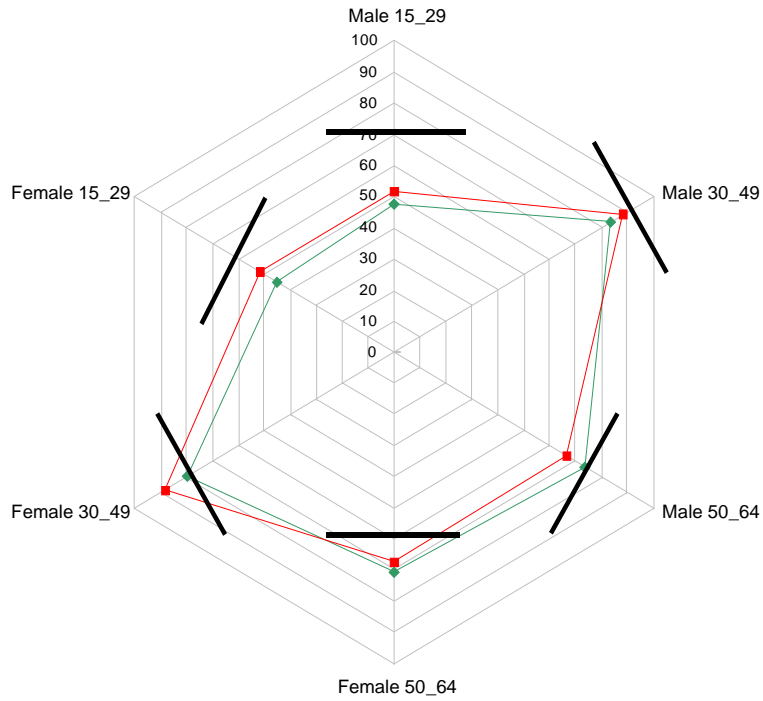
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	857	406	47,4	199	834	431	51,7	158	70,6
Male 30_49	1253	1042	83,2	108	1253	1106	88,3	44	91,8
Male 50_64	758	555	73,2	12	888	589	66,3	75	74,8
Female 15_29	821	369	45,0	146	790	409	51,7	87	62,7
Female 30_49	1202	956	79,5	-5	1200	1058	88,2	-109	79,1
Female 50_64	753	531	70,5	-86	876	588	67,1	-70	59,1
Male 15_64	2868	2003	69,8	319	2974	2125	71,5	277	
Female 15_64	2776	1857	66,9	54	2866	2054	71,7	-93	
<b>Total 15_64</b>	<b>5645</b>	<b>3860</b>	<b>68,4</b>	<b>374</b>	<b>5840</b>	<b>4179</b>	<b>71,6</b>	<b>201</b>	<b>75,0</b>
Female as % of tot. empl. :		48,1				49,2			

### b - Equivalent Full time

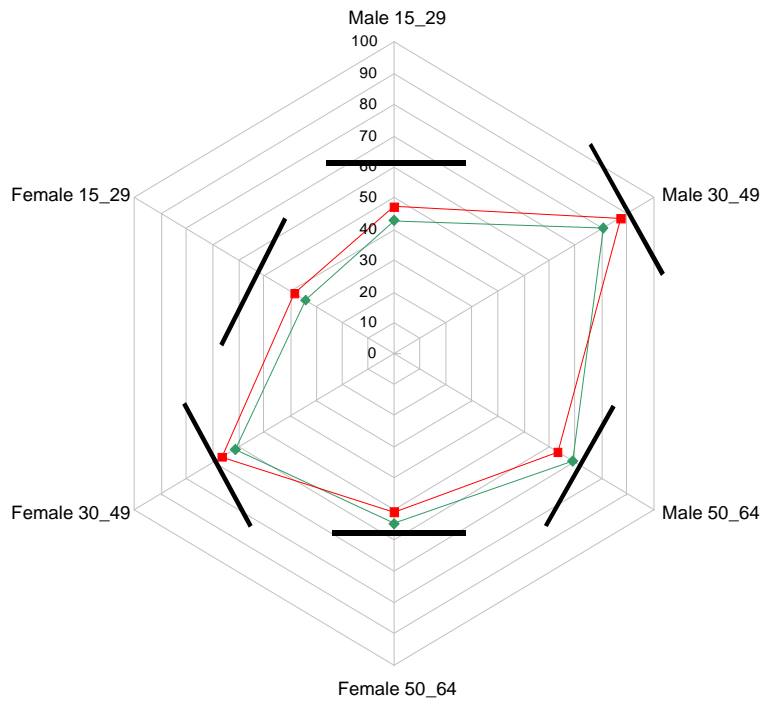
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	857	366	42,6	169	834	394	47,3	125	62,3
Male 30_49	1253	1008	80,4	122	1253	1087	86,7	43	90,2
Male 50_64	758	519	68,4	26	888	559	63,0	78	71,8
Female 15_29	821	280	34,1	151	790	305	38,6	109	52,5
Female 30_49	1202	734	61,0	107	1200	799	66,6	39	69,9
Female 50_64	753	410	54,5	-45	876	447	51,0	-21	48,6
Male 15_64	2868	1892	66,0	317	2974	2040	68,6	247	
Female 15_64	2776	1424	51,3	212	2866	1551	54,1	127	
<b>Total 15_64</b>	<b>5645</b>	<b>3316</b>	<b>58,8</b>	<b>353</b>	<b>5840</b>	<b>3591</b>	<b>61,5</b>	<b>205</b>	<b>65,0</b>
Female as % of tot. empl. :		42,9				43,2			

## SE 2 - Employment rates per gender and age group Sweden

a - Standard employment

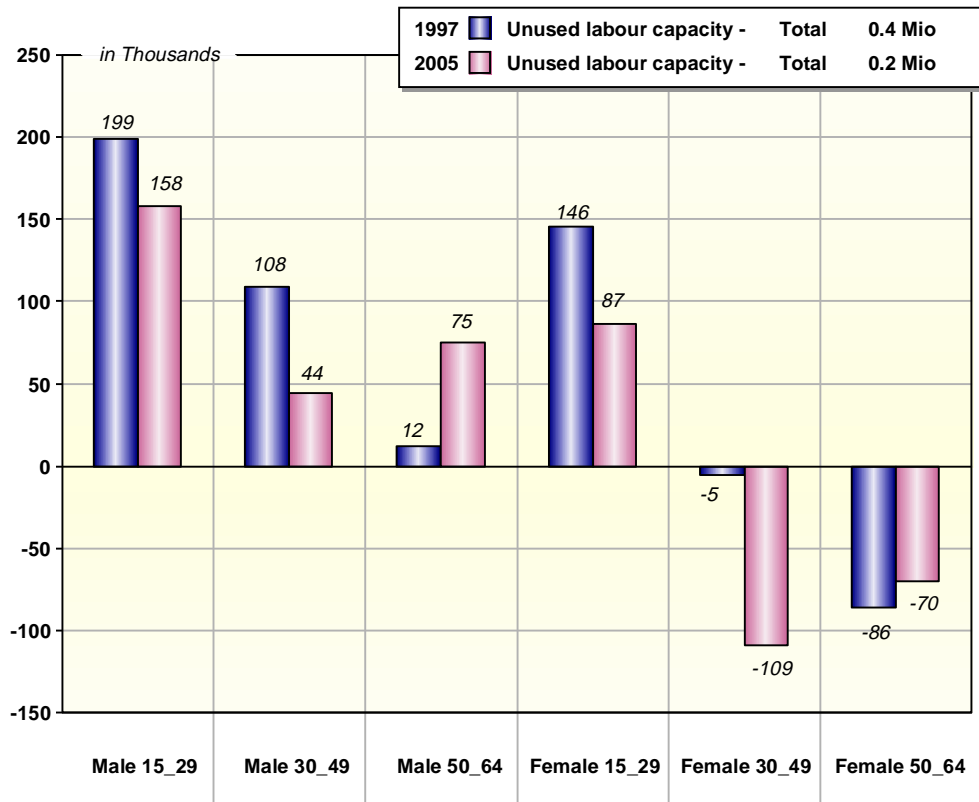


b - Equivalent Full time

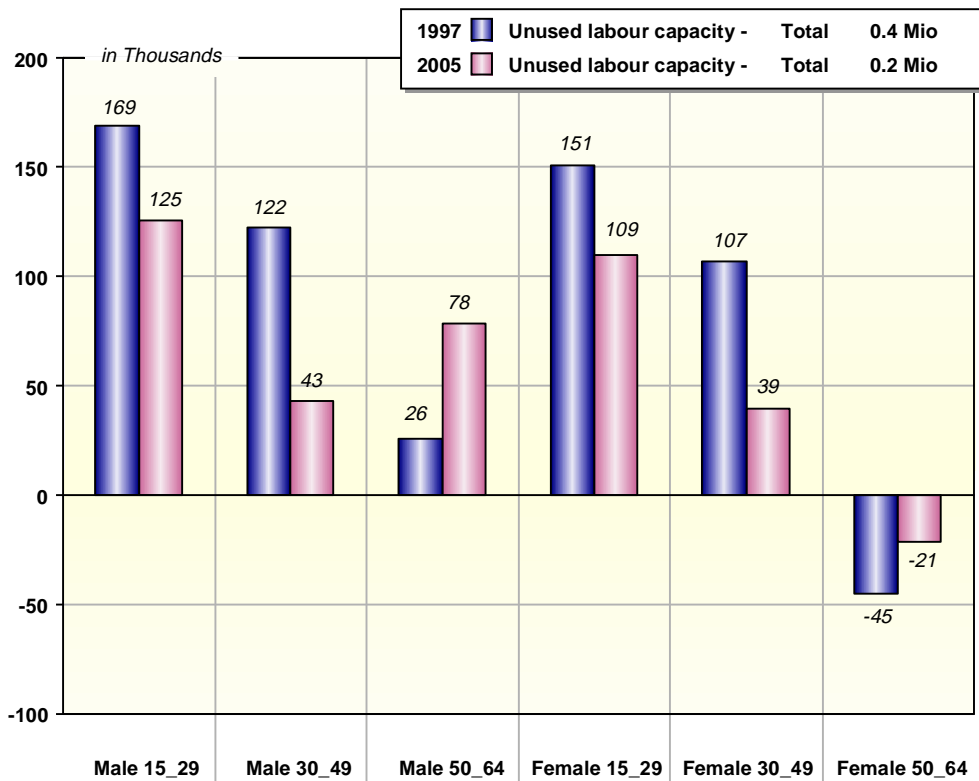


### SE 3 - Unused Labour capacity Sweden

a - Full time + Part time

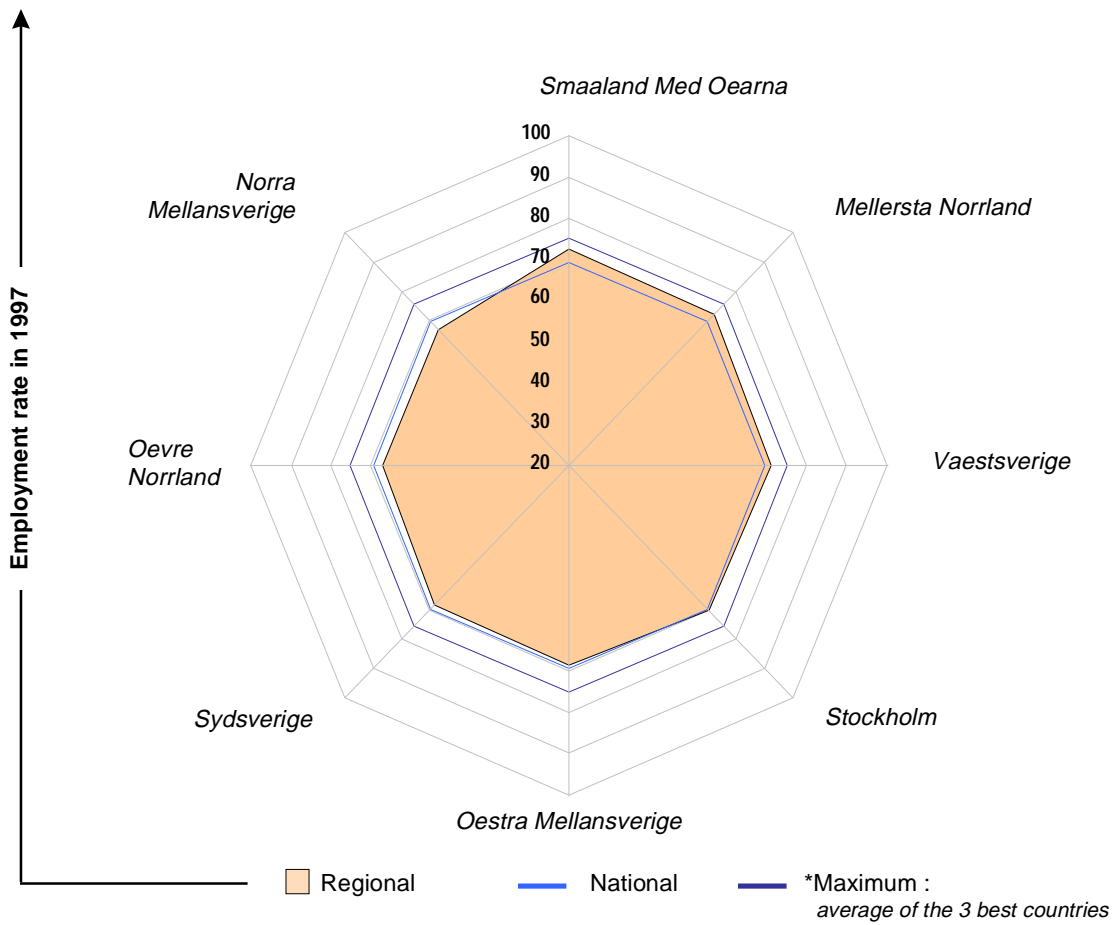


b - Equivalent Full time

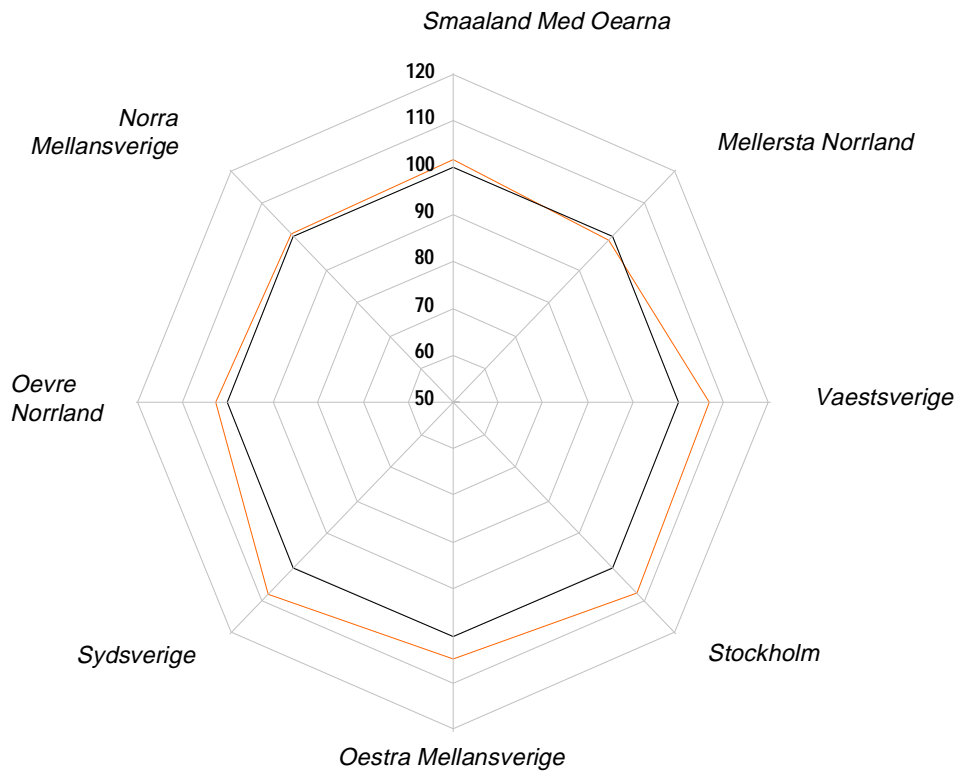




**SE 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - Sweden**

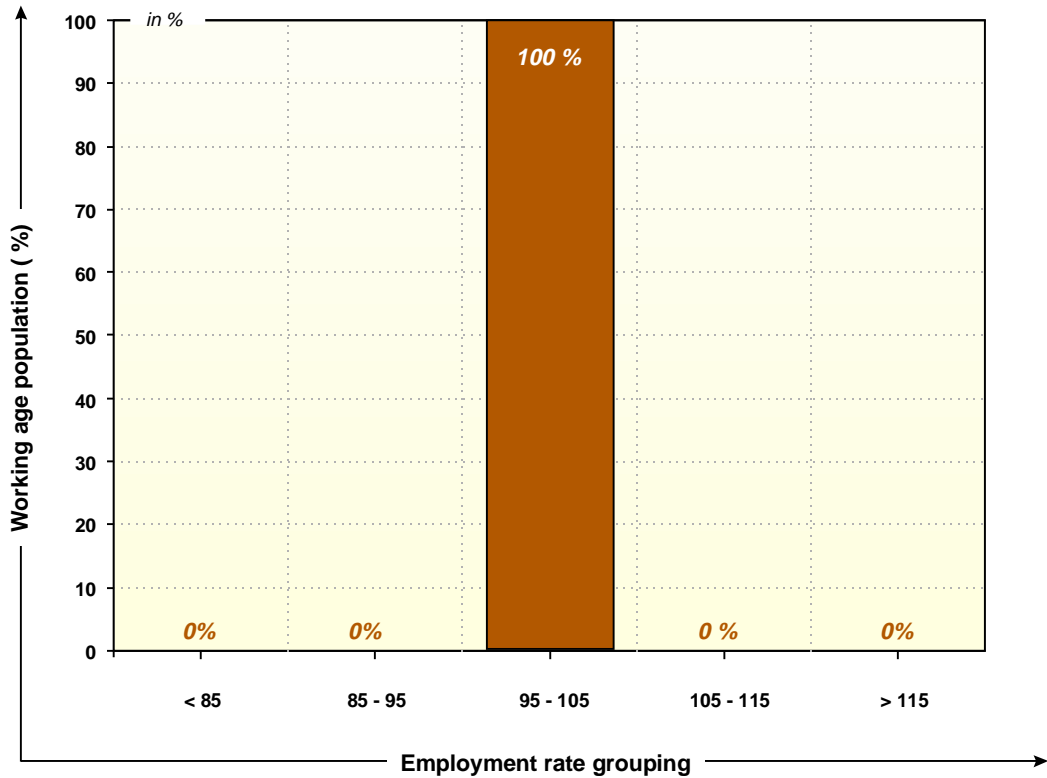


**SE 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)**

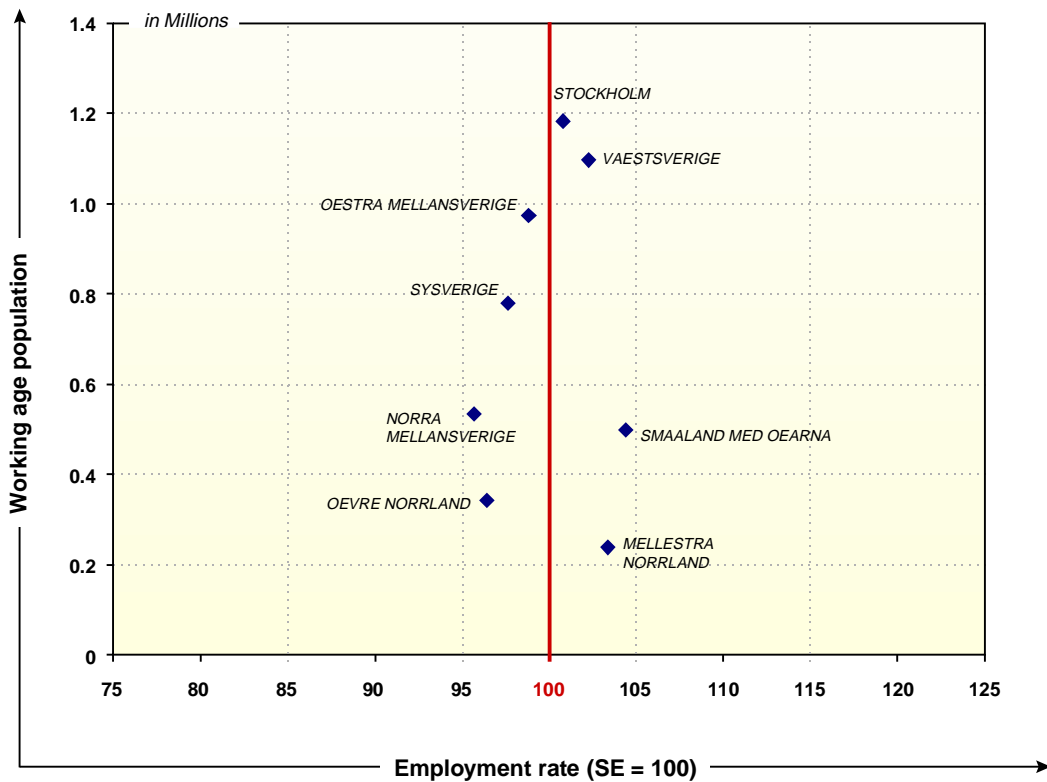


### SE6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### SE 7 - Relative position of regions in terms of working age population size and employment rate 1997



## UK 1 - Employment scenarios 1997-2005

United Kingdom - Annual employment growth rate : **0.2 %** - End Year **2005**

### a - Standard employment

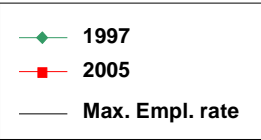
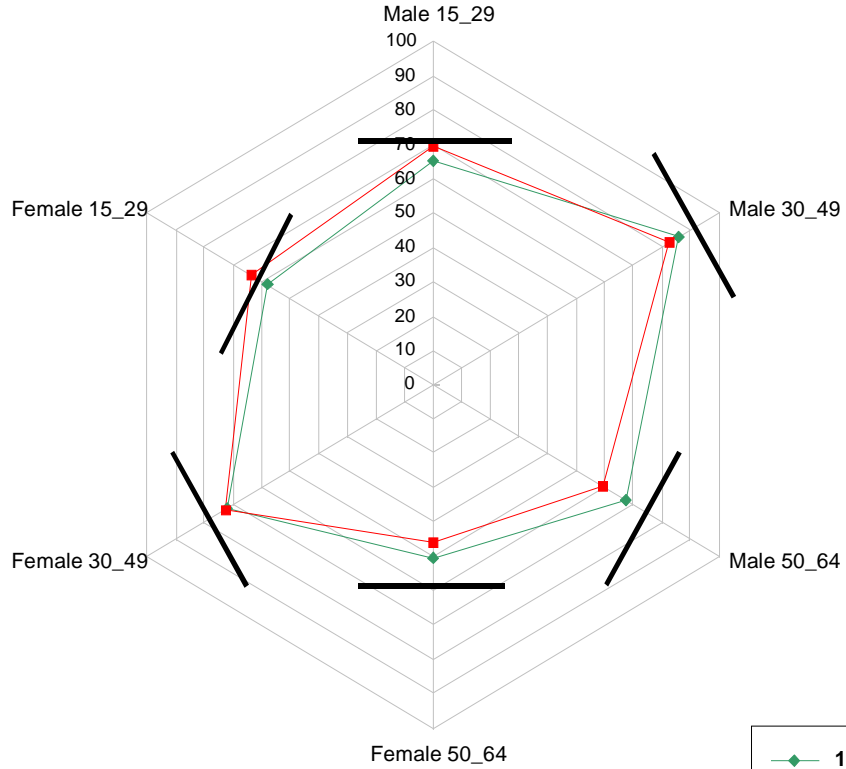
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	6039	3938	65,2	323	5690	3938	69,2	77	70,6
Male 30_49	8610	7362	85,5	544	8953	7360	82,2	861	91,8
Male 50_64	4635	3116	67,2	349	5297	3115	58,8	845	74,8
Female 15_29	5739	3310	57,7	290	5393	3430	63,6	-47	62,7
Female 30_49	8468	6059	71,6	635	8662	6278	72,5	570	79,1
Female 50_64	4739	2395	50,5	404	5415	2482	45,8	717	59,1
Male 15_64	19284	14416	74,8	1216	19939	14413	72,3	1782	
Female 15_64	18946	11765	62,1	1329	19470	12190	62,6	1240	
<b>Total 15_64</b>	<b>38230</b>	<b>26181</b>	<b>68,5</b>	<b>2492</b>	<b>39409</b>	<b>26602</b>	<b>67,5</b>	<b>2954</b>	<b>75,0</b>
<i>Female as % of tot. empl. :</i>		<i>44,9</i>				<i>45,8</i>			

### b - Equivalent Full time

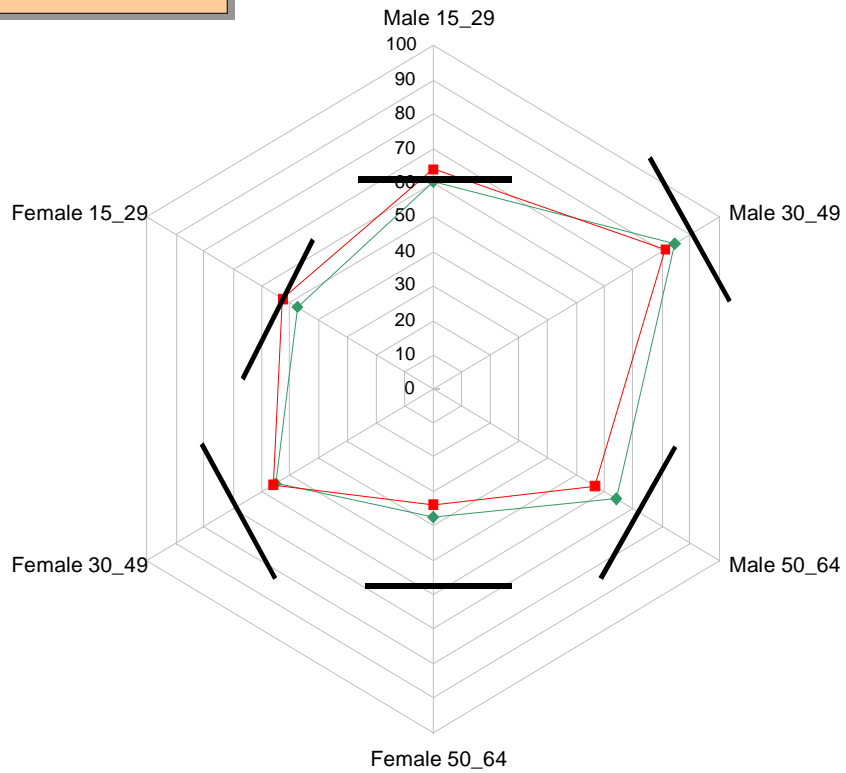
	1997				2005				Max empl. rate
	Population	Employment	Employment rate (%)	Unused Labour capacity	Population	Employment	Employment rate (%)	Unused Labour capacity	
Male 15_29	6039	3643	60,3	122	5690	3645	64,1	-98	62,3
Male 30_49	8610	7232	84,0	531	8953	7237	80,8	836	90,2
Male 50_64	4635	2964	63,9	366	5297	2965	56,0	840	71,8
Female 15_29	5739	2729	47,6	282	5393	2838	52,6	-7	52,5
Female 30_49	8468	4658	55,0	1259	8662	4843	55,9	1210	69,9
Female 50_64	4739	1759	37,1	542	5415	1828	33,8	801	48,6
Male 15_64	19284	13839	71,8	1019	19939	13847	69,4	1578	
Female 15_64	18946	9146	48,3	2084	19470	9509	48,8	2003	
<b>Total 15_64</b>	<b>38230</b>	<b>22985</b>	<b>60,1</b>	<b>1865</b>	<b>39409</b>	<b>23355</b>	<b>59,3</b>	<b>2261</b>	<b>65,0</b>
<i>Female as % of tot. empl. :</i>		<i>39,8</i>				<i>40,7</i>			

## UK 2 - Employment rates per gender and age group United Kingdom

a - Standard employment

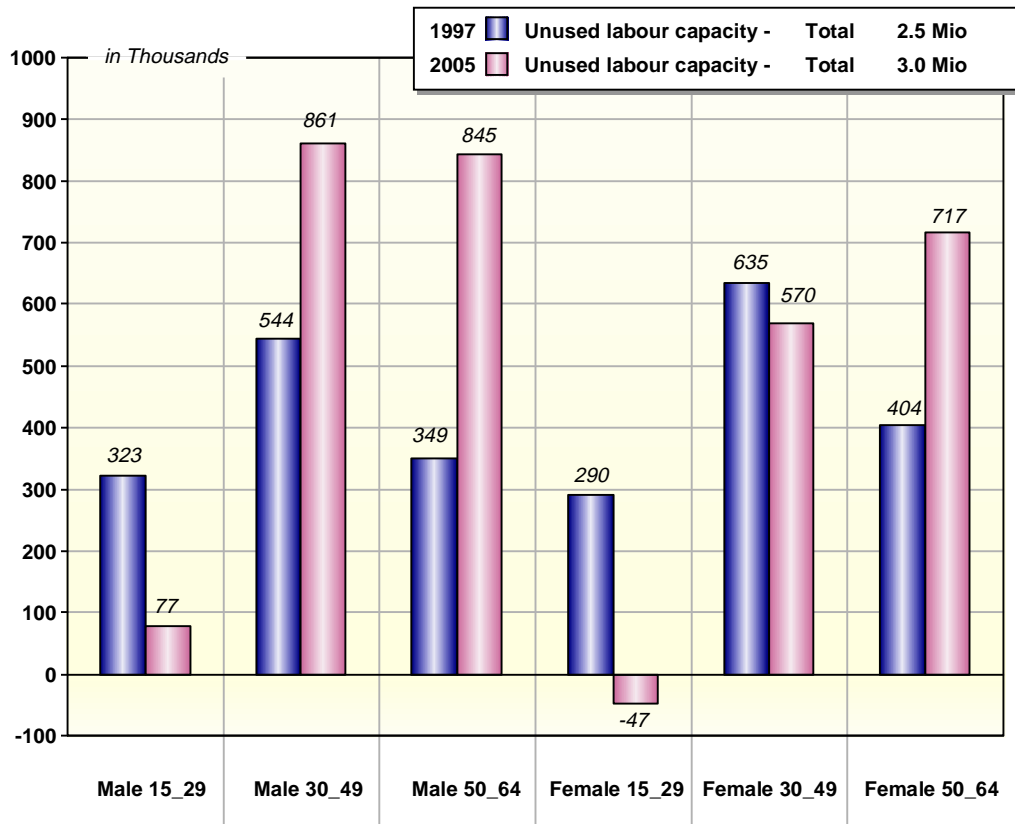


b - Equivalent Full time

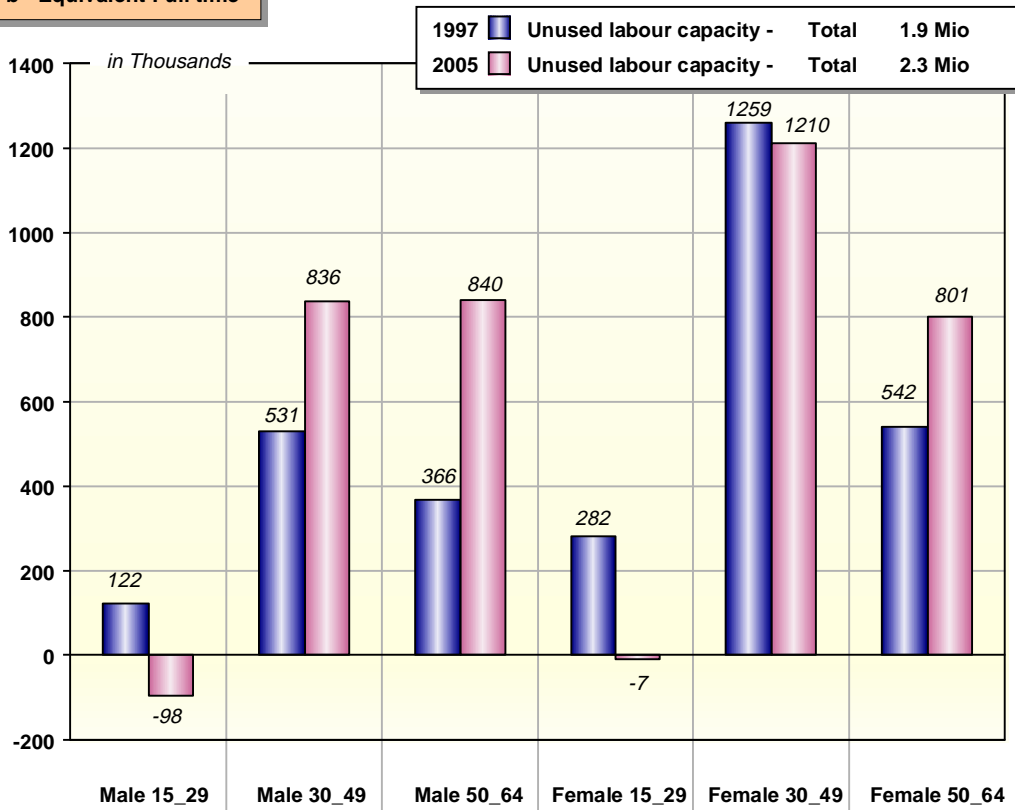


### UK 3 - Unused Labour capacity United Kingdom

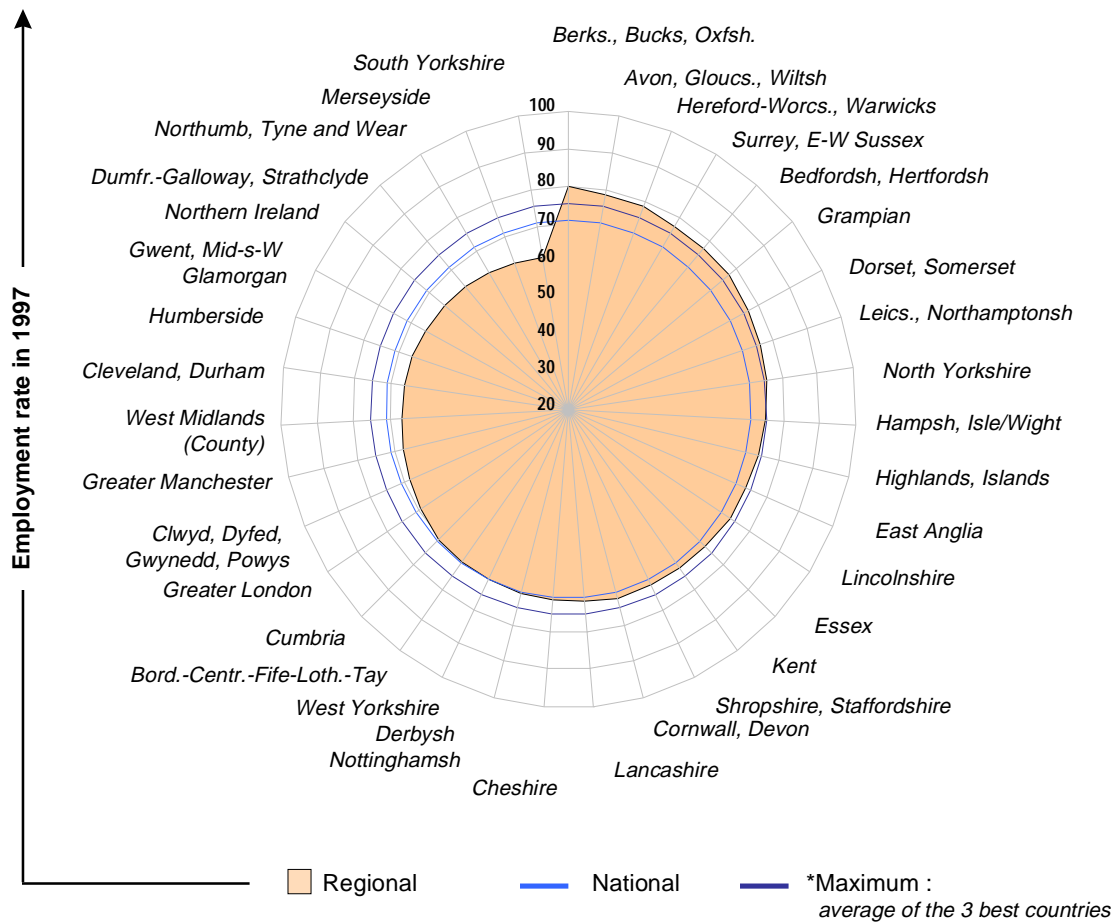
a - Full time + Part time



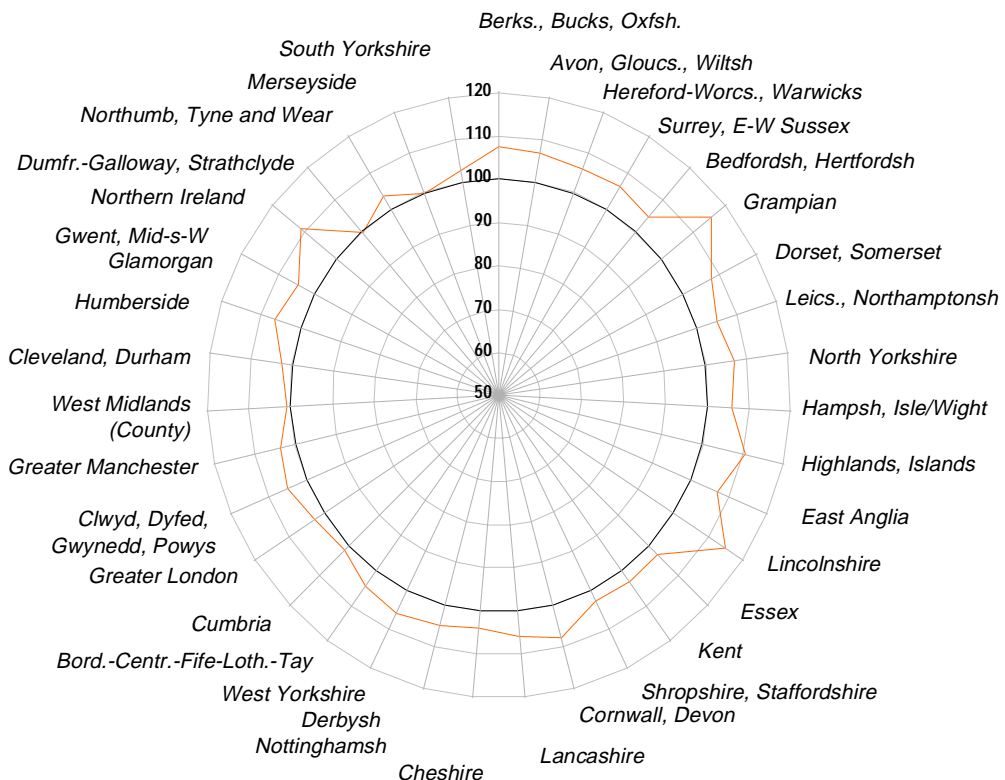
b - Equivalent Full time



## UK 4 - Regional employment rates compared with national and maximum\* EU levels - 1997 - United Kingdom

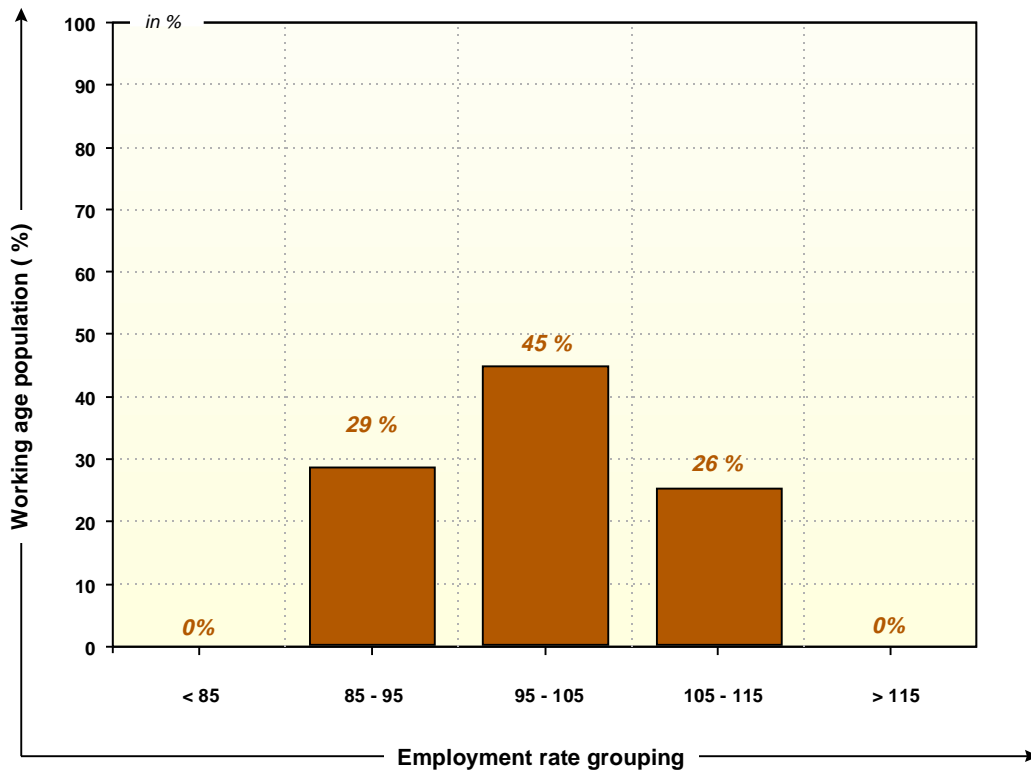


## UK 5 - Regional changes in the working age population size between 1997 - 2010 - 15-64 age group in 2010 (index 100 = 1997)

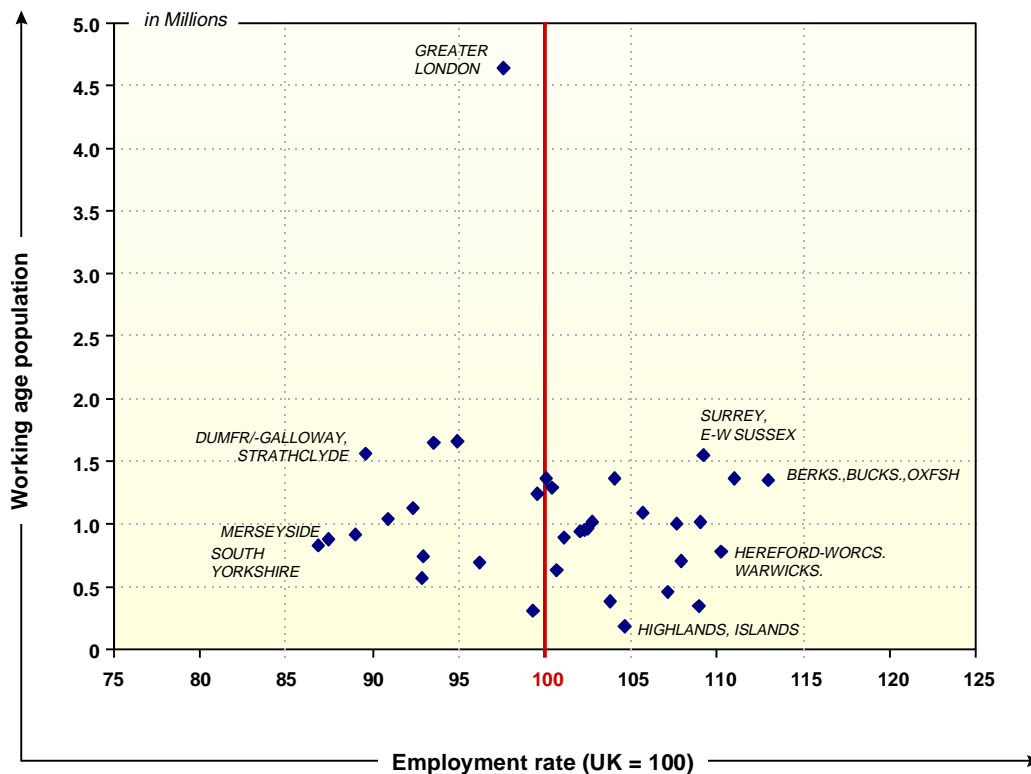


### UK6 - Employment rate disparities at regional level :

Working age population by groupings of regional employment rates 1997  
(national average rate = 100)



### UK 7 - Relative position of regions in terms of working age population size and employment rate 1997



*Annex II*

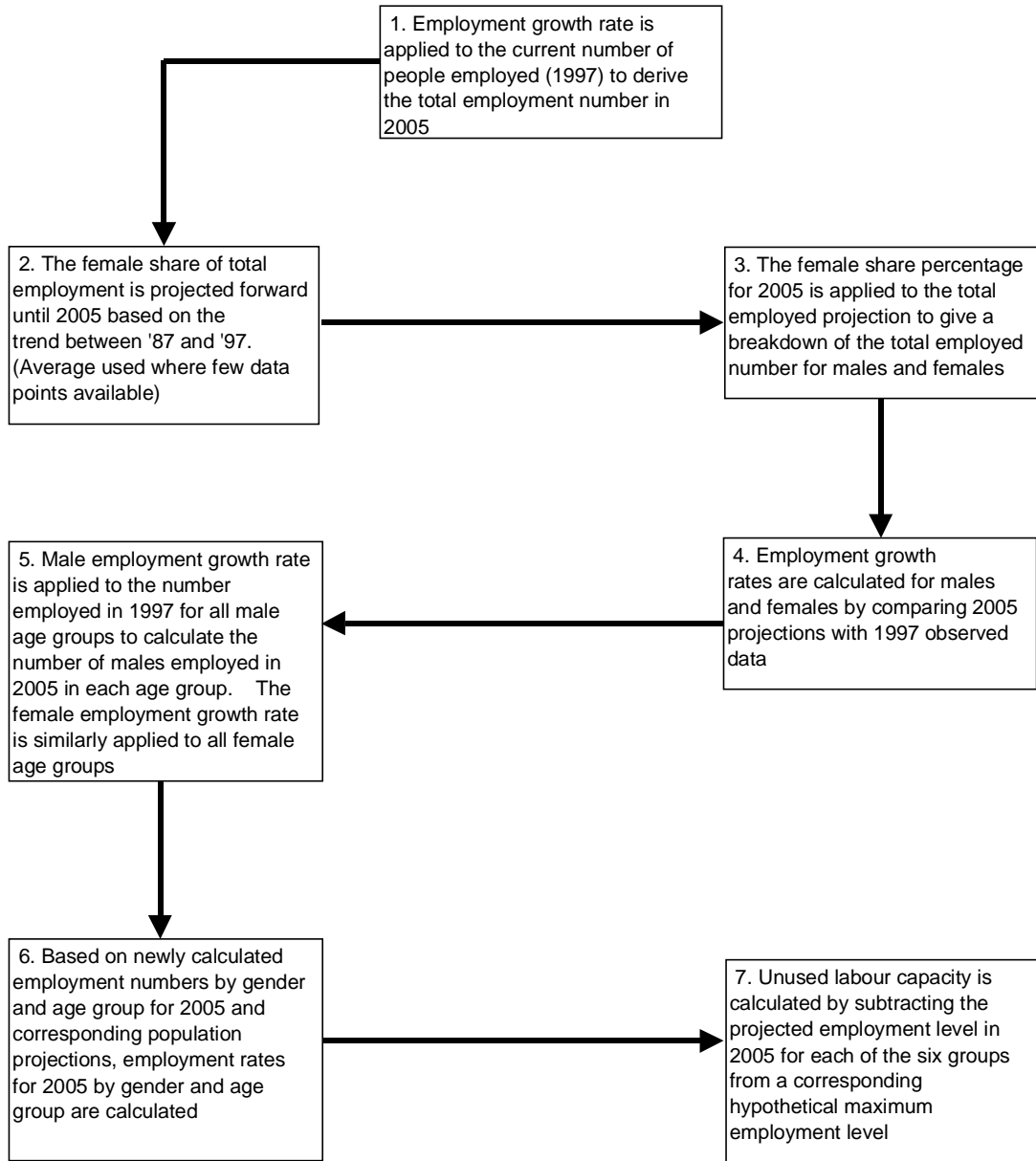
*Methodology*



## *Methodological aspects*

The flow chart below (figure 1.1) describes the different stages of the calculation of the employment rates in 2005 for each of the six gender and age groups:

**Figure 1.1**



## Detailed description of calculation

### *Notation*

Let  $ME_t^x$  represent the level of male individuals employed in the age group x at time t e.g.  $ME_{1997}^{15-29}$  represents the number of males employed between the age of 15 to 29 years as at 1997.

Similarly, let  $MP_t^x$  represent the male population level in age group x at time t; let  $Mr_t^x$  represent the male employment rate within the age group x at time t

$$\text{i.e. } Mr_t^x = \frac{ME_t^x}{MP_t^x} .$$

Corresponding terms for females are represented as  $FE_t^x$ ,  $FP_t^x$ ,  $Fr_t^x$ . Total values for the population (male and female) are shown as  $TE_t^x$ ,  $TP_t^x$ ,  $Tr_t^x$ .

Let  $q_t$  represent the proportion of females in the total employed population at time t i.e.

$$q_t = \frac{FE_t^{15-64}}{TE_t^{15-64}} .$$

Let the annual employment growth rates for males and females be denoted by  $g_M$  and  $g_F$  respectively.

### *Calculation of employment scenario in 2005*

We know population and employment levels by age group and gender for 1997 and  $q_{1997}$  (the female share in employment).

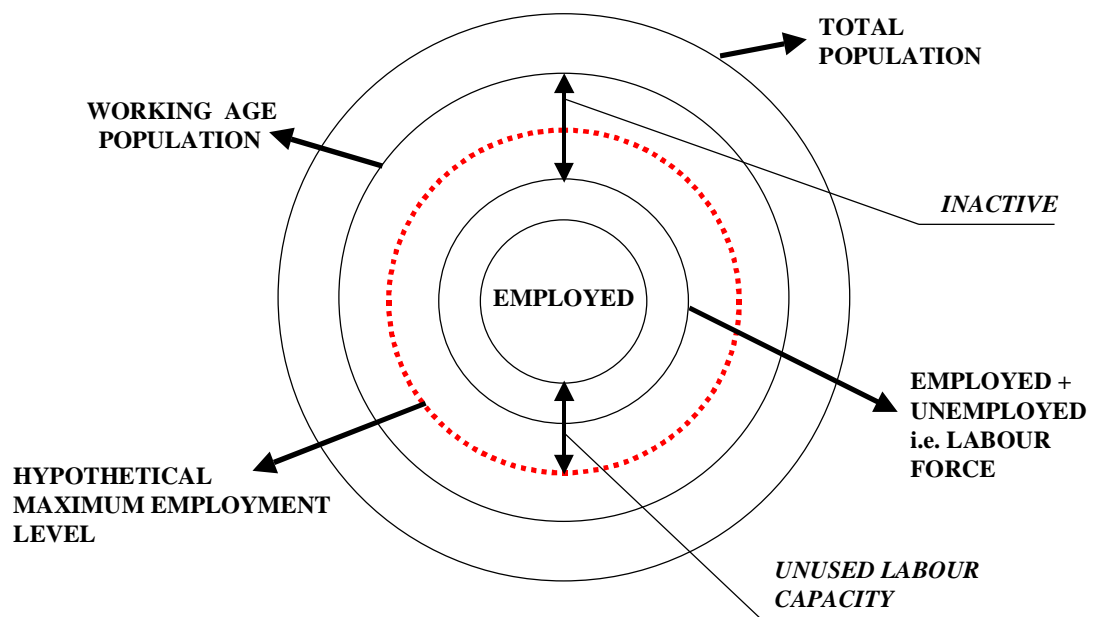
The objective is to estimate the effects of demographic changes between 1997 and 2005 on the labour market in terms of employment participation rates for males and females in different age groups.

The following simple model has been applied to obtain projected values of employment levels by age group and gender in 2005:

1. Apply DG II employment growth rate assumption to  $TE_{1997}^{15-64}$  to obtain the total level of employment in 2005,  $TE_{2005}^{15-64}$ .
2. Calculate  $q_{2005}$  by projecting historical values ( $q_{1987-1997}$ ) on the basis of a log linear trend (Linear trend used for Spain, Italy and Greece).
3. Apply  $q_{2005}$  (share of females) to  $TE_{2005}^{15-64}$ , to obtain the gender split of the employed population in 2005. This gives  $TE_{2005}^{15-64} = ME_{2005}^{15-64} + FE_{2005}^{15-64}$ .

4. Now, for both males and females, compare 1997 employment levels to the newly estimated employment levels in 2005 to obtain employment growth rates by gender, namely  $g_M$  (for males) and  $g_F$  (for females).
5. Apply  $g_M$  to all male age group employment levels in 1997 to obtain:  
 $ME_{2005}^{15-29}$ ,  $ME_{2005}^{30-49}$  and  $ME_{2005}^{50-64}$ . Similarly, apply  $g_F$  to female 1997 employment levels to obtain the  $FE_{2005}$  values for all age groups.
6. Employment rates for 2005 can now be calculated by dividing the projected employment levels by age group and gender by the corresponding population projections for each of the six groups of the working age population.
7. Unused labour capacity is calculated by subtracting the projected employment level in 2005 for each of the six groups from the corresponding hypothetical maximum employment level. The hypothetical maximum is the average of the three best Member States in terms of employment rate of the particular age group and gender being considered<sup>3</sup>. (see figure 1.2 below)

**Figure 1.2**  
*Unused Labour Capacity*



*Remarks: UNUSED LABOUR CAPACITY is defined as the level of unemployed plus the difference between the hypothetical maximum employment level and the size of the labour force. NB For simplicity the diagram assumes no employment outside the working age population (15-64 years).*

<sup>3</sup> The hypothetical maximum employment rate for the total working age population (15-64) is set at 75% for conventional reasons