

The Labour Market Situation of Non-EU-15 Citizens in Berlin, Copenhagen, and Vienna

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1. Unequal opportunities and the question of how to overcome them

At issue is the fact that the continuing immigration of the last half-century has been resulting in poverty focused on immigrants and their descendants. At least in part this poverty is the result of differences in employment levels between minorities derived from this recent immigration and families with a longer history of residence in the given society. The analysis in sections two to four will focus on only a limited set of questions:

- How big are the differences in employment between populations of different citizenship and between sexes in each of the three countries?
- How have these differences been evolving over time?
- How big are the differences in employment of the same sex and citizenship (or country of birth) between the three countries?

The final section will try to account for the differences that emerged in the first part. We will be looking at the possible impact of differential employability (education, skill, experience, language), differential social capital (networks into companies), and discrimination (accent, name, residential area, legal obstacles to employment).

2. On assessing the labour market situation

Indicators of the labour market situation

The best indicator of the situation in the labour market is the employment rate, i.e. the share of the employed including the self-employed in the working age population. It tells us how many income earners there are in a population and this tells us a lot about how well this population is doing.

Focusing on the employment rate there are two kinds of context. One is the temporal context: is the current employment rate greater or smaller than past ones? Is there an upward trend or a downward one, i.e. are things getting better or worse or staying the same? The other context is geographic: are employment rates, or their changes, greater or smaller than in other places of interest? This helps in assessing the levels and changes that have been achieved. In both instances it is important to compare like with like which poses a challenge for data quality and for the consistency of definitions that has often proven hard to meet. In this report the comparison is between Austria, Denmark, and Germany, and between the three capital cities, i.e. Vienna, Copenhagen, and Berlin, respectively, and it covers the period from the middle of the 1990s to the middle of the current decade.

It may be useful to highlight the employment rate's advantages over the unemployment rate. They are information content and ease of interpretation. On the first of these, the unemployment

rate changes not only when the number of the unemployed changes but also when the number of the employed does. Secondly, its message is unclear. Suppose there is a population of one thousand, out of which 700 are employed and 100 are unemployed. The unemployment rate is 100 divided by 800, i.e. 12.5 per cent. Now suppose there are the same one thousand people but only 70 are employed and only 10 are unemployed. The unemployment rate is 10 divided by 80, i.e. 12.5 per cent, as before. In the first case, when 700 of the 1,000 were employed, we might be willing to concede that having 100 unemployed was worthy of attention. In the second case the ten unemployed are clearly not the problem. The problem here is that only 70 of the 1,000 are employed. The employment rate reflects this accurately being 70 per cent in the first case but only 7 per cent in the second. It pinpoints the problem with great precision. If we were to use some kind of an unemployment rate, more useful than the conventional one would be an unemployment rate relating the number of unemployed to the working age population. In the first case this would be 100 out of 1,000, i.e. 10 per cent, in the second case 10 out of 1,000, i.e. 1 per cent. As with the employment rate, the true magnitude of the concern would be readily apparent. If this unemployment rate is added to the employment rate the sum is the labour force participation rate, a widely available measure of the labour market situation.

A low employment rate is not necessarily a cause for alarm. Increasing uptake of educational opportunities by the working age population will lower the employment rate. If we can agree that more education is always better, a more complete picture would therefore be obtained by holding those in education equal to those in employment and adding the two up into the active population. In the current report this was not done but it should be kept in mind.

The employment rate contains important information and we will confine ourselves to it, although it is easy to see that we would need to know a lot more in order to describe the labour market situation of any particular population. The most important additional item would be the incomes of the employed.

If incomes differ, the first question will concern education. Are populations equally educated, and to the degree that they are do they enjoy equal returns on education? This is a very important question that has received very little attention in Europe. Unfortunately it cannot be answered within the confines of this paper. A larger study would be called for, since extensive conceptual work and data analysis would be involved.

Apart from the employment rate there could be divergences in the kinds of jobs – part time, unsteady, low paid. For any policy measures taken to improve the situation this would make some difference. Such data to modify and calibrate the employment rate were not at hand for this research.

Employment rates will here be broken down by sex and citizenship. Because much of the data originate from sample surveys the information on citizens of other countries tends to be based on fairly small samples. In most instances this precludes breakdown by individual citizenships, by age, by education and so on. Data by place of birth rather than by citizenship would have been preferable for many reasons but they are far less accessible and tend to cost both time and money. Eurostat data that are freely available on the world wide web (http://forum.europa.eu.int/irc/dsis/employment/info/data/eu_lfs/index.htm), up until 2005, only differentiate between country citizens, EU-15 citizens, and others. The data are subject to periodic revisions. Downloads for this report were made in mid-September 2006 and updated in mid-December 2006. Austrian data for 2004 were corrected using data from Statistics Austria. For anybody wishing to replicate this study it may be noted that some of Eurostat's labels are obviously incorrect. The population designated "non nationals but citizens of other EU-15 countries" is actually the non-EU-15 citizen population while the – somewhat nonsensically designated – group "other EU-15 citizens" actually comprises the EU-15 citizens. The presentation below will focus on the difference between the employment rate of country citizens and of non-EU-15 citizens and will be looking at women and men in turn.

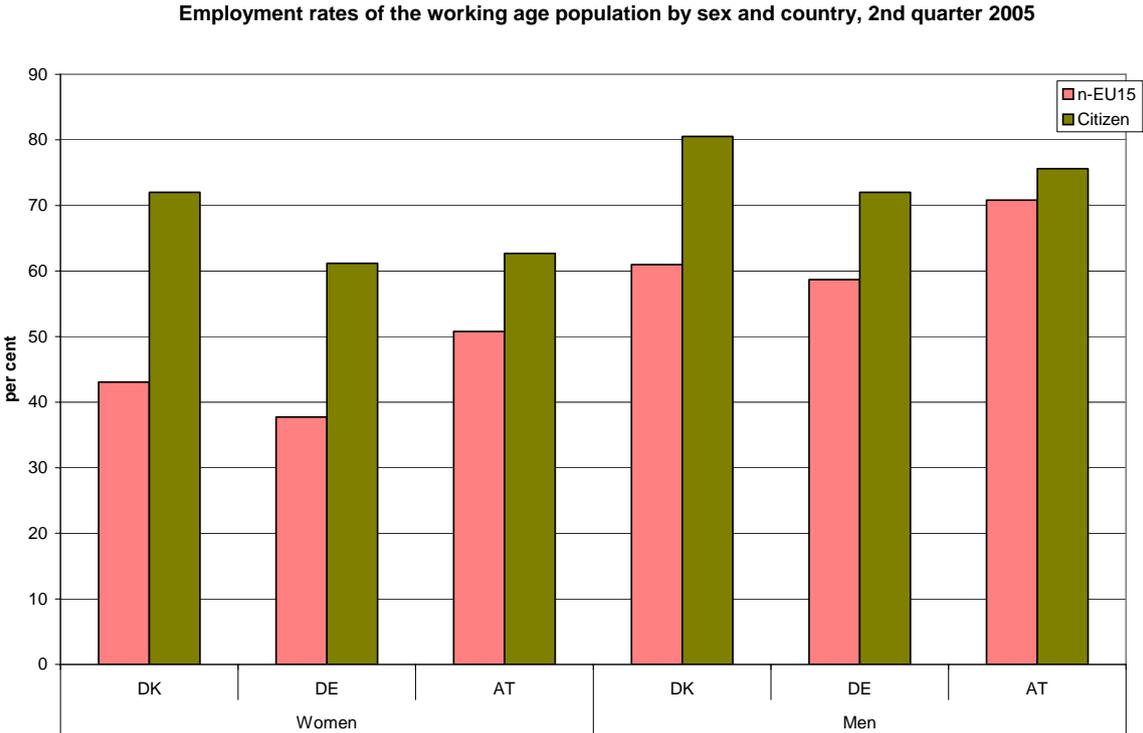
Working age is defined as the age group 15 to under 65 years.

Denmark and Germany have longer time series for the second quarter, i.e. the period April to June, but for Austria most of the available data pertain to March, and, from 2004, to the first quarter. First quarter data, and especially March data, are influenced by the weather and by holidays that some years fall into March but most years into April. Second quarter data tend to be far less affected by variations in either the weather or holidays, and furthermore they tend to be similar to annual average.

3. The situation in 2005

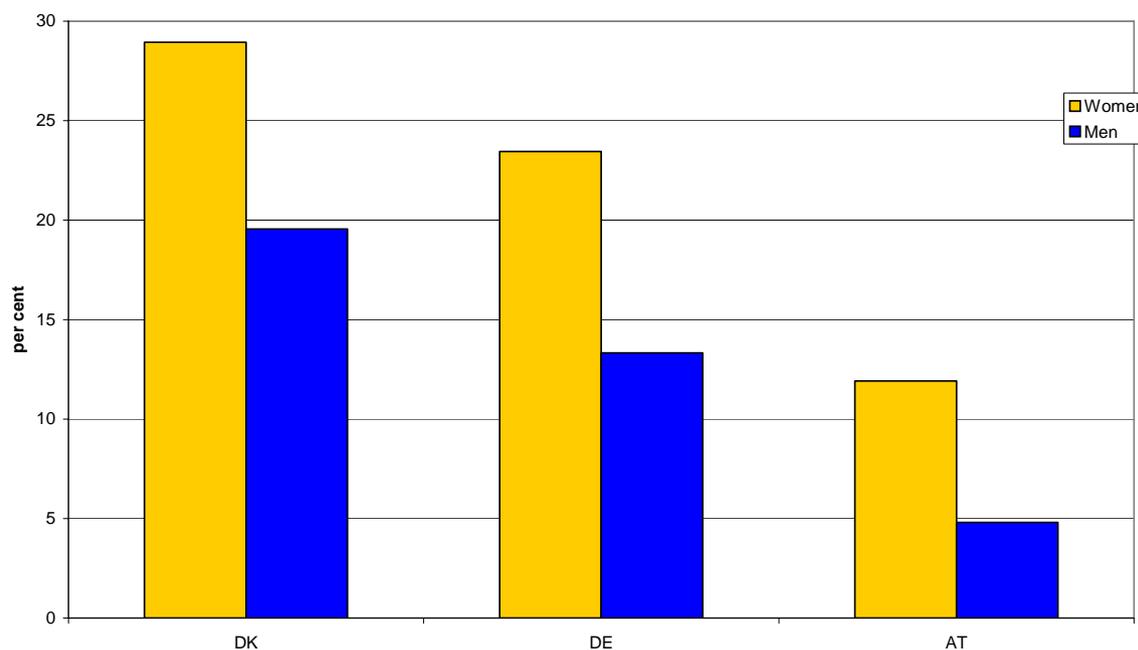
Countries

The most recent data available at the time of writing are for 2005. The labour force surveys of the three countries for the months April to June (2nd quarter of the year) show a fairly uniform picture. All employment rates of country citizens of working age are greater than those of non-EU-15 citizens. All male employment rates are greater than the respective female ones, and citizen employment rates are greater in Denmark than in Austria where they are greater than in Germany while non-citizen employment rates are greatest in Austria followed by Denmark and Germany.



The gaps between citizen and non-citizen employment rates vary considerably. Between the two sexes and the three countries they range from 5 percentage points between men in Austria to 29 between women in Denmark. They are greater in Denmark than in Germany where they are greater than in Austria.

The difference between the employment rate of country citizens and of non-EU-15 citizens by sex and country, 2nd quarter 2005



Employment rates of the population 15 to 64 years old by sex, country, and citizenship, 2nd quarter of 2005, per cent

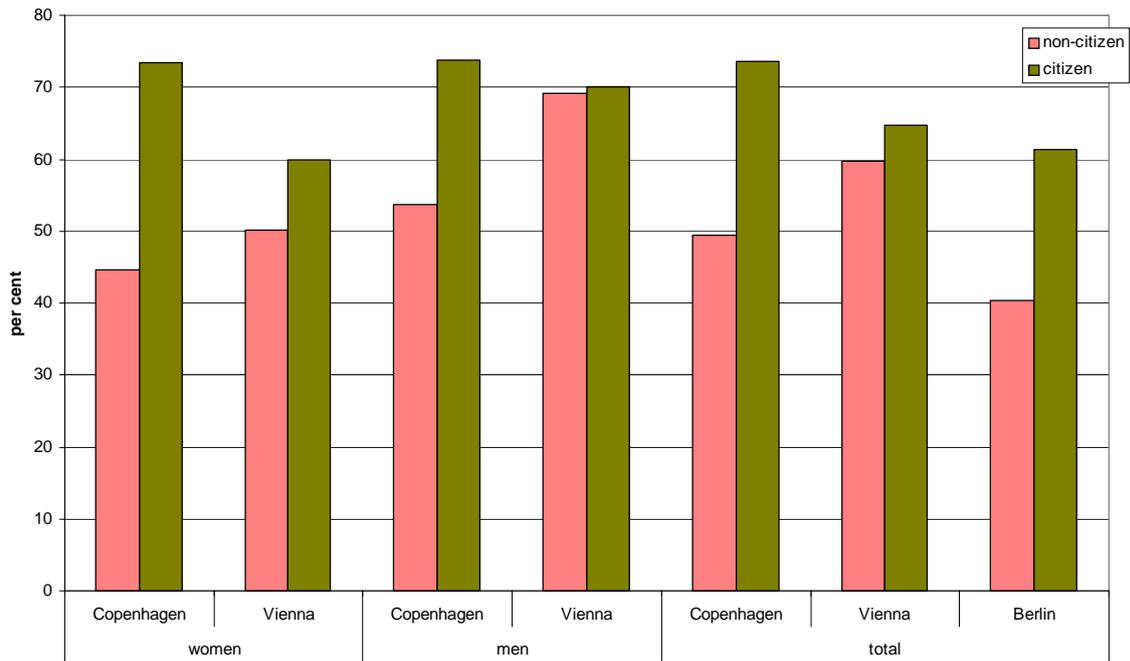
		non-EU-15	Citizen	gap
Women	Denmark (DK)	43.1	72.0	28.9
	Germany (DE)	37.7	61.2	23.4
	Austria (AT)	50.8	62.7	11.9
Men	Denmark (DK)	61.0	80.5	19.6
	Germany (DE)	58.7	72.0	13.3
	Austria (AT)	70.8	75.6	4.8

Computed from data downloaded from Eurostat website, December 2006, lfsq-pganws series.

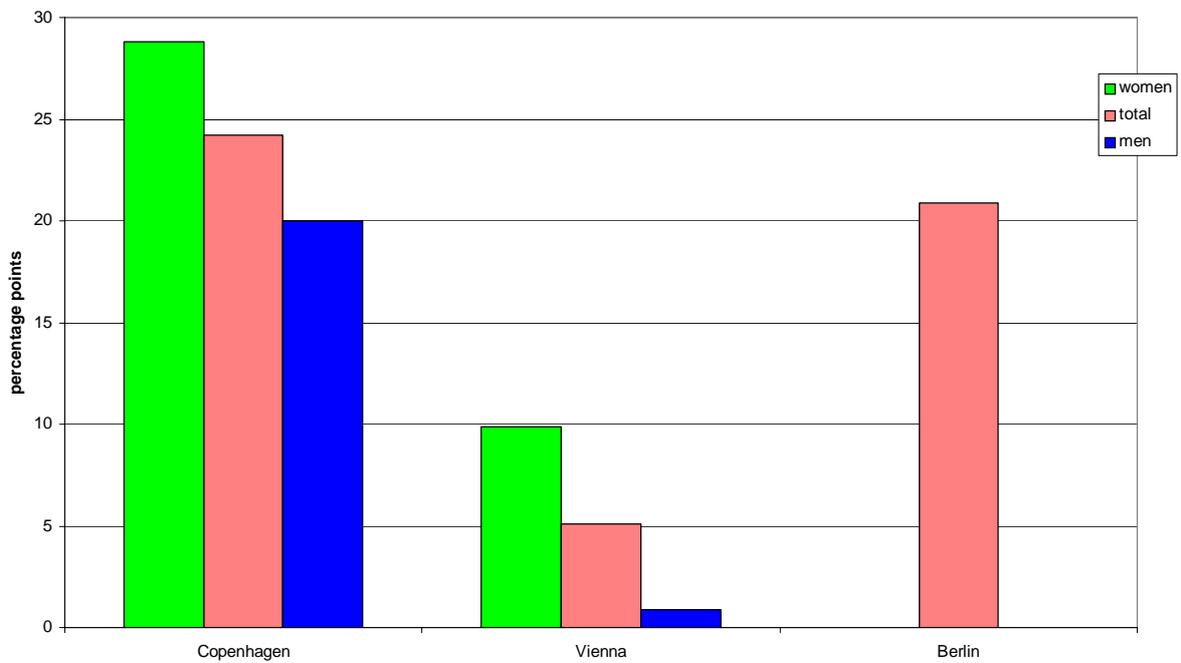
Cities

At city level the same pattern of employment rates is observed as at country level, i.e. citizen employment rates are greater in Copenhagen than in Vienna, where they are greater than in Berlin while non-citizen employment rates are greatest in Vienna and smallest in Berlin. The gaps between citizens and non-citizens are once again greatest in Copenhagen and smallest in Vienna.

Employment rates of the working age population by sex and citizenship, 2004

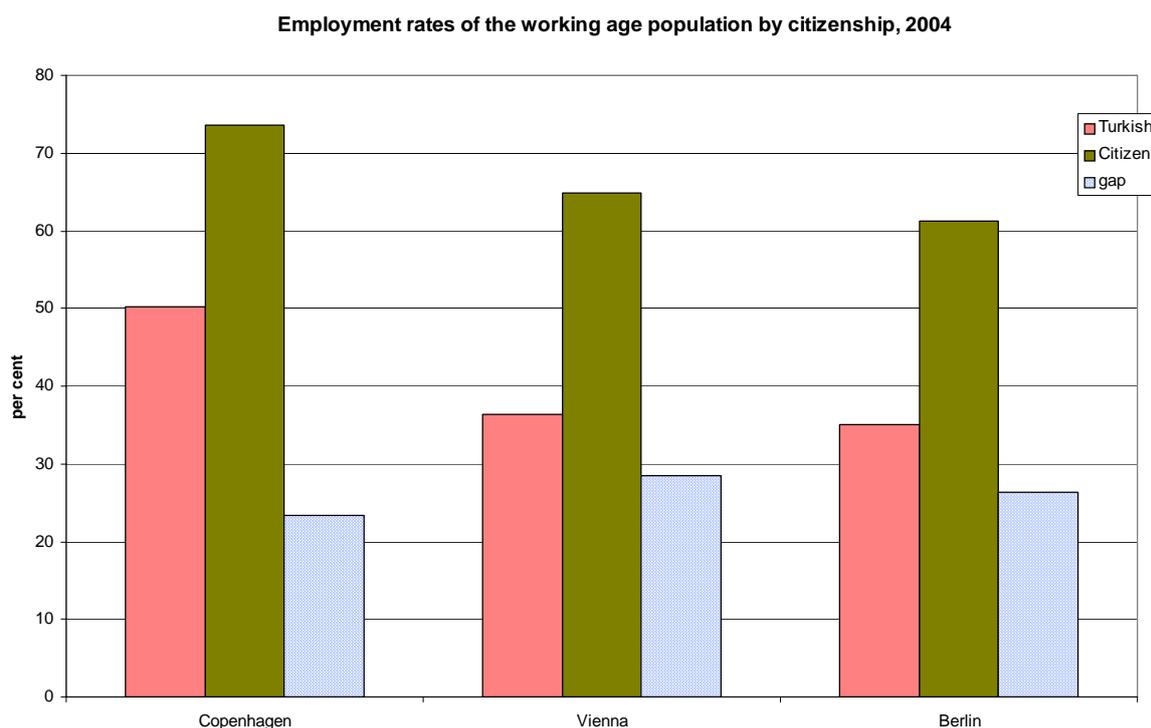


Citizen-non-citizen gaps in employment rates by sex, 2004



Turkish citizens in the three cities in 2004

An important question concerns the degree to which employment rates are shaped by the place of origin of immigrants and the place of destination, respectively. For this purpose it is necessary to compare the employment rates of populations of the same origin or citizenship across the three cities. Taking Turkish citizenship as an example of non-EU-15 citizenships that is feasible for all three cities shows both citizen and Turkish employment rates to be greater in Copenhagen than in Vienna and smallest in Berlin. Contrary to the situation when all non-citizens are lumped together the gap turns out to be fairly uniform across the three cities. It is 23 percentage points in Copenhagen, 26 in Berlin, and 29 in Vienna.



Turkish citizens make up about 4.4 per cent of Berlin's working age population, and about 2.9 per cent in Vienna. About 1.5 per cent of Copenhagen's working age population has parents of Turkish citizenship. In Vienna the female share was 45 per cent, in Copenhagen it was 46 per cent.

- The employment rates of these three populations are similar in Berlin and in Vienna but much greater in Copenhagen. In Berlin 35 per cent were employed in 2004, in Vienna 36 per cent, but 50 per cent in Copenhagen.
- In Copenhagen this was about 24 percentage points less than for the working age population with at least one citizen parent. In Berlin the gap was 26 and in Vienna 29 percentage points. Thus in spite of the higher employment rate in Copenhagen the gap there was similar to the other two cities.
- The gap between the employment rates of citizen women and "Turkish" women was 31 percentage points both in Copenhagen and in Vienna despite a 14 percentage point difference between women in Vienna and women in Copenhagen.
- The male gap was 17 percentage points in Copenhagen but 24 percentage points in Vienna.

- The male-female difference in the “Turkish” employment rate was 14 percentage points in Copenhagen and 18 in Vienna.

The employment rates of “Turkish”, “former Yugoslav” and citizen working age populations in 2004

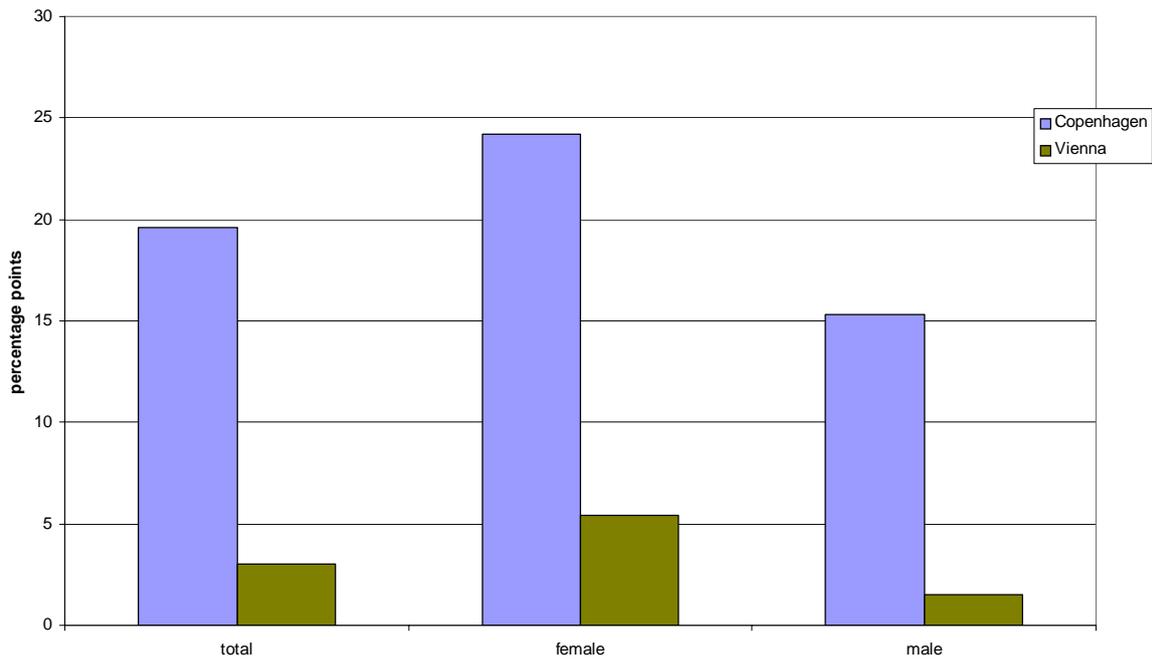
	Cities			Countries		
	Berlin	Copenhagen	Vienna	Germany	Denmark	Austria
Turkish						
Total	35.0	50.2	36.3	43.3	50.1	45.5
Female		42.8	28.7	29.5	41.4	29.3
Male		56.5	46.3	55.5	58.1	61.7
ex-YU						
Total		54.0	61.8		49.1	66.8
Female		49.3	54.6		43.1	59.2
Male		58.5	68.5		54.9	73.6
Citizens						
Total	61.3	73.6	64.8	48.2	74.5	68.4
Female		73.5	60.0	37.7	71.5	61.8
Male		73.8	70.0	58.7	77.4	75.2

Germany and Austria: Labour Force Survey. Denmark: Statistics Denmark.

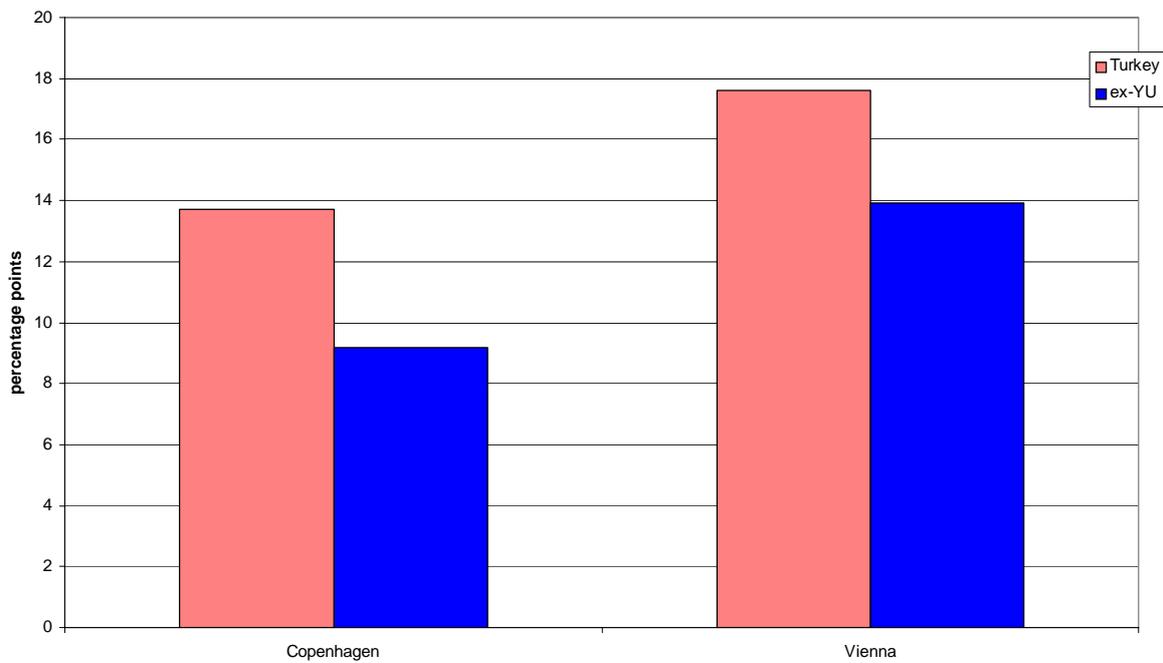
The composition of origin countries is so different between the cities, and data availability is so restricted that other comparisons of single citizenships across the three cities are unfortunately not possible. A comparison of citizens of formerly Yugoslav republics (excluding Slovenia) in just Vienna and Copenhagen yields considerably different results from those for Turkish immigrants. While in Copenhagen the employment rate of post-Yugoslav immigrants is similar to that of Turkish immigrants and much below that of non-immigrants, in Vienna the employment rate of post-Yugoslav citizens is similar to that of country citizens and very different from that of Turkish citizens. This is true for both sexes. As with the Turkish group the sex gap turns out to be about 5 percentage points greater in Vienna than in Copenhagen but in both cities it is smaller than in the Turkish case.

The results of the comparison between citizens and Turkish citizens are at odds with those for post-Yugoslav citizens. The Turkish results would have suggested two key findings, one, the employment rates vary between the cities, but, two, the gap in the employment rates between citizens and Turkish citizens do so much less. The cities appeared to make the employment rates but not the gaps, but in the case of post-Yugoslav citizens the cities very clearly do make the citizen-non-citizen gap. Finally, the sex gap turns out to depend both on the origin group and the city. It is larger for the Turkish group than for the post-Yugoslav one, but it is also larger in Vienna than in Copenhagen.

The difference between the employment rates of citizens and post-Yugoslav citizens by sex, 2004



Employment rate gaps between the sexes by citizenship and city, 2004



Are the capital cities a better place for employment than the country at large? Upon inspection the picture turns out to be mixed.

- Employment rates in Vienna are generally lower than nationally. Across citizenships the female ones tend to be more similar between city and country than the male ones. The gap between the employment rate of citizen and of Turkish citizen males was much larger in Vienna than nationally, due primarily to the lower employment rate of Turkish males in the city.
- In Berlin the citizen employment rate was greater than nationally but the Turkish citizen employment rate was lower. Consequently, while the gap between the citizen and the Turkish citizen employment rate was only about 5 percentage points in Germany it was 26 percentage points in Berlin.
- Female employment rates are greater in Copenhagen than elsewhere in Denmark. Among males the Danish and the Turkish employment rates are slightly smaller in Copenhagen, due perhaps to greater educational involvement. Only among women of formerly Yugoslav origin does the city really make a difference. The gaps between Danish origin and non-Danish origin employment rates tends to be smaller in Copenhagen than nationally.
- Sex gaps are generally smaller in the cities.

Turkish citizens, especially if male, seem to fare worse in the city than nationally. At least in Vienna and in Copenhagen citizen males also did worse in the city. Female employment rates seem to be affected less negatively or even positively. This chimes in with anecdotal evidence of the women in immigrant households having a greater urge to move the households to urban areas than their male counterparts.

4. Developments at country level

Employment rates since 1994

One main finding at country level concerns the difference between citizen and non-citizen employment rates. What was true for 2005 turns out to be true for the entire period since 1994. Danish employment rates for both sexes stand out for the large gap between country citizens and non-EU-15 citizens. The reverse can be observed for Austria. On average over the years the difference in Denmark is 33 percentage points for women and 28 for men while it is 4 percentage points (first quarter of the year) or 7 percentage points (second quarter of the year) for women and zero for men in Austria. In Germany it is 12 percentage points for men and 20 for women. At the same time, Denmark is alone among the three countries in having narrowed the gap since the mid-1990s proving that the gap as such is not a law of nature.

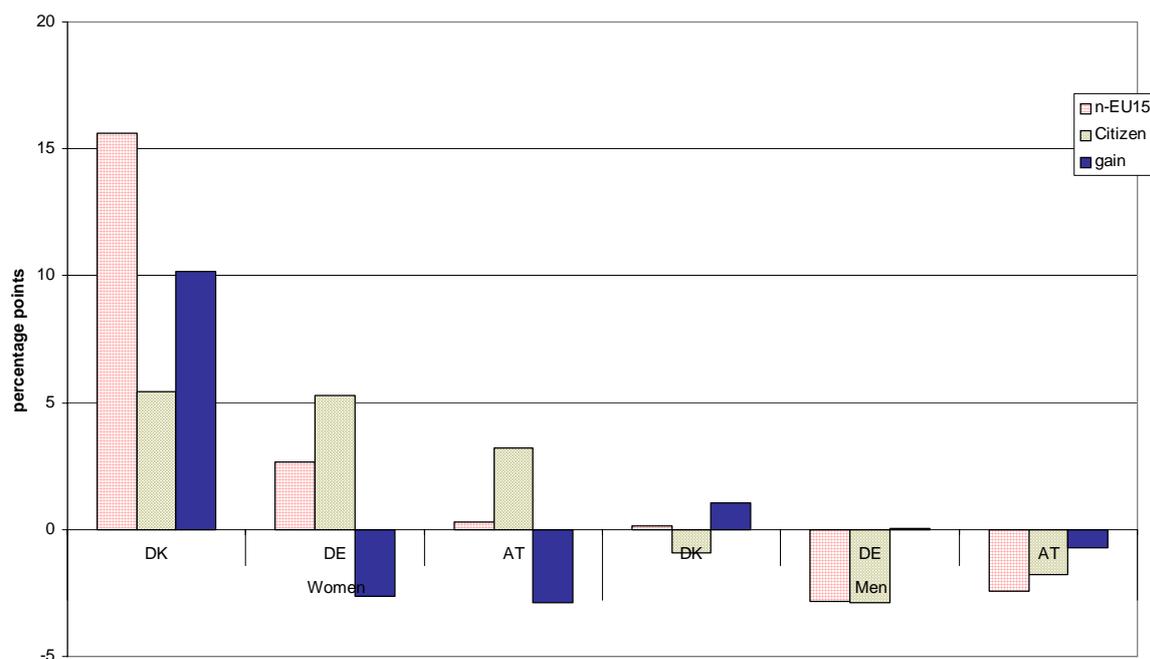
Looking at developments over time we can see any convergence or divergence between citizen and non-citizen employment rates that may have occurred. From this the second main finding arises. The 1995 to 2004 trend among women in Denmark was for non-EU-15 women to catch up fairly strongly but in Germany and in Austria they fell farther behind. Among the men there is no firm evidence of convergence or divergence in any of the three countries. The differences between employment rates of citizen men and of non-citizen men seem to be almost fixed.

- The trend for the employment rate of non-EU-15 women in Denmark was to grow by 15.6 percentage points between 1995 and 2004 while it was only 5.4 percentage points for citizen women. Therefore non-EU-15 citizen women caught up by around 10 percentage points, i.e. about one per year.
- In Germany, over the same period, the trend growth of the employment rate of non-EU-15 citizen women was only 2.7 percentage points compared to 5.3 for citizen women. Thus non-

EU-15 citizen women tended to fall about one quarter of a percentage point farther behind every year.

- In Austria, from 1995 to 2003, trend growth for non-EU-15 citizen women was only 0.3 percentage points, about one tenth of the trend growth for citizen women.

Ten-year trend gains of non-EU-15 citizens on the employment rates of citizens, 1995 to 2004



Ten-year trend gains of non-EU-15 citizens on the employment rates of citizens by sex and country, 1995 to 2004

	Women			Men		
	non-EU15	Citizen	non-EU-15 gain	non-EU15	Citizen	non-EU-15 gain
Denmark	15.6	5.4	10.2	0.1	-0.9	1.1
Germany	2.7	5.3	-2.6	-2.9	-2.9	0.0
Austria to 2003	0.3	3.2	-2.9	-2.4	-1.8	-0.7

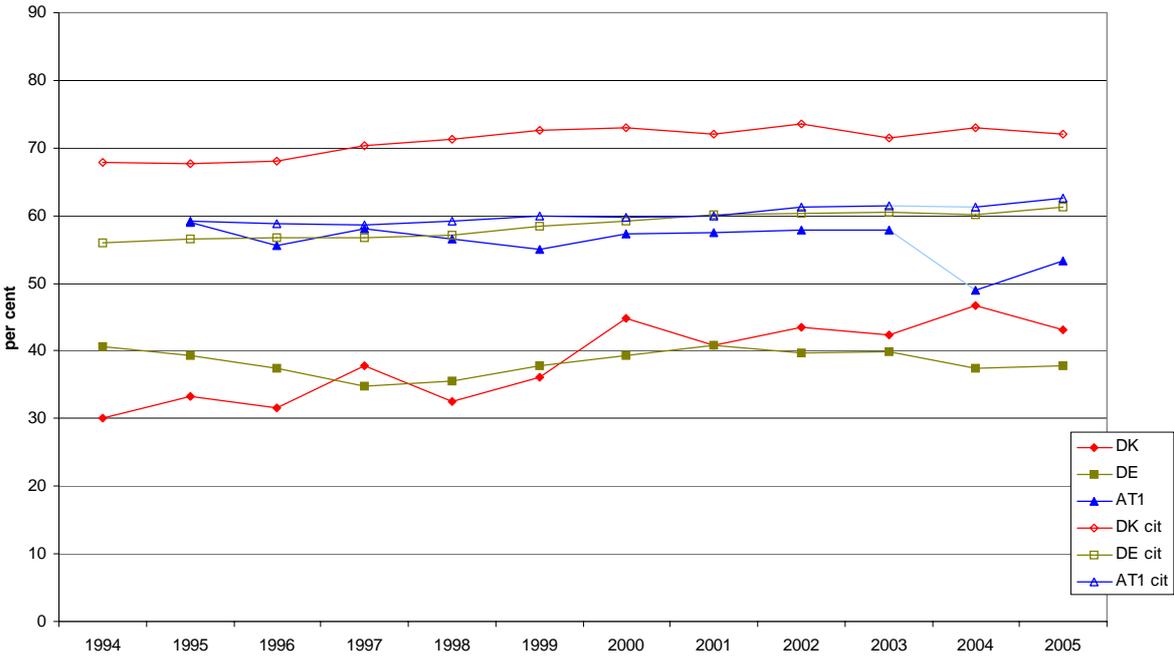
Computed from data downloaded from Eurostat website, December 2006, lfsq-pganws series. Rounding errors.

The convergence findings imply a third important result. There is no evidence to support the notion that employment growth of non-EU-15 citizens has been hurting (or aiding) the employment opportunities of citizens in any of the three countries. They do not appear to be linked. Likewise it will be shown below that the growth of non-citizen populations over the past ten to fifteen years has not had a negative impact on the employment chances of those same populations.

Some more detailed observations on the employment rates of women from 1994 to 2005:

- At over 70 per cent, since 1997, the employment rate of citizen women aged 15 to 64 in Denmark is unusually large in the context of the three countries. Citizen women in Germany and in Austria only crossed 60 per cent in 2001. There was a trend for citizen women employment rates to rise in all three countries. In Denmark the employment rate rose in the 1990s but may not have risen in this decade.
- The employment rate of non-EU-15 citizen women has been greatest in Austria. Until 2003, it was always between 55 per cent and 59 per cent. The sudden downward change in 2004 is a result merely of a reorganisation of the LFS rather than a reflection of reality. It could mean that the data for the earlier years are five to ten percentage points too large. Even so they would be larger than in Denmark or Germany.
- Like in Austria the trend in Germany among non-EU-15 citizens has essentially been flat but at a considerably lower level of only 35 to 40 per cent.
- Only in Denmark has the employment rate of non-EU-15 citizen women been rising. While it stood at about 30 per cent in the mid-1990s it has now risen to about 45 per cent overtaking Germany around the year 2000.
- Not included in the figure, country citizens and EU-15 citizens tend to have very similar employment rates in each of the three countries.

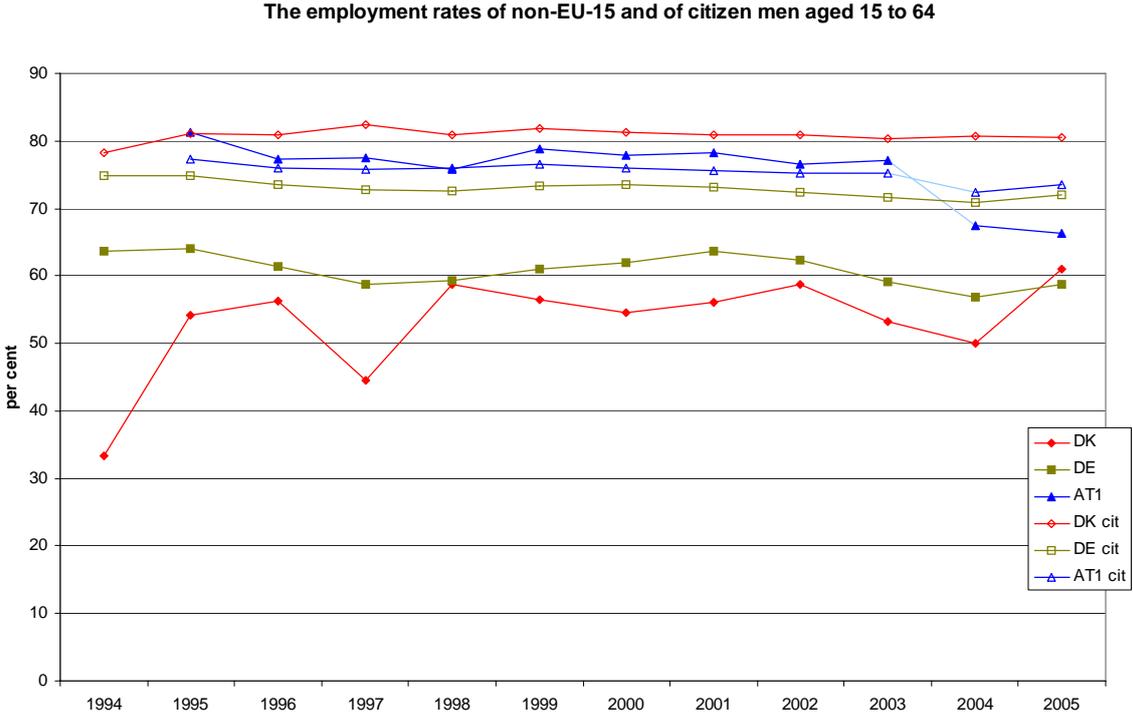
The employment rates of non-EU-15 and of citizen women aged 15 to 64



Men:

- Employment rates are ten to twenty percentage points greater than for women.
- Again, but to a lesser degree, employment rates of citizens are greater in Denmark than in the other two countries. At the same time, non-EU-15 citizens in most years had the lowest employment rates in Denmark but the trend may have been slightly upward, especially before 2000. The level is somewhere between 50 and 60 per cent.

- In Austria the employment rate of non-EU-15 citizen men was larger in most years than that of citizen men but the same caveat applies as in the case of the women. The trend for citizen men may have been slightly downward by about two percentage points for every ten years. The current level is about 75 per cent.
- In Germany the trend for both citizenship categories – and for EU-15 citizens, too – has been downward by about three percentage points for every ten years. The current level is about 72 per cent for citizens and about 59 per cent for non-EU-15 citizens.



Some of the differences between countries and between citizenships, less so between the sexes, could be due to differences in age structure. Selective naturalisation could also play a part.

There is a data issue in Austria about the level at which non-EU-15 citizen employment rates stand. The old series, up to 2003, suggests employment rates at a level of 55 to 60 per cent for women and 75 to 80 per cent for men but the 2004 and 2005 data suggest notably lower levels. Data on citizen and EU-15 citizen employment rates seem not to be affected to the same extent. The downward revision came on the heels of the 2001 census results and the attendant revision of the sampling base for the Labour Force Survey. In part it may also have been due to the extensive changes in survey methodology taking effect from 2004. The 2004-2005 levels should therefore be treated as more realistic. Revised data for the period up until 2003 will not be publicly available until mid-2007 at the earliest.

Have the employment rates of citizens and non-citizens been linked?

The reactions to immigration are often panicky. In some part this is due to an expectation that an increased supply of labour could be detrimental to the employment chances of the previously resident population and to those of citizens in particular. More technically the expectation would be that increases in non-citizen employment would hurt citizen employment. Alternatively one might expect increased employment to generate additional income and demand with a beneficial

effect on the employment of citizens and non-citizens alike. Eurostat employment data enable us to check the relative merits of these expectations.

The tables and figures below show how the employment rates of citizens and non-EU-15 citizens have been moving in the three countries over the period 1994 to 2005. The results:

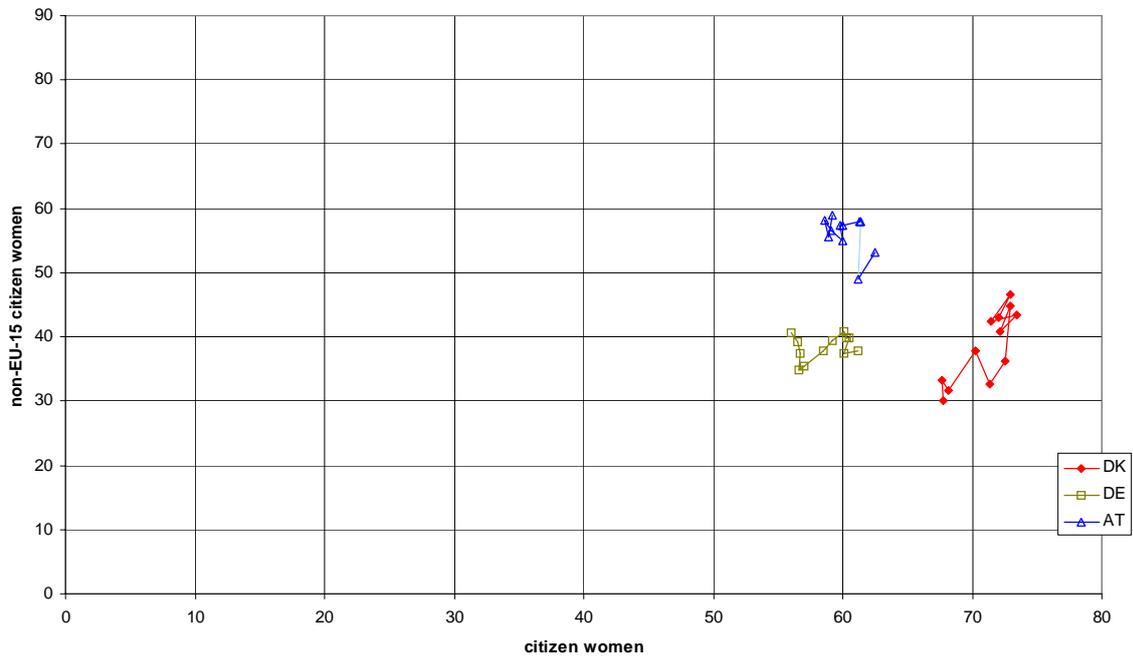
- In Denmark, over the period 1994 to 2005, the employment rates of citizen and non-EU-15 citizen women rose in tandem ($r=0.82$) but the non-EU-15 citizen employment rate rose considerably faster, i.e. nearly three times as fast ($b=1.40$ compared to $b=0.48$) resulting in an increase by about half from 30 per cent to around 45 per cent as mentioned above. The employment rates of citizen and non-EU-15 citizen males also both grew but were linked much less ($r=0.50$). The trend increase among citizen men was practically zero, due perhaps to the comparatively high level the employment rate had throughout the period. The employment rate of non-EU-15 citizen men of working age grew at more than one percentage point per year but this result needs to be taken with a grain of salt for it is owed entirely to the 1994-1995 and 2004-2005 increases. During the period 1995 to 2004 there is no discernable change of the employment rate. It remains to be seen if the 2005 data survive further updates of the Eurostat database, and if they do, the higher level's sustainability remains to be proven in the coming years.
- Given the 2004 break in the data series it makes no sense to look at the Austrian data after 2003. Until 2003, the employment rates of women rose but among non-EU-15 women the change was near zero. The employment rates of men declined with that of non-EU-15 citizen men declining one third faster than that of citizen men.
- In Germany the employment rate of citizen women has been increasing while that of non-EU-15 citizens was basically unchanged. Among males there has been a tendency for the employment rate of both citizens and non-EU-15 citizens to decline at roughly the same pace.

Employment rates of women and men aged 15 to 64, per cent, Denmark and Germany second quarter of the year, Austria March until 2003, then first quarter

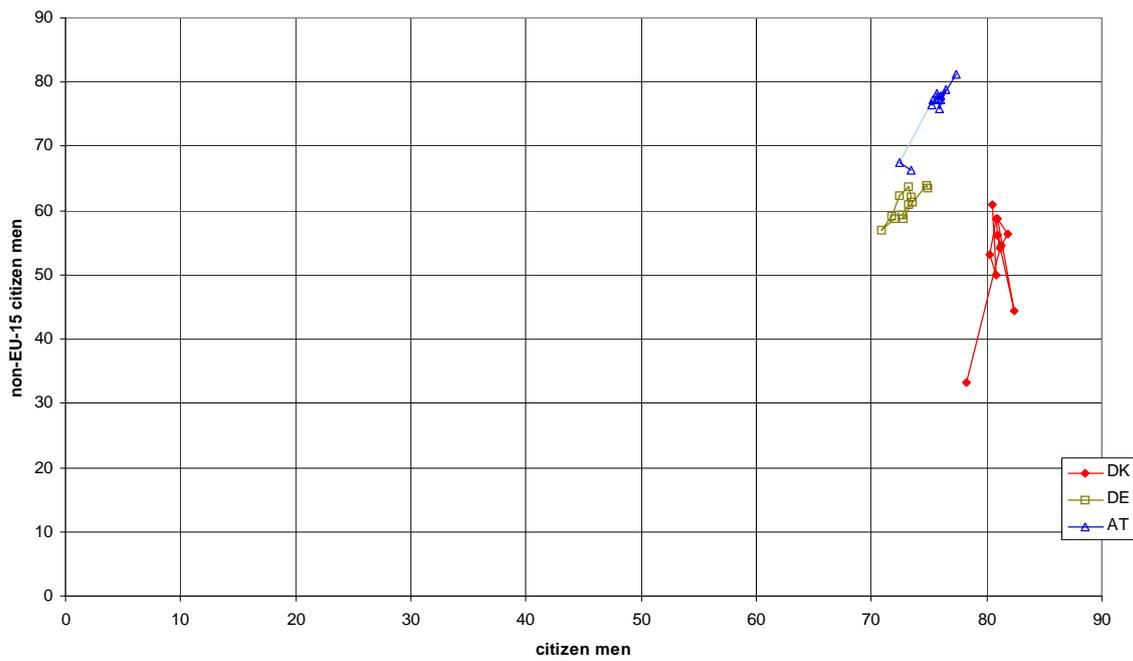
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Non-EU-15 citizen women												
DK	30	33	32	38	33	36	45	41	43	42	47	43
DE	41	39	37	35	35	38	39	41	40	40	37	38
AT	-	59	56	58	57	55	57	57	58	58	49	53
Citizen women												
DK	68	68	68	70	71	73	73	72	73	71	73	72
DE	56	57	57	57	57	59	59	60	60	60	60	61
AT	-	59	59	59	59	60	60	60	61	61	61	63
Non-EU-15 citizen men												
DK	33	54	56	44	59	56	55	56	59	53	50	61
DE	64	64	61	59	59	61	62	64	62	59	57	59
AT	-	81	77	77	76	79	78	78	77	77	67	66
Citizen men												
DK	78	81	81	82	81	82	81	81	81	80	81	81
DE	75	75	74	73	73	73	73	73	72	72	71	72
AT	-	77	76	76	76	76	76	76	75	75	72	73

Computed from data downloaded from Eurostat website, December 2006, lfsq-pganws series.

The employment rates of citizen and of non-EU-15 women aged 15 to 64, per cent, 1994-2005



The employment rates of citizen and of non-EU-15 men aged 15 to 64, per cent, 1994-2005



In total, therefore, there are two instances of no change for non-EU-15 citizens while the employment rate of citizens rose (women in Germany and in Austria), the reverse is true in one instance (men in Denmark), two instances of employment rates falling simultaneously (men in Germany and in Austria), and one instance of employment rates rising simultaneously (women in Denmark). There is no instance of the employment rate of one citizenship rising while that of the other citizenship falls.

Have population increases been detrimental to employment?

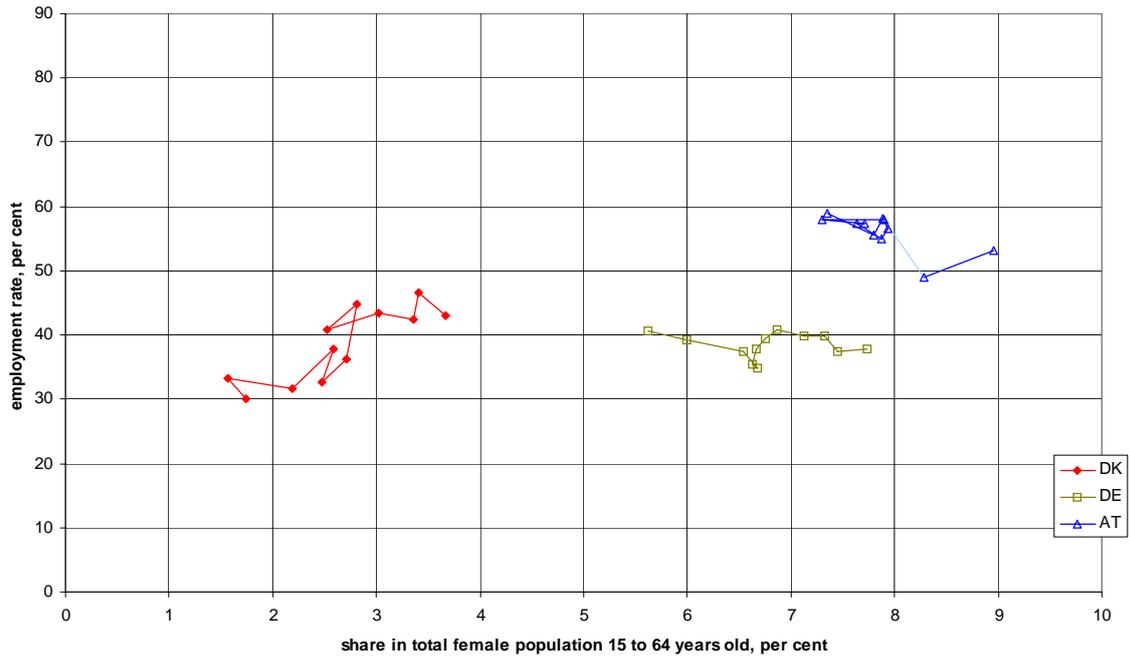
Panicky reactions to immigration are also due sometimes to an expectation that an increased supply of labour could be detrimental to the employment chances of the previously resident population of the same citizenship. It is therefore useful to relate a citizenship's share in the working age population to the same citizenship's employment rate. Is an increasing share really related to a declining employment rate and vice versa? As evident from the data there is only one case – men in Germany – to support the notion that the employment rate will tend to drop as the population increases.

- In Denmark, as the population share of non-EU-15 citizens rose so did that same population's employment rate. This was true for both sexes but the relationship is much stronger for the women.
- The German results are mixed. As the population share of non-EU-15 women increased from 6 per cent to 8 per cent the employment rate remained at the same level of about 40 per cent. The population share of non-EU-15 citizen men rose much less but seems to have been accompanied by a decline in the employment rate.
- The Austrian data, for what they are worth, seem to show that, up to 2003, changes in the population share had no impact on the employment rate. What happened in 2004 and 2005 can only be evaluated when a longer time series after the break in the data has accumulated.
- If the three countries are ranked, the population share is greatest in Austria and so is the employment rate. Population shares are slightly lower in Germany and much lower in Denmark while the employment rate of non-EU-15 women is roughly the same in Germany and in Denmark and the employment rate of men is usually lower in Denmark than in Germany.

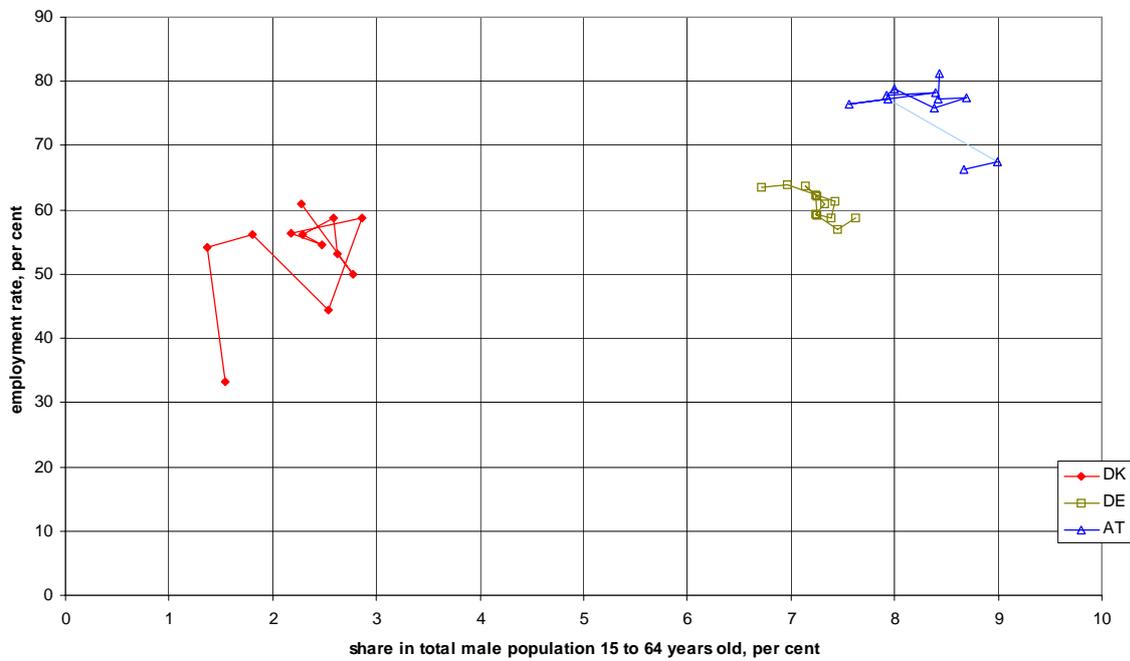
Overall there are three cases of no change in the employment rate as the population share changes (women in Germany and in Austria, men in Austria), two cases of simultaneous increases (women and men in Denmark), and one case of a declining employment rate as the population share increased (men in Germany). In addition, the country with the greatest population shares also has the greatest employment rates. Further, the similarities between the two sexes point to the existence of country effects operating on non-EU-15 populations regardless of their composition either in terms of origin countries, education, or age.

It should be noted that non-EU-15 male population shares rose only minimally. For this reason they are no real help in testing the hypothesis. Female population shares rose more and do also more clearly not support a negative correlation between population growth and employment growth.

Population share and employment rate of non-EU-15 citizen women aged 15 to 64, 1994-2005



Population share and employment rate of non-EU-15 citizen men aged 15 to 64, 1994-2005



Share of non-EU-15 citizens in the population aged 15 to 64 of the same sex, per cent, Denmark and Germany second quarter of the year, Austria March until 2003, then first quarter

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Women												
DK	2	2	2	3	2	3	3	3	3	3	3	4
DE	6	6	7	7	7	7	7	7	7	7	7	8
AT	-	7	8	8	8	8	8	8	7	8	8	9
Men												
DK	2	1	2	3	3	2	2	2	3	3	3	2
DE	7	7	7	7	7	7	7	7	7	7	7	8
AT	-	8	8	9	8	8	8	8	8	8	9	9

Computed from data downloaded from Eurostat website, December 2006, lfsq-pganws series.

For the employment rates it might be argued that the time of the year, i.e. March, to which the Austrian data up to 2003 pertain does in some years allow for more employment than in others. The weather and hiring strategies relative to holidays have to be considered for their causal effect on the employment rate. However, jumps in the employment rate and especially in the population share of non-EU-15 citizens in private households did not become smaller, in 2004-2005, when the sample was extended to the whole year.

Danish data by generation

Statistics Denmark provides a selection of freely accessible data on its website (www.statbank.dk, www.dst.dk/homeuk). There is a break in the data series in 2003. Employment rates are slightly smaller from 2003 than before. There is a distinction between Danish origin, immigrants, and descendants. "Immigrants are defined as persons born abroad by parents that are both foreign citizens or born abroad. When no information is available on the country of birth, the person is classified as an immigrant" (OECD 2006:273). Descendants are the children of a pair of immigrants. Danish origin therefore includes anybody with only one foreign-born or foreign-citizen or immigrant parent.

As shown by the two figures below there is significant progress in the employment rates from the immigrant generation to the first generation of descendants. Employment rates are generally much larger for descendants than for immigrants. Among males, in 2005, the difference was about 7 percentage points, among females it was considerably more than that, i.e. about 13 percentage points between Western immigrants and their descendants and about 17 percentage points between non-Western immigrants and their descendants. In other words, among the women, of Western descendants one eighth more was employed than among Western immigrants, and of non-Western descendants one sixth more than of non-Western immigrants. In comparison to 1997 there had been a considerable narrowing of the advantage descendants had over non-Western immigrants. At the earlier time the male advantage had been about 13 percentage points, the female one about 24 percentage points. The narrowing derived largely from significant rises in the employment rates of non-Western immigrants, especially until 2002, while the employment rates of their descendants did not increase as much. This discrepancy could partly be due to composition effects. If few new immigrants entered the labour market during the period, the rise in their employment rate would reflect mostly the incremental success at integrating the pre-1997 arrivals. In addition, some of the earlier immigrants would also be leaving Denmark or would reach pension age thus decreasing the working age population. Increasing employment and a stagnating or even declining working age population of immigrants would combine to a rapid rise in the employment rate. The same would not be true of their descendants. They would successively be reaching working age. Therefore not only would the

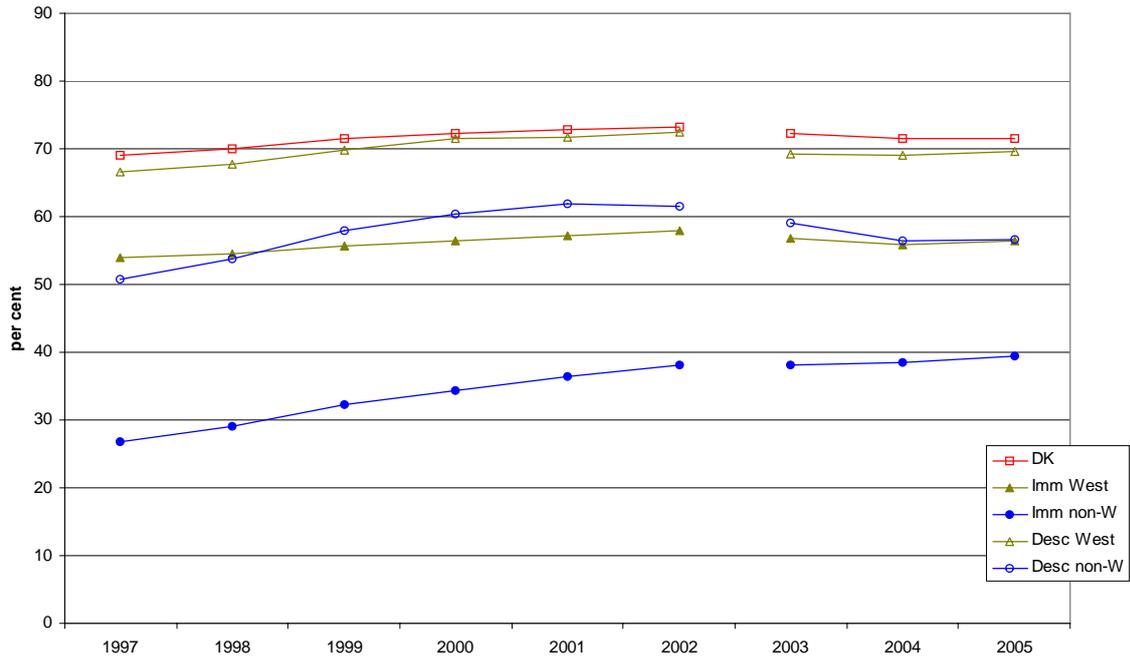
number of employees be increasing but also the population from which to draw employees. Combined the two increases would mean little change in the employment rate.

There are interesting patterns in these employment rates. Among the women Western descendants reach nearly the same employment rate as Danish origin women, and non-Western descendants reach nearly the same employment rate as Western immigrants, especially in 2004 and 2005. Non-Western immigrants range far below. No such equalities can be observed among men. The range of male employment rates is narrower than that of females but they are clearly spaced with very similar gaps between Danish origin at the top and Western descendants, Western immigrants, non-Western descendants, and non-Western immigrants following successively.

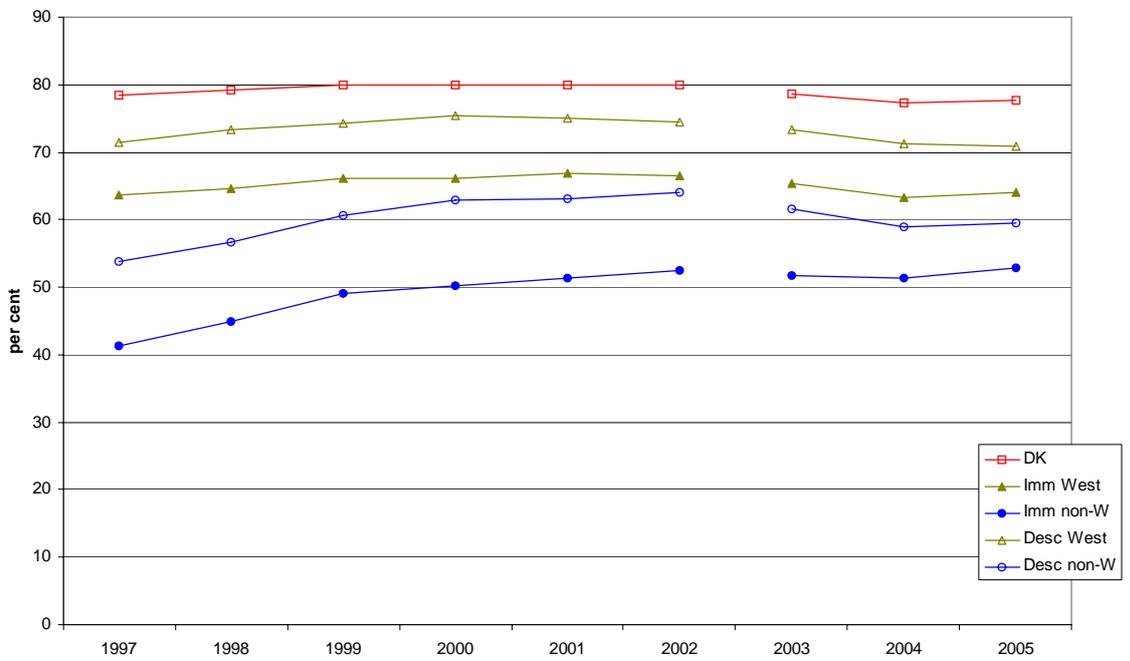
We can compare developments over time in order to gain an impression of whose employment rates are driven by the same dynamics, even if the levels are different. The analysis shows there to be greater similarity among the five categories of women than the five categories of men. It also shows the development of the employment rates of non-Western immigrants to be more dissimilar than of the others which in this case means more favourable.

- The employment rate of Danish origin women was substantially parallel to the employment rates especially of Western immigrant women and non-Western descendants (96 per cent each) but also to those of Western descendants (88 per cent). It was less parallel – only 63 per cent – to the development of the employment rate of non-Western immigrant women. As a result the employment rate of Western descendants largely paralleled that of Western immigrants (83 per cent) while the employment rate of non-Western descendant women paralleled that of non-Western immigrant women by only 48 per cent.
- The pattern is somewhat different among the men. Again there is a large degree of parallelism between Danish origin employment rates, Western immigrant (83 per cent), and Western descendant (89 per cent) employment rates, and also between Western immigrant and Western descendant (87 per cent). But there is zero percent parallel between Danish origin and non-Western immigrant and only 29 per cent between Danish origin and non-Western descendant employment rates. There is 68 per cent parallel between non-Western immigrant and non-Western descendant employment rates.

Employment rates of women aged 16 to 66 in Denmark



Employment rates of men aged 16 to 66 in Denmark



5. The three cities in national context

The cities

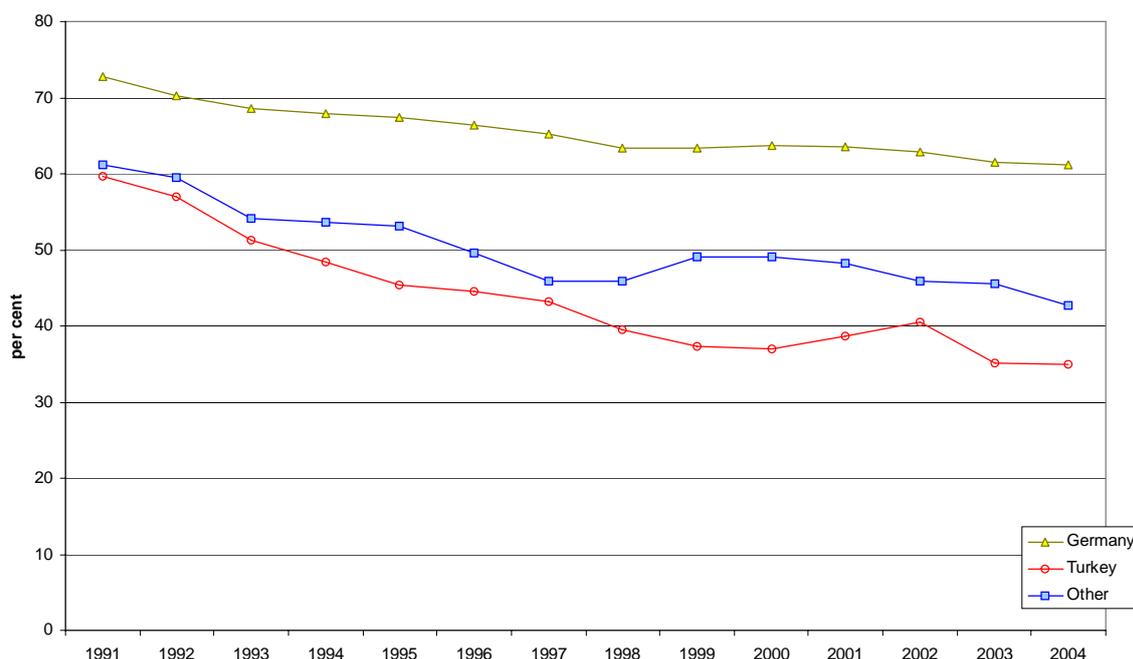
The working age population of Copenhagen is about 372,000 of which about 70,000 are classified as not of Danish origin, i.e. they were born abroad to parents neither of which had either Danish citizenship or had been born in Denmark. This is about 19 per cent of the city's working age population, up from about 14 per cent in 1995. In Vienna a comparable share is not known but would likely be between 25 and 30 per cent, and similarly in Berlin. The Berlin working age population peaked in 1996 at about 2.46 million and is now about 2.42 million, about twice the size of Vienna and about 6.5 times the size of Copenhagen. The share of citizens of other countries in the Berlin working age population is about 14.5 per cent, or about one in seven. The same share in Vienna is about 19 per cent. (Another 11 per cent of the working age population do have Austrian citizenship but were born abroad.) Since 1998, Vienna's population has been increasing after several decades of stagnation. Berlin is only a very small part of Germany, about 4 per cent of the population. Copenhagen comprises about 9 per cent of the population of Denmark, Vienna about 20 per cent of Austria's.

It needs to be emphasized that the uniform data format available for the countries does not exist for the cities. At local level we have to make do with a hodgepodge of data.

Berlin

In Berlin employment rates declined rapidly in the 1990s. The decline may have levelled off since about the year 2002 as suggested by statistical tests but at the same time it is true that among all three citizenships we are able to distinguish the lowest observed employment rate occurred at the end of the time series, in 2004. The levelling off, if it is happening, is particularly true for the citizenship that suffered the worst decline, i.e. Turkish citizens. The data since 1991 suggest that in 1990 Turkish citizens would have had the same employment rate as other non-German citizens. The trend difference would have become as great as about eight percentage points, by 2002. The gap between Turkish citizens and German citizens would have grown from about 13 percentage points, in 1991, to about 26 percentage points, by 2002, and the difference between German citizens and Other citizens from about 12 to about 17 percentage points. Since 2002, these gaps may have been narrowing. A couple more years of data after 2004 will help to confirm the existence or non-existence of the reversal.

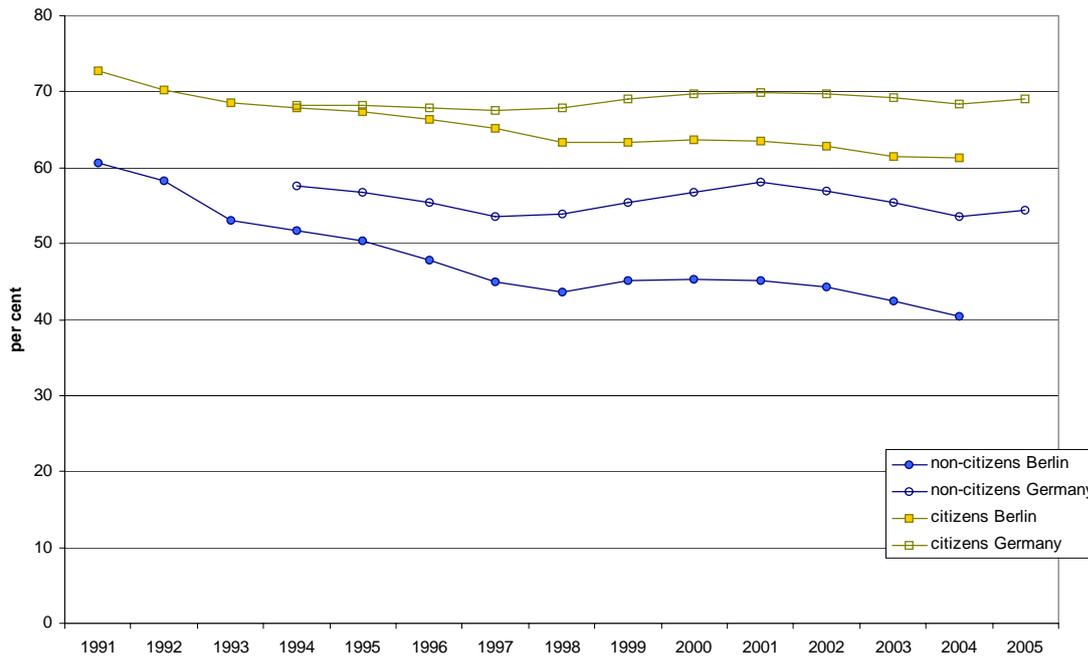
Berlin: The share of the employed in the working age population (employment rate) by citizenship



The next figure shows three things.

- The first is the increasing divergence between employment rates in Germany and in Berlin. Employment rates for citizens and non-citizens in Germany have gone up and down along with the business cycle but there is no discernable trend for them to rise or to decline. As a result, while German citizens in Berlin had the same employment rate as German citizens in Germany in 1994, by 2004 they had a seven percentage point disadvantage. And while non-citizens in Berlin were then lagging seven percentage points behind non-citizens in Germany they now lag 13 percentage points behind.
- The second is that the gap between Berlin and Germany has always been greater for non-citizens than for citizens. There is, one might say, a six percentage point Berlin penalty on the employment rates of non-citizens. This has been varying very little over the years.
- And third, the two lines for Berlin appear as reasonably parallel as do the two lines for Germany. In other words, the gap between citizen and non-citizen employment rates has been fairly stable. The message is more than evident. How non-citizens are faring in Berlin depends on the labour market in Berlin and not on where they are from, and how they are faring in Germany depends on the German labour market and not on their countries of origin.

Employment rates of working age citizens and non-citizens in Berlin and Germany



- But, as the next figure demonstrates, the gap has a life of its own. In fact, there are two tendencies that are both equally true of Germany as of Berlin by itself:
 - Firstly, the gap opens and closes cyclically. When the economy performs less well it widens, and when it performs better it closes again. Non-citizens evidently keep serving as buffers in the labour market. When conditions are poorer their employment rate drops more than that of citizens. When conditions improve it recovers ...
 - ... but not quite, for this is the second tendency: the gap slowly but inexorably widens. The figure contains the two regression lines, and these two lines are almost perfectly parallel. Although the gap is considerably larger in Berlin than elsewhere in Germany it grows at the same pace, i.e. by about one percentage point in four years.
 - The cyclicity and the growth trend of the gap both being the same federally as in Berlin, while Berlin is not a very substantial part of the federal labour market, are a clear indication that the buffer function and the widening are not Berlin phenomenon but German ones. If they were to be countered, federal policy makers would be called upon to act.
 - What does remain to be acted upon by Berlin is the size of the gap in the employment rates. Throughout the years it has been 5.7 percentage points larger than federally accounting for about one quarter of the Berlin gap in 2004.

The gap between citizen and non-citizen employment rates in Berlin and in Germany



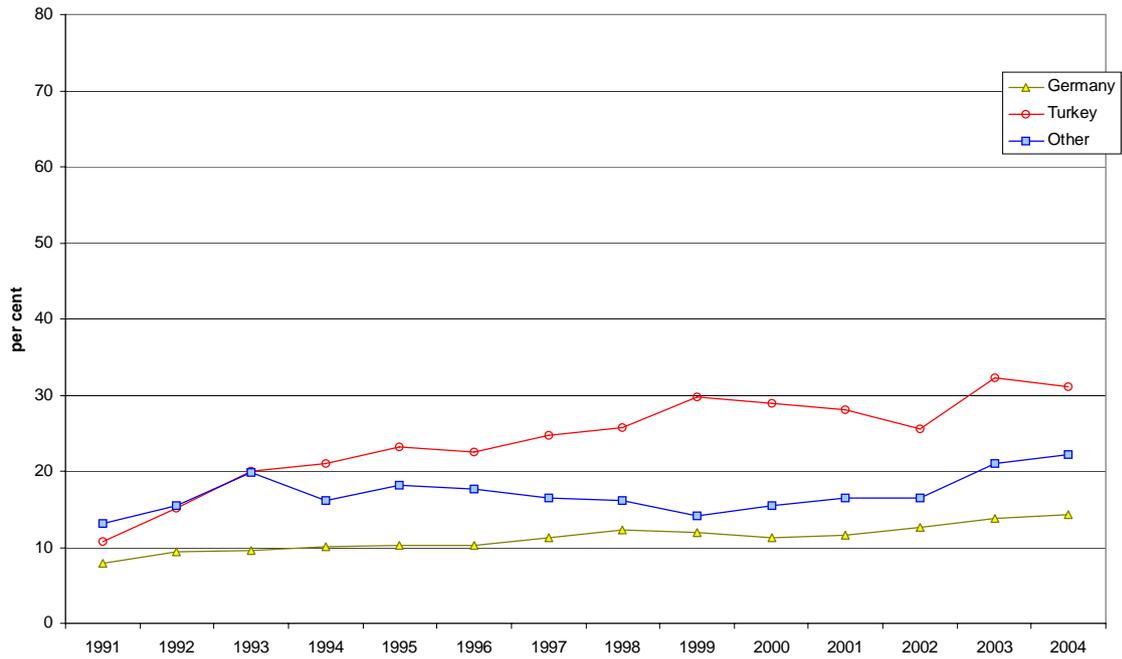
When employment declined was this translated into unemployment or into withdrawal from the labour market? Likewise, if employment rates in Berlin should indeed begin to rise, the important question will be how this may affect unemployment and occupational inactivity.

- For German citizens it can be shown that unemployment and inactivity took turns picking up the decline in the employment rate.
- Among Turkish citizens most of the employment decline fed rising unemployment. Inactivity increased much less and may in fact have peaked in 1998.
- Among Other citizens the larger part of the employment decline translated into rising inactivity.

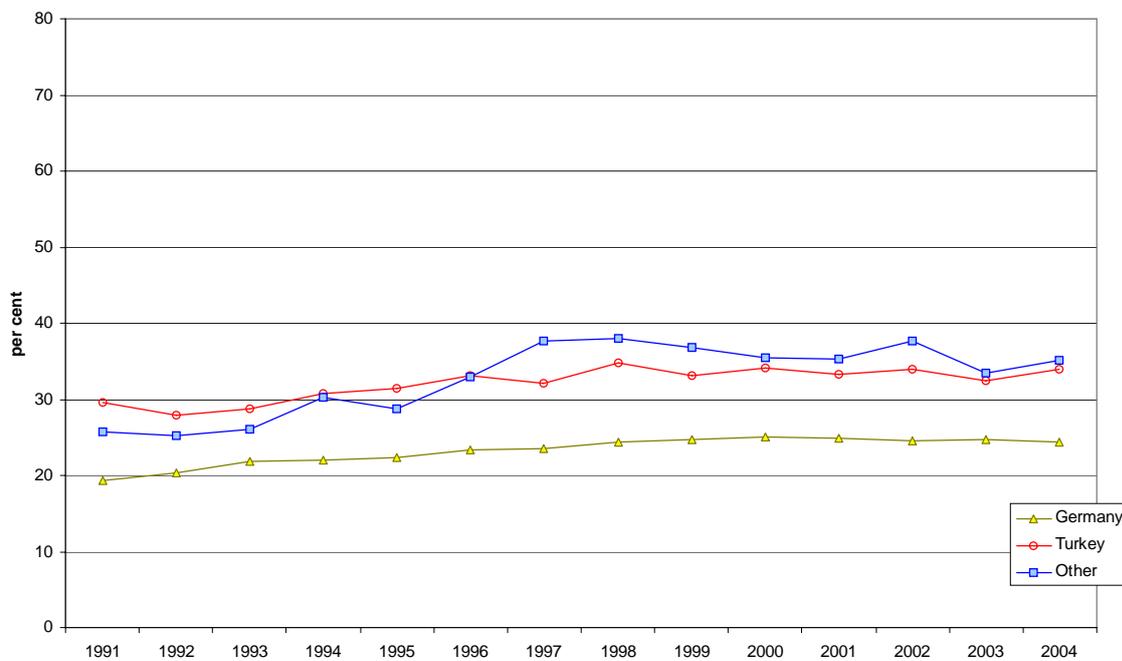
Interestingly, therefore, the decline in employment opportunities was absorbed very differently within the three citizenship populations.

The two figures below show unemployment and inactivity as a share of the working age population. To note, this is not a conventional unemployment rate (share of the unemployed in the labour force) but the share in the working age population. It is immediately comparable with the employment rate, and added to the employment rate it would yield the labour force participation rate.

Berlin: The share of the unemployed in the working age population (unemployment rate) by citizenship



Berlin: Occupational inactivity as a share of the working age population by citizenship

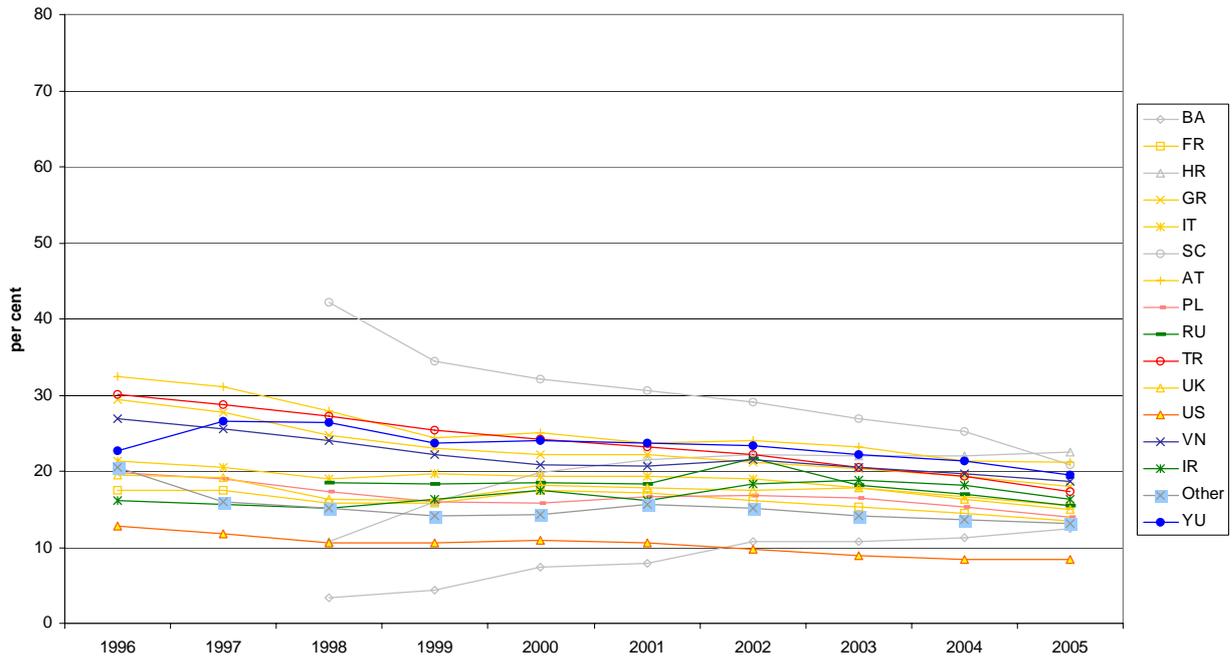


In Berlin employment rates declined regardless of how the population changed. From 1991 to 2004, the number of working age German citizens declined and so did their employment rate, the number of Turkish citizens tended to decline as did their employment rate, and the number of citizens of other countries increased while their employment rate declined.

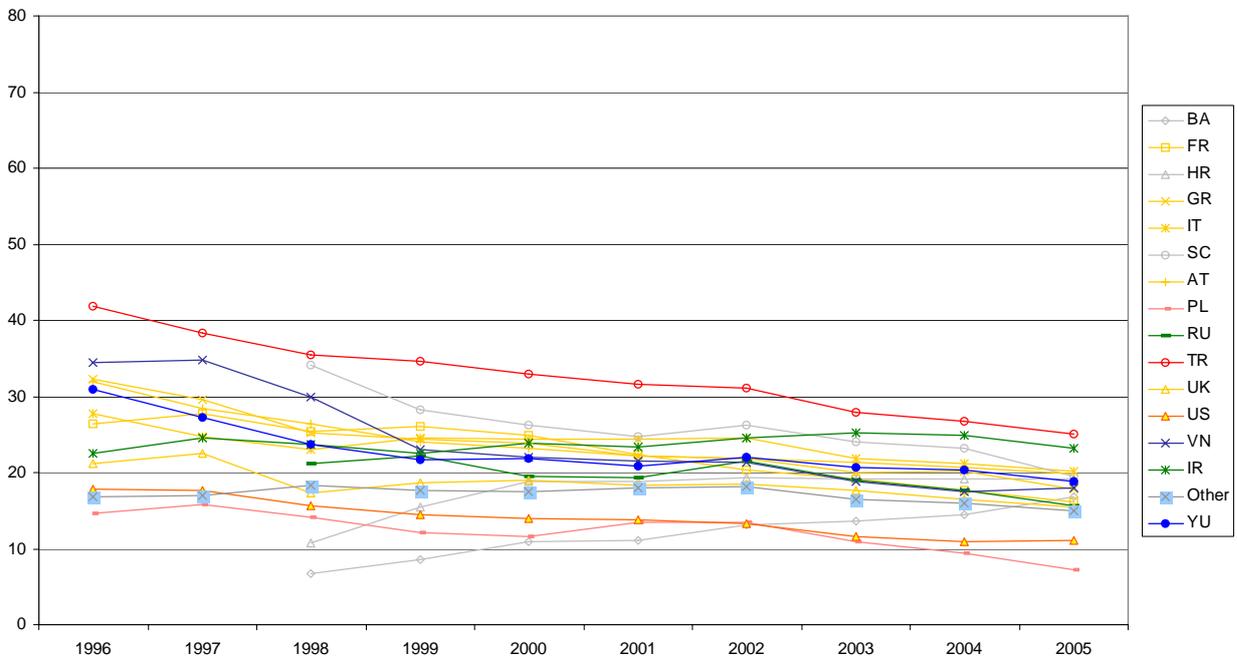
The next two figures show Berlin working age employment rates by 15 citizenships and sex. The first thing to note is that the data source is different from above. There it was survey data, here it is administrative data: employment is from social security, population is from the aliens register. Social security data do not include the self-employed nor those employed for less than a certain minimum monthly wage. This makes a large difference, as can be seen when comparing Turkish employment rates. Above it declined from about 45 per cent in 1996 to about 35 per cent in 2004, here across the two sexes both values are about ten percentage points less. This cannot be stressed enough: the data source matters. A couple of other things should be kept in mind. The only noteworthy exceptions to the generally declining trend appear to occur in the Bosnian (BA) and the Croatian (HR) citizenships while the decline seems to be particularly large in the Serbian-Montenegrin, i.e. the earlier Yugoslav citizenship (SC). This is an administrative artefact stemming from the way in which the authorities learn of citizenship changes. Once we add all former Yugoslav citizenships up there is relatively little change in the employment rate. Further there is a broad category “Others” aggregating about one third of the non-citizen working age population in Berlin. Finally, German citizenship is not included in these data. Social security counts employment by the place of work rather than the place of residence. Consequently, commuters, who would be predominantly citizens, would count as employees in Berlin. This would tend to overstate the employment rate of citizens in Berlin.

Given the large difference in levels relative to the survey data reported above interest should probably be focused on the differences between the citizenships and the changes over time rather than the level at which all this occurs. Over time there is only one little exception to the declining trend, and this occurs among women with Iranian citizenship where the employment rate, by 2005, had not quite reverted to the 1998 low, although it seemed in the process of doing so. In all other instances the employment rate was lower in 2005 than in 1998, and in some instances very much so. The largest decline was observed among men of Vietnamese citizenship followed by both sexes of Turkish citizenship. Generally speaking there has been a trend for employment rates of both men and women to converge towards the 15 to 20 per cent bracket. This implies larger reductions among the men than the women. Indeed, by 2005, in four out of twelve citizenships women had the greater employment rate than men (Poland, Austria, Vietnam, Yugoslavia), and in three more the difference was negligibly small (Greece, Russia, UK). Only US citizens are clearly below the 15 to 20 per cent range, and so are men of Polish citizenship. At the other end men of Turkish and of Iranian citizenship are clearly above the central range.

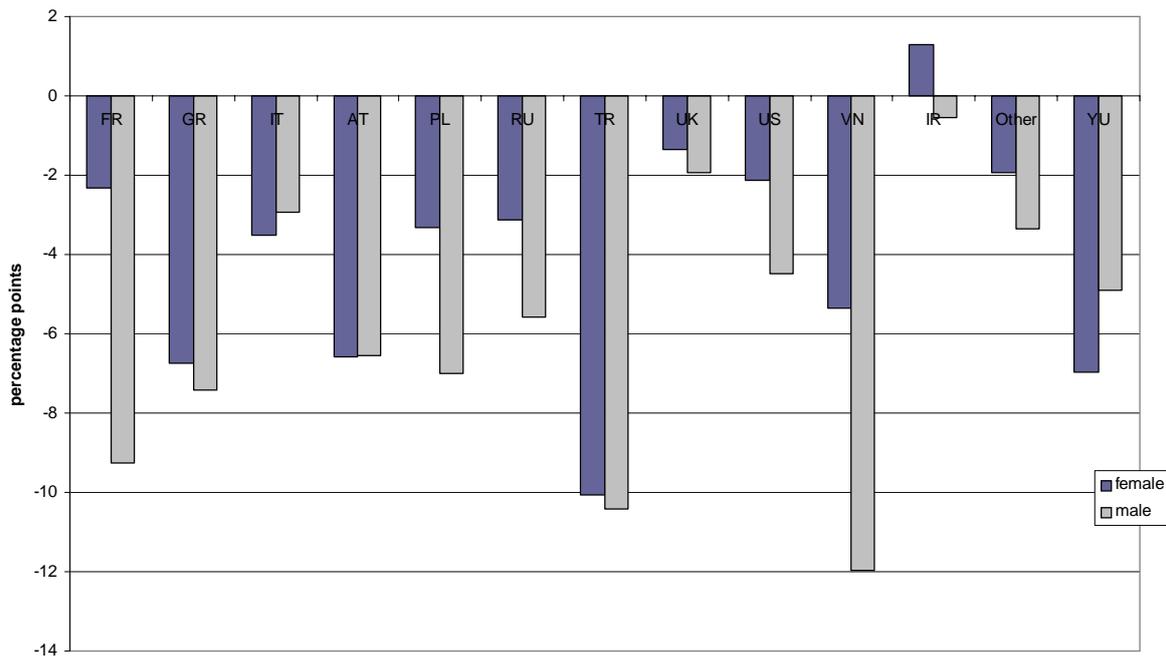
Employment rates of women aged 15 to 64 in Berlin



Employment rates of men aged 15 to 64 in Berlin



Changes in employment rates of the age group 15 to 64 in Berlin, 1998 to 2005 by citizenship



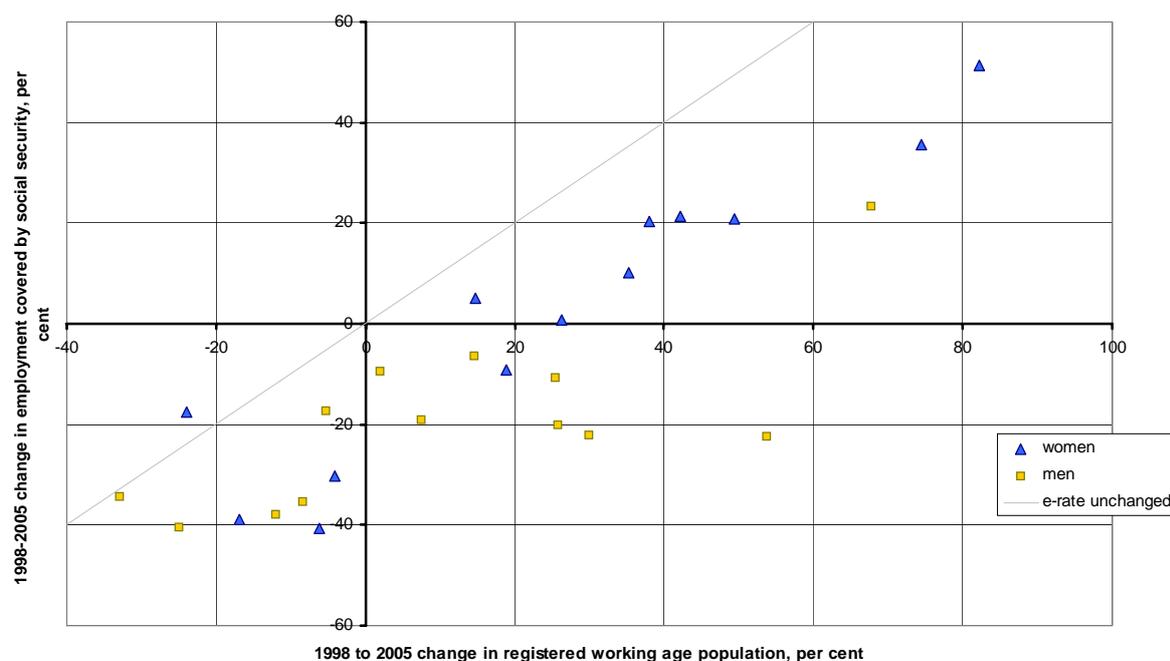
For the men of most citizenships the negative changes in the employment rate were due to declining employment. In some cases population also declined but proportionately not as fast. Among women it was more often the case that employment grew but proportionately not as quickly as the population. Both cases lead to reductions in the employment rate but they do make a real-life difference. To be, as the men, in a labour market where employment shrinks, is different from being in a labour market, like part of the women, where employment grows, even if insufficiently. It has to be emphasized that it is only part of the women. The total employment of non-citizen women, from 1998 to 2005, shrank by 15 per cent while population increased by 17 per cent. This compares with an employment reduction among the men of fully one quarter (-25 per cent) and a population increase of 4 per cent.

- Employment declining proportionately faster than population was true for the former Yugoslavia, for Turkey, for Greece, and for men of Iranian and Italian citizenship.
- For a number of others it was true that population rose while employment declined. These included Austrian citizens, and men of UK, French, Polish, US, and Vietnamese citizenship. The Other citizenship men also belong here.
- Finally there were also cases of employment rising but proportionately less than population. This was true for Russian citizens, and for women of UK, Italian, French, Polish, US, and Vietnamese citizenship, and also for the Other women category.
- The one case of a rising employment rate, women of Iranian citizenship, was due to population shrinking proportionately faster than employment.

As visible in the figure below there clearly is a tendency for the change in employment to be greater when the population change is also greater. The trend is much more marked for the women (r -square = 0.88) than for the men (r -square = 0.55). If a female working age population increases by 10 per cent then the trend is for employment to increase by 8.1 per cent. For males the increase in employment would tend to be only 4.3 per cent. But for both sexes an unchanging working age population tends to go along with a decline in employment, -18 per

cent for women and -24 per cent for men. In other words, the underlying tendency in the labour market, in 1998 to 2005, has been extremely negative. With one exception all seven cases of population growth of more than 30 per cent were accompanied by growing employment. The one exception are men of Polish citizenship. At lower population growth rates all employment changes were negative except for women of US and UK citizenship.

Percent changes in employment and population by citizenship, Berlin 1998 to 2005



The share in the working age population (per cent), changes in the employment rate (percentage points), the registered working age population (per cent) and in employment covered by social security (per cent), Berlin 1998 to 2005

		Popu- lation share	Women			Men		
			Employ- ment rate	Employ- ment	Popu- lation	Employ- ment rate	Employ- ment	Popu- lation
Turkey	TR	23.7	-10.1	-41	-6	-10.4	-35	-8
ex-YU	YU	9.6	-7.0	-39	-17	-4.9	-41	-25
Russia	RU	3.1	-3.1	51	82	-5.6	23	68
Vietnam	VN	2.3	-5.4	36	74	-12.0	-22	30
Iran	IR	1.0	1.3	-17	-24	-0.5	-34	-33
US	US	2.9	-2.1	1	26	-4.5	-11	25
Poland	PL	9.5	-3.3	21	49	-7.0	-22	54
France	FR	2.8	-2.3	21	42	-9.3	-20	26
Greece	GR	2.1	-6.7	-30	-4	-7.4	-38	-12
Italy	IT	3.2	-3.5	10	35	-2.9	-17	-5
Austria	AT	2.0	-6.6	-9	19	-6.5	-19	8
UK	UK	2.2	-1.4	5	15	-1.9	-9	2
Others		35.6	-1.9	20	38	-3.4	-6	15

Calculations by the author based on data from German Social Security and the Aliens Register.

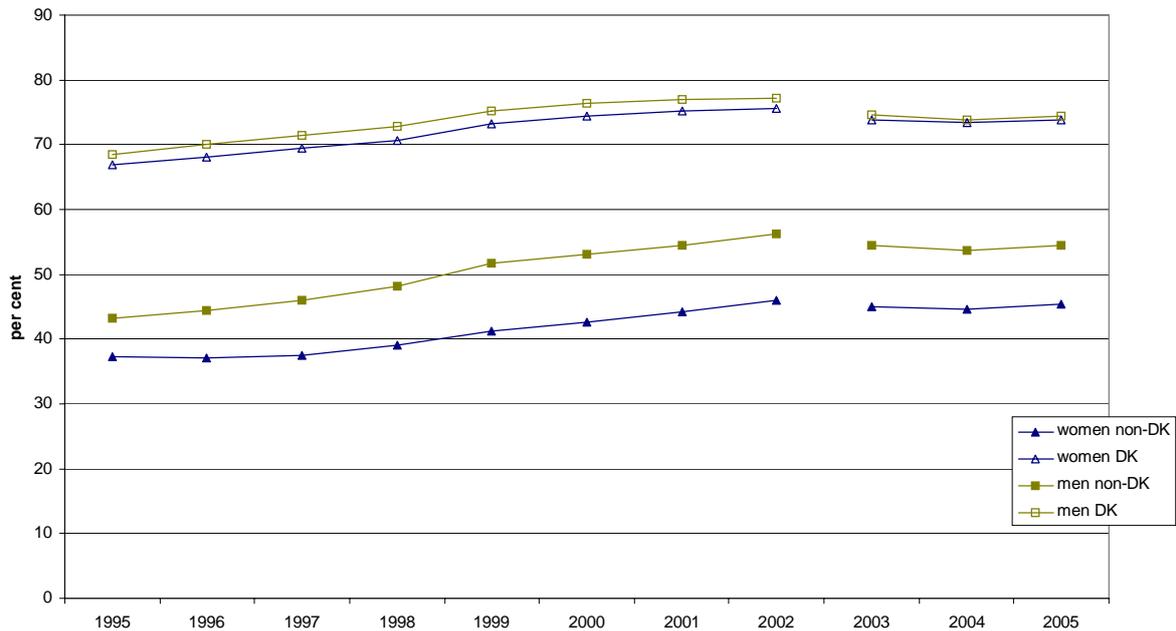
The population changes of the two sexes are correlated ($r\text{-square}=0.81$) and so are the employment changes ($r\text{-square}=0.64$). This is much less true of changes in the employment rate ($r\text{-square}=0.44$). Population changes going hand in hand is one sign in favour of naturalisation playing a part. Employment changes are less coordinated between the sexes. This occurs especially among citizenships with positive female employment change. Some of these have fairly negative male employment changes (Vietnam, France, Poland, Italy), others less so (Other, UK, US), and in one case, Russia, the male employment change is highly positive. It is difficult to think of any sort of pattern in this. Conceivably there are citizenships with the sexes forming households together and others where this is less the case. Increased female employment could then be making up for losses in male employment. But that would leave unexplained why the same is not happening among formerly Yugoslav, Turkish and Greek citizens. Perhaps age composition plays a role.

The employment reductions among men may have to do with Berlin being less of a construction site than it used to be. The less dismal situation for women may stem from demand in the service sector being less negatively affected.

Copenhagen

Employment rates in Copenhagen today are considerably greater than in Berlin. In large part this is due to their growth since the mid-1990s. At the time Berlin and Copenhagen would not have looked all that different but opposing developments since then have made them very different. 2002 marked a peak for Copenhagen employment rates partly because of the break in the data between 2002 and 2003 already noted when reporting country level data. All the parental citizenship or birth countries we have data for show greater employment rates in 2002 than in 1995. This is true for both sexes. In some cases the rises were remarkable indeed. Outstanding, if not due to administrative fiat, would be the rise in Bosnian employment rates from around 10 per cent in 1996 to over 50 per cent. Others include Iranian origin where the female working age employment rate rose from below 20 per cent to over 40, and the male one from below 30 per cent in 1995 to around 50 in 1999. Pakistani, Turkish and Moroccan female employment rates grew from 20 to 25 per cent into the 32 to 42 per cent range while the male ones grew from around 40 per cent into the 50 to 60 per cent range. Somali, Iraqi and Lebanese women raised their employment rate from around 7 per cent to twice that, and the men recorded even greater gains.

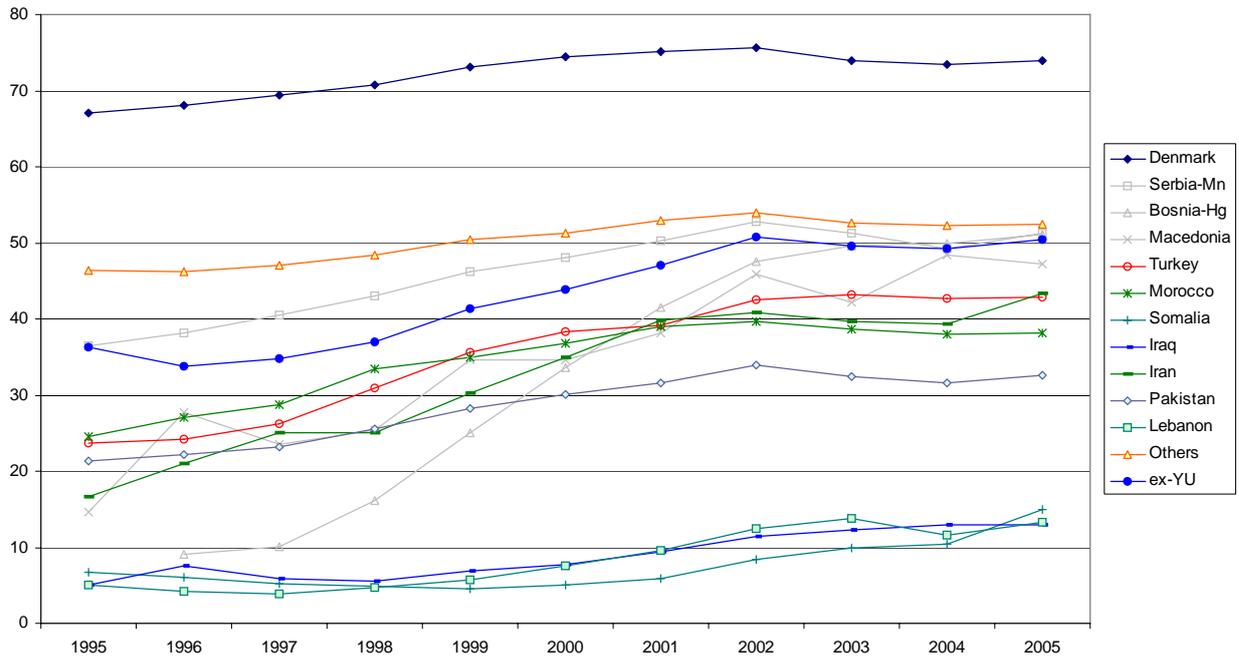
The employment rates of the Danish origin and non-Danish origin working age population in Copenhagen



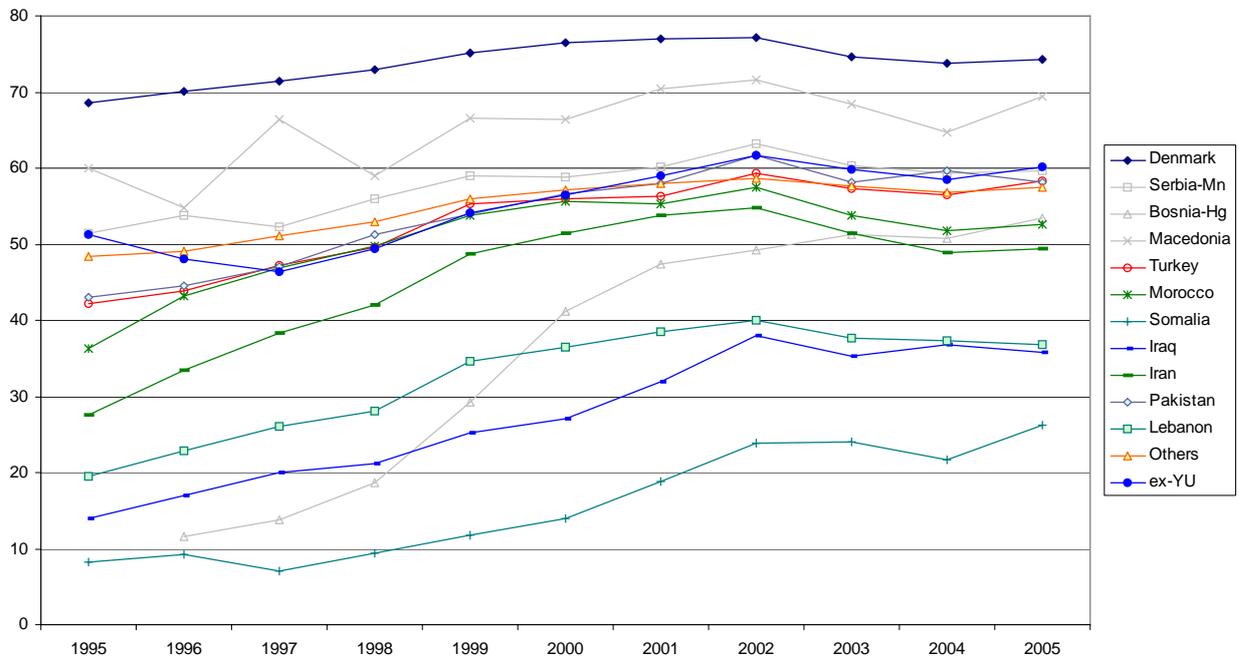
In spite of these impressive gains a clear hierarchy remains obvious in the Copenhagen labour market. While the female non-Danish mainstream is now clearly above 40 per cent employment rate Somali, Lebanese and Iraqi women remain below 15 per cent. Lebanese and Iraqi men remain below 40 per cent and Somali men below 30 per cent, although the bulk of male employment rates is now above 50 per cent. It is also obvious that Iranian and Moroccan men and women and Pakistani women are at the lower end of the mainstream. In fact, Pakistani women have been falling behind Turkish, Iranian and Moroccan women.

Statistical corrections of the employment rate in 2002-2003 mostly occurred among the men. To a certain degree there has been a tendency for the corrections to be greater if the previous gains were greater. This affected Iranian and Moroccan, Lebanese and Pakistani men the most, and Iraqi men much less. Some kept gaining in spite of the 2003 statistical correction.

Employment rates of women aged 16 to 66, Copenhagen



Male employment rates, Copenhagen



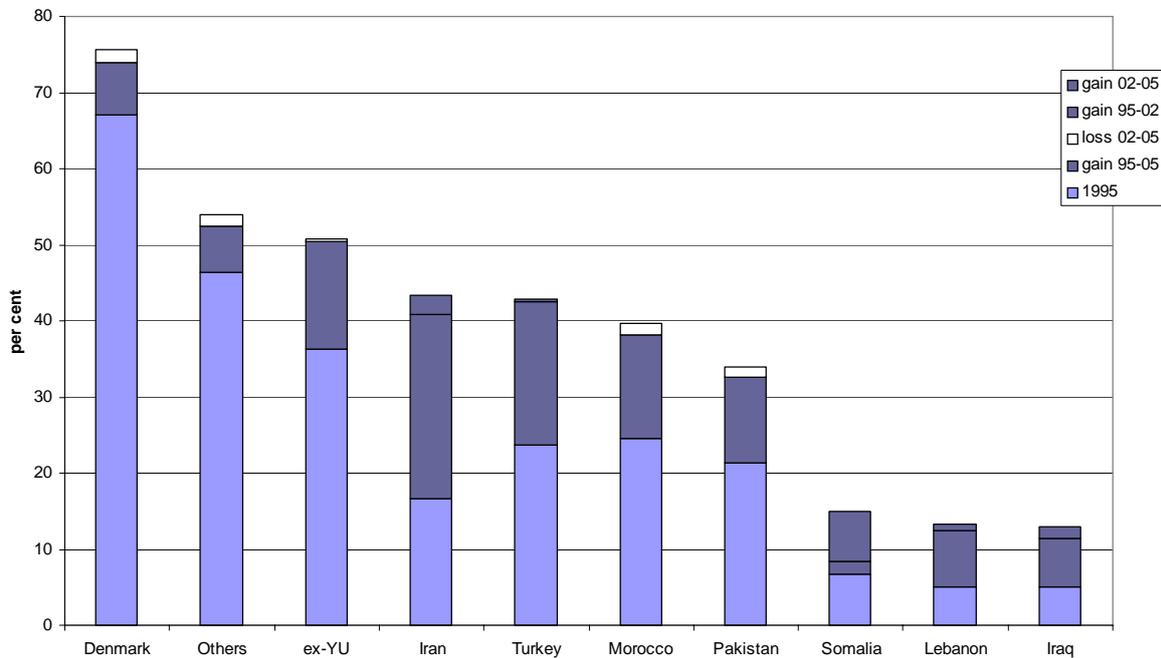
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Employment rates 1995 and 2005 (per cent) and gains in employment rate 1995-2002 and 2002-2005 (percentage points) by parental citizenship or birthplace, Copenhagen

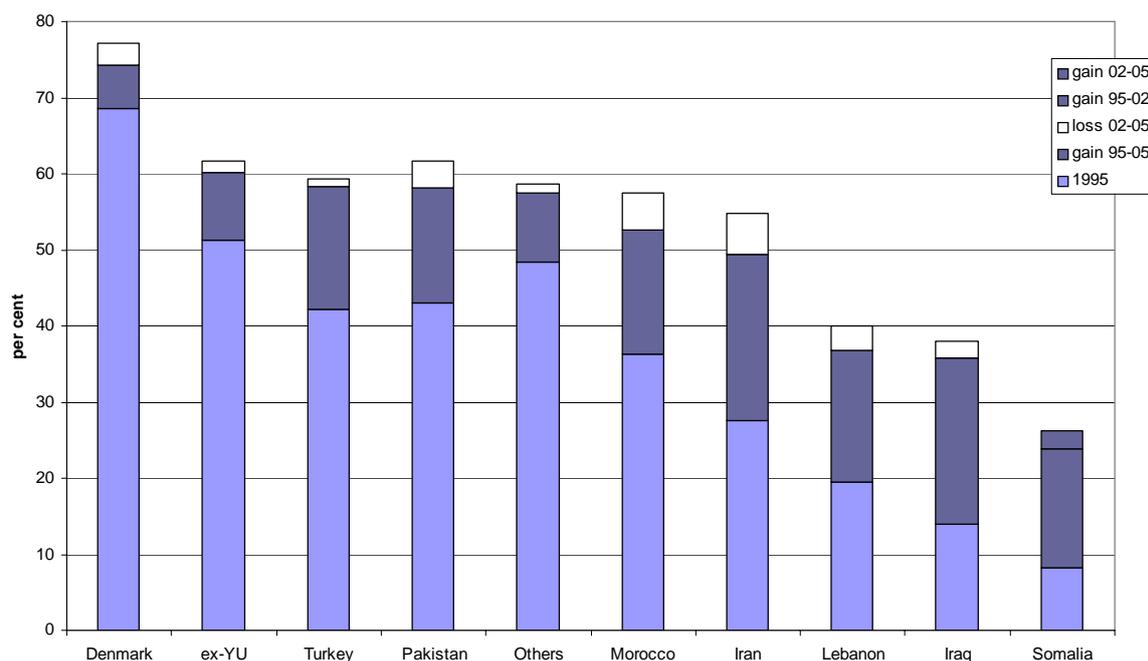
	women				men			
	1995	gain 1995- 2002	gain 2002- 2005	2005	1995	gain 1995- 2002	gain 2002- 2005	2005
Denmark	67.0	8.6	-1.8	73.9	68.5	8,6	-2.8	74.3
Serbia-Monten.	36.4	16.3	-1.5	51.2	51.4	11,9	-3.6	59.7
Bosnia-Herzeg.	9.2	47.6	3.4	51.0	11.6	49,2	4.3	53.5
Macedonia	14.7	31.2	1.3	47.2	60.0	11,6	-2.2	69.4
Turkey	23.6	18.8	0.4	42.8	42.2	17,1	-1.0	58.3
Morocco	24.6	15.0	-1.5	38.1	36.4	21,2	-5.0	52.6
Somalia	6.8	1.6	6.6	14.9	8.3	15,7	2.3	26.2
Iraq	5.0	6.4	1.6	13.0	13.9	24,1	-2.3	35.7
Iran	16.7	24.2	2.4	43.3	27.5	27,3	-5.5	49.4
Pakistan	21.4	12.5	-1.2	32.6	42.9	18,8	-3.6	58.1
Lebanon	5.1	7.3	0.9	13.3	19.5	20,5	-3.2	36.8
Others	46.4	7.6	-1.5	52.5	48.3	10,3	-1.1	57.5
ex-YU	36.2	14.5	-0.3	50.5	51.3	10,3	-1.5	60.1

Author's computations based on data from the Statistical Office of the City of Copenhagen.

Gains and losses in the employment rate of women, Copenhagen 1995-2005



Gains and losses in the employment rate of men, Copenhagen 1995-2005



Vienna

Unfortunately the data situation for Vienna is dismal. As in Berlin there is a choice between LFS data and Social Security data. The latter lack about one eighth of Vienna's employees for they commute out of the city but contain that quarter of employment fed by commuters into the city. The in-commuters are likely to be predominantly Austrian citizens which may not be true of out-commuters. Vienna employment rates based on Social Security data may therefore paint a seriously warped picture. The LFS, as seen above, has been changing. We will therefore use the 2001 census for a reference and look at 2004 and 2005 LFS data only. In terms of the labour market mid-May, when the census was taken, tends to be similar to annual average.

Employment rates of women and men aged 15 to 64 at the census of mid-May 2001, and at the LFS 2004 and 2005 (annual average)

	Total		Women		Men	
	Non-citizens	Citizens	Non-citizens	Citizens	Non-citizens	Citizens
Vienna						
2001	67.2	71.3	58.7	63.8	72.5	72.0
2004	59.7	64.8	50.1	60.0	69.1	70.0
2005	60.6	64.6	53.7	60.9	67.5	68.6
Austria						
2001	67.4	68.3	57.2	61.0	76.4	75.7
2004	62.1	68.4	51.5	61.8	72.4	75.2
2005	61.9	69.5	52.9	63.1	71.4	75.9

Statistik Austria and author's computations based on data published by Statistik Austria.

As was true for Berlin, the situation in Vienna generally looks less satisfying than in the country at large. If the data are true the 2001 to 2004 period was very negative in Vienna. The employment rate of non-citizen women lost almost nine percentage points in just three years. Even the citizen women's decline of the employment rate by four percentage points over the same period is hard to believe. But seeing that in Austria overall the employment rate of citizen women was greater in 2004 than in 2001 makes it hard to reject the data for Vienna as mere measurement error. The employment rate of non-citizen women also declined less in Austria overall than it did in Vienna.

In addition, employment rate gaps between citizens and non-citizens have been increasing but probably less in the city than in the country as a whole. The female gap in the city seems to have risen from about 5 percentage points in 2001 to about 7 percentage points in 2005 but from about 4 to about 10 in the country as a whole. The male gap, in 2001, had slightly been favouring non-citizens in both the city and the country but by 2005 had been about 1 percentage point to their disadvantage in the city and about 5 percentage points in the country as a whole. This may partly reflect the buffering we observed in Berlin. Economic and labour market conditions in 2005 were less favourable than in 2001.

6. Accounting for differential labour market outcomes

What do we need to explain?

At the outset we chose employment rates as the best indicator of labour market outcomes. In the two preceding chapters they were shown for each sex to differ considerably by citizenship. It was also shown that across the three cities and across the three countries neither levels nor differences are the same for a given citizenship and that the changes over time are also not uniform. So there is a lot to explain. What it boils down to is to explain the observed level of the employment rate in a given place at a given time for a given sex and citizenship. In what way do places, times, sexes and citizenships differ, and can these observed differences account for the differences in employment rate? If not, which other as yet unobserved influences can we think of that might contribute to explaining the differential levels of the employment rate?

We are not going to be able to answer these questions in a satisfactory manner. The chief bottleneck is the availability of satisfactory data. In part data are costly to get, and in part they just simply don't exist. There are even kinds of data that are almost impossible to produce. Furthermore, a proper analysis takes its time, and time is money. This chapter is therefore restricted to pointing up the conceivable influences and how they might be measured if anybody endeavoured to do so.

Several kinds of explanations

There are several kinds of explanations we have to consider: definitions that don't match, error in measurement, composition effects, and cause and effect. Perhaps a moment may be spared to consider the non-causal influences on changes in the employment rate over time and differences between places.

- Definitions pose a problem when trying to combine data from different datasets. The LFS, for instance, refers to a different base population than administrative data would. So it is not possible to use employment data from the one and population data from another source together. It was already pointed out that employment data from Social Security refer to the place of work while population data, of course, refer to the place of abode. If commuting is of any importance the two cannot be combined. Secondly, problems of definition are pervasive in international comparisons. They concern not only what is being observed but also when and where. Unfortunately this is also highly true within the European Union. We

have tried to avoid these problems as much as possible both in computing employment rates and in interpreting them comparatively.

- We already pointed to likely measurement error as an explanation for the 2003-2004 changes in the Austrian data. Presumably the newer data are more valid but the trouble is we don't actually know. The Austrian case is only distinct for how plainly visible the organisational changes in the LFS make the concerns one can have about survey data. Where such reorganisations do not happen or where a statistics office decides to paper over the breaks in the data the concerns do not become as obvious which does not mean they could not be equally large.
- Composition effects play a large role in the data we are looking at in this report but we don't know how large. They could be measured, to be sure, but it would take far more differentiated data and far more time than were available for our purposes. To give an illustration. Suppose there were two populations. In each of the two the women had an employment rate of 50 per cent and the men of 90 per cent but one of them were made up of 40 per cent women and 60 per cent men and the other of 60 per cent women and 40 per cent men. The first one would then have an overall employment rate of 74 per cent and the second one of only 66 per cent. This is one example of the composition effect. Given migration it appears every year anew because a new cohort is added to the population. Thus the employment rate may decline, although the employment rate of the previously resident population of the same or any other citizenship could remain as employed as it was. The Austrian labour market in 1990 would provide a case study of how easily observers fall into the trap of wanting to interpret changes causally that were largely due to composition effects. Changes in the age composition of a population have the same effect, if age groups have different employment rates. Changes in the age composition of a population have the same effect, if age groups have different employment rates. Because of limitations on sample sizes, we cannot also be looking at age structure as an explanation of the differences observed in the earlier sections of this report. Some of the differences between countries and between citizenships, less so between sexes, could be due to differences in age structure.

If differences remain after taking definitions, measurement error, and composition effects into account there is good reason to ask why. Above we did so in some instances, although neither measurement error nor composition effect could be properly taken into account. We asked about the influence of population increases on the employment rate and the influence the employment rate of one population component might have on the employment rate of another. Below we will be exploring other possible causes and the availability of empirical evidence in their support. These include five groups of variables. One measures the rights people have in relation to other people in the same society. The second one measures anything to do with skill or, more broadly, with employability. A third one deals with measures of how well people are connected or networked. A fourth one deals with the recognition of existing rights and skills and with admission to networks. The fifth group of variables concerns the availability of replacements for anybody leaving the labour market or progressing to a more highly esteemed occupation.

Are differential rights to blame?

Citizenship was invented and strengthened in order to be able to accord rights differentially. It was deemed to be desirable that not everybody should have all the same rights in every place. After 1945 a base line of human rights was drawn that should be available to everybody in any place at any time, and these also have gradually been elaborated and strengthened. But at the citizenship level the law is about differentiating and discriminating. It creates categories of persons against some of which it proscribes discrimination while against others it prescribes discrimination. Admission to the labour market, in the course of the 20th century, has become a particularly common area of legally prescribed discrimination. Usually it is the most recently arrived immigrants that get temporarily excluded from the labour market. In 1945 these tended to

be refugees, from the mid-1970s the focus was on family migrants, more recently exclusionary regulations against asylum applicants have been strengthened. I am here only talking of people who have already arrived in the country, not of exclusion from the territory, although exclusion from the labour market is often viewed as a step towards exclusion from the territory. Today the major distinction in the EU in terms of access to the labour market is not simply along citizenship, as between EU-citizens and citizens of countries outside the EEA and Switzerland, but also involves duration of residence. Five years of settled residence earn rights in the labour market that in some measure close the gap to citizens. This duration criterion came into force during the period under observation in this report. During this period, also, there has been considerable new immigration, partly through asylum, partly through family formation. Therefore, non-EEA-citizen populations in all three countries are mixed in regard to their rights in the labour market but not all populations have the same mix. Obviously, therefore, legally prescribed exclusion from the labour market could be part of the explanation for the gaps in employment rates. Unfortunately, in neither of the countries, and certainly not in Germany and in Austria, are there employment or even population data broken down by legal status and duration of residence. In reality, though, these are the data policy makers should be looking at rather than citizenship or “origin”.

Selective naturalisation rules could play a part in explaining differential employment outcomes by citizenship. If eligibility for naturalization were tied to a steady income, as it is in some countries including Austria, the less employed would tend to remain in their original citizenship while the more employed would tend to become citizens of the receiving country.

There has been at least one commendable effort to measure the degree of legal exclusion from the labour market (Hofinger/Waldrauch 1997; Waldrauch 2000) but this has remained at the level of countries. It does not measure the various levels of exclusion suffered by different categories of persons within a country, although presumably the index could be developed in that direction.

Is differential employability to blame?

The EU’s national action plans on employment were instrumental in introducing the concept of employability. The basic idea seems to be that if people had the right skills more of them would be employed. It is about combating mismatch, i.e. that employers are scouting for skills that are not sufficiently on offer in the labour market. Creating those skills should get people into employment. Occupational skills are the first to think of. When employers seem to be looking for assistant nurses train assistant nurses, when they are looking for engineers train engineers, and so on. In practice this is difficult. For one thing, students and school leavers of all ages may not be as responsive to appeals to choose certain occupations as would be necessary, and current market signals may contradict the projected demand. Demand does not usually announce itself several years in advance. By the time it is discovered it is manifest and no longer a problem of the future that can be prevented. A lack of engineers today may mean that when they are trained, several years from now, they will not be needed anymore because the enterprises could not wait this long and had to give up on those lines of business that would have required engineers while for the same reason other enterprises were never started. In reality it would be necessary to have an abundance of all skills at all times in order for European economies and employment to grow more.

Creating skills is development work. The more instant alternative is to recruit them from elsewhere. Even better, one would think, if people with skills arrive without having had to recruit them. This is taking place in Europe, but the surprising fact is that few if any governments have been making systematic efforts to know about the skills arriving day to day. Sample surveys, even if they are as large as the LFS, tend not to pick up new arrivals and the samples are never large enough to discern 500 chemical engineers or even a thousand nurses. Censuses remain the only source of information but they are at least five, usually ten years apart, and in Germany there has not been a census since 1987. Even Nordic countries with their intricate registers only find out

on the occasion of a census when they send out a questionnaire to the newly arrived immigrants to ask them, among other things, about their education. Another issue is knowing what an education received abroad consisted in, or even knowing the skills a domestically received education has resulted in. The OECD's PISA tests have turned into big surprises for some countries, and I don't mean the ranks but the level of skill that was measured and turned out not to conform with what had been assumed. The truth therefore is that the level of information about the skills available in a population is dire. This is emphatically true for immigrant populations. There are lots of educational and occupational skills that simply remain unsuspected, undiscovered, and unused.

At the same time, of course, it is also true that a share of immigrants including refugees does possess very little education upon arrival. Of the 2005 foreign-born population of Austria that had arrived over the previous 20 years one third had completed nine years of school at best. (Another third had completed 10 or 11 years or vocational training, and one third had completed upper secondary or tertiary education.) This may in part be due to poor educational opportunities where they came from, specifically perhaps for their ethnic or religious community or their sex. If so, the educational deprivation suffered in the origin country could be compensated to some degree by the receiving country.

It has become common for children to gain more education than their parents had but it remains rare for them to gain much more education. The foundations for success at school and at other pursuits tend to be laid early in life. This tends to limit the advances a family can make from one generation to the next regardless of the efforts made by the surrounding public and private institutions. Some educational progress between generations should be expected but closing the gap between an immigrant generation with perhaps only five or eight years of schooling and a receiving population that has managed to make the successful completion of twelve years of schooling the norm will certainly take more than one generation.

Precious little statistical attention has been paid to the education of immigrants. Data on occupational experience and on-the-job training but also on further education for the most part do not exist, not only in Europe, although all of this may be of importance for finding employment. Surprisingly often authorities do not have information on where or when the highest completed degree was obtained. It usually should not but in practice it does matter a great deal if a degree has been obtained "here" or "there". As Peter Kee (1995) and Augustin de Coulon (2001) have shown degrees from abroad are not being rewarded in terms of income. The same goes for Israel, but there it was also shown that any education obtained in the country is in fact being rewarded in terms of wages (Friedberg 2000). There seems to be a selection process at work. People who would have to be paid adequate wages in spite of the degree being from abroad do not get employed, and people who cannot be paid adequate wages in spite of their degree being from within the country also do not get employed.

Occupationally relevant skills are often divided into cognitive and non-cognitive ones. In the preceding paragraphs the existence and absence of cognitive skills was addressed. Non-cognitive skills are harder to measure, and in fact are harder to define and to agree on what should be measured. In the street they are now frequently called "soft skills" including such items as sociability, punctuality, and loyalty to the enterprise as against family, religious or peer group demands, for instance on an employee's time. In a widely discussed empirical study James Heckman tried to determine the importance of non-cognitive skills for the level of wages. He distinguished three causes of wage differentials: differences in cognitive ability, differences in behaviour or non-cognitive abilities, and differences in treatment or discrimination. Much of the debate has been focusing on just two of these variables, i.e. discrimination on the one hand and differences in cognitive abilities on the other. In Heckman's study cognitive skills are operationalised as mathematics test cores. Non-cognitive skills were defined as "motivation, self-control, time preference, and social skills" but are operationalised as "antisocial behaviour ... such as aggressiveness or violent behaviour, cheating or lying, disobedience, peer conflicts, and

social withdrawal” covered by 28 questions asked of the mothers about their children (Carneiro et al. 2005:33). Heckman produces cross-sectional evidence to show that differences both in cognitive and non-cognitive skills develop in the first few years of life. Since the wider society would appear an unlikely influence on babies, and since information on genetic endowments was not available, he attributed the early differences to maternal cognitive skills and to a range of factors in the home environment including the family income level, the frequency of mothers reading to their children, “the number of books, magazines, toys, and musical recordings, family activities (eating together, outings), methods of discipline and parenting, learning at home, television-watching habits, parental expectations of the child (chores, time use), and home cleanliness and safety” (Carneiro et al. 2005:13). Gaps in cognitive skills may subsequently grow larger as schooling is less effective on those with poorer early cognitive skills. Heckman concludes that for persons with at least one parent living in the US as early as 1979 differences in cognitive and non-cognitive skills account for all the difference in wages between white and Hispanic men in the US but do not fully account for the lower wages of black men.

Non-cognitive or “soft” skills are “culture.” In Heckman’s study it is the culture of an individual and of a household. This is a correct and commendable use of the concept. In many instances, though, talk of “soft skills” is little else than a new version of the old and rampant “culturalism” described by Ayşe Çağlar in 1990. It consists in ascribing a single, uniform “culture” to a set of people and to categorize them in this way. This is no different from other forms of racism. It tends to be forgotten that culture is not geographically bounded but socially. All the phenomena collected under the heading “soft skills” and ascribed to a varying set of origin countries or even citizenships are also featured in Edward P. Thompson’s magisterial history of “The Making of the English Working Class” and in literature on other countries that followed in its footsteps. Disciplined workers do not originally grow in the home. They have to be made in the enterprise and by the state. In doing so employers and officials acquired considerable “soft skills” of their own that are now lost again. It is forgotten how hard and degrading humans find having to adapt to somebody else’s setting the clock for them when they have been used to following their own as is true of anybody originating from small scale farming or husbandry or also for anybody unemployed for a longer period of time. This habit of viewing culture as a matter of place rather than of occupational or social position is perhaps the greatest deficit in the integration debate as it evolved over the past forty years. It goes along with a widespread assumption that culture is willed, and that culture change can successfully be demanded. In practice it has been proven time and again that such demands are fruitless and in fact usually counterproductive. The only way to change culture is to change the occupational and social rank persons find themselves in. And this takes time. There is no quick fix to complaints one may feel about the culture of some other part of the population. Here there is, perhaps, a useful application for “tolerance” and for the idea that personal contacts help to improve it.

Another big item under the employability heading, and not featured in Heckman’s analysis, is language competence. For measurement reasons this is also another item that is difficult to study empirically. Language competence has several dimensions. Regardless of hearing or reading, speaking or writing one such dimension is grammar including spelling. A second one is the size and selection of the vocabulary. A third one is accent. Perhaps rhetoric, i.e. the way in which people engage and bond through language, should be considered as a separate fourth dimension. Let us focus on the first three. It is not usually appreciated how small a part of our skills on any of the three is relevant for the factual information we try to convey or to pick up. Most of the grammar contains no information relevant to the subject, and certainly the accent does not. Command of the grammar is almost entirely a social marker, as is accent. The size and selection of the vocabulary also contains a lot of information on the social standing of those speaking, hearing, writing or reading. Accent additionally has a strong geographical component which is perhaps less true of the vocabulary and much less true of grammar. Most of the information contained in language is social rather than factual, and social means it serves to determine relative hierarchical positions. Does this person understand the words I use? Does he or she speak better

than myself? Does this person sound as if she or he is not from “here” or of another social rank than myself? In fact, for every new generation varying the language to make it distinct from the parental generation is of central importance. Cliques and clubs create their own variations and recognize each other by this. So the only reasonable question about language concerns the processes by which a particular variation comes to be regarded as hierarchically superior to another. This is clearly a question of power. Thus if accents were ranked into desirable, acceptable, tolerated, and prohibited ones, this might correlate perfectly with the social ranks of their speakers. The gist of all this is that a distinction must be made between the true language demands of work and the social acceptance for a person’s language. This is no different from the relevance of the visual appearance for employment.

In the end, employability is of course about expected productivity. Recent research in the US, for instance, points in the direction that New York city employers are as likely to hire a young white man with a felony conviction as a young black man without a criminal record. The question is how much lower the wage of the young black man would have to be in order to have an equal chance at getting hired. Governments, in Europe, in a sense have been answering this question by subsidising wages to some degree or in some form in order to get people (back) into employment. Training and probationary periods were introduced also with the intent to make employment less of a long-term financial risk for small firms. These schemes would need to be evaluated in terms of the effective wage subsidy they contained in order to answer the question. The other question that also remains open is whether employability is really only about expected productivity. Employers are also conscious of social rank and may wish not to appear as if they had to hire those left over by other employers.

Is lack of ‘social capital’ to blame?

Access to employment is often a question of meeting or contacting the right person at the right time or of knowing somebody who knows somebody. As long as information on jobs circulates in networks, and often only there, links into enterprises and offices are important. Immigrant households are generally assumed to have fewer such links but there is little empirical information to go by. A host of activities at local and sometimes sectoral level have been undertaken in place of networks. They include informing employers about the skills and the experience of minority workers, mentoring schemes, temporary employment schemes, job fairs etc. (see www.ilo.org/migrant/discrimination for examples of this and other employment related activity).

In social capital theory a distinction is being made between bonding, bridging, and linking. The combination of the three is thought to matter. Bonding is within the group, bridging is between groups, linking is up and down the social hierarchy. The question is how these are acquired for certainly they cannot depend entirely on personal initiative. There must be somebody to bond with, for instance, and bridging or linking attempts will be fruitless if there is no response from other groups or from the higher-ups. The better off in society tend to create their own habitats within which to place their children and themselves. Networks tend to be created not so much by choice but by the context in which people are placed. Children have little control over the school or the particular class they will be placed in but the people they meet there may help them into a job twenty or forty years later. Also, there is a limited capacity for individual networking. So it is important to be a member of clubs and associations. Civic associations at local level may be of key importance, not least because they may actually include a degree of social diversity. To be excluded from them can severely limit job and business opportunities. Civic associations include, for instance, the voluntary fire brigade in a town, the sports clubs, the religious associations, the various associations organized around health, recreation, community improvement, politics, and so on. Many of these are in practice not open to immigrants and their children, even without formal bans on their membership or participation. If a government were intent on improving the employment chances of minorities, here might be a good place to start.

Is discrimination to blame?

It was mentioned earlier that Heckman concluded the level of black male wages could not entirely be accounted for by cognitive skills and non-cognitive behaviour. This leaves room for the social capital explanation and for a further one, i.e. discrimination. Indeed there is now massive evidence collected in real life hiring processes to show that discrimination against certain names, certain accents, certain skin colours does in fact take place in labour markets (Zegers de Beijl 2000; Bertrand/Mullainathan 2003; Fibbi et al. 2003; Allasino et al. 2004 among many others). In this kind of research matched pairs of testers apply for the same job. Most often the testers are young men applying for entry-level jobs. It is nearly impossible to do this in higher-grade jobs where diplomas would need to be shown. The method is only suited to discovering discrimination in access to jobs.

No similar method has been devised to test for discrimination in advancement within companies. Advancement has become important in gaining secure, long-term employment. If immigrants have access only to seasonal and intermittent employment their employment rates will of course also be lower.

There is not as much debate about the causes of discrimination as would be warranted. One purpose of discrimination could be to keep families in occupations for which there is no alternative personnel. People cannot be permitted to advance out of the lowliest occupations unless there is ample replacement. In fact the replacement has to be there first. In practice it has to displace the previous incumbents. This would normally be the role of new immigration. If the new immigration is either too skilled or not sufficiently numerous, or in a legal situation that precludes employment, discrimination can become a necessary instrument to force the most recent immigrants and their descendants to remain in the most poorly regarded, least remunerative occupations.

Changing people's ways on discrimination is the object of many an effort. Often these still start from the assumption that attitudes must change in order to change behaviour. This assumption is in need of being challenged. Firstly, it is the behaviour that matters. Attitudes have no substance, they are invisible, and remain so unless there is behaviour to infer them from. The old human fallacy lies in explaining the visible by reference to invisible causes, ghosts, spirits, deities, unknown forces, fixed attitudes. Taylor et al. (1997) produced evidence to show that efforts to make attitudes conscious and thereby to change them had no effect on actual behaviour. But behaviour could be influenced to some degree by directly training it in a, perhaps, more Pavlovian way. Like Duns Scotus (Bloch 1985:113) and La Mettrie before him, Nietzsche (1978:124), on the psychological evidence of his day, strongly suspected consciousness to have little influence on behaviour, and recent brain research, much to the chagrin of free-choice-conservatives, seems to prove him right. Behavioural action commences in the brain before it becomes aware of the action it is setting in motion. Consciousness, as it seems, mainly serves the purpose of aligning actual behaviour with external demands on behaviour. It can control impulses to some degree thus producing a greater degree of conformity with norms set by others. Mostly, though, it seems to be useful in finding verbal interpretations and justifications for past behaviour and for succumbing to impulses we find a forgivable displeasure not to follow. Consciousness is good at excuses and at rationalisation. So, where does behaviour come from, if not from attitudes? It comes from norms and from current circumstance. There is a strong element of imitation on the one hand, and also a strong element of simply being told what to do. We should also expect there to be pre-social behaviour that we are born with because it is evolutionarily selected. In consequence it is not attitude that changes behaviour but behaviour that changes attitude.

If behaviour, apart from being a consequence of physiological impulses, is largely a response to norms it is obviously the norms that need to be changed in order to influence behaviour. This opens a door for the law and law enforcement to be of influence. We need to be aware, though,

that the law competes for influence with all the informal, local, situational norms and power struggles in daily life. Its influence will be felt but only over time and only if enforcement is sufficiently serious and sustained.

7. Conclusions

This exploratory study confirms that considerable gaps between the employment rates of working age citizens and non-EU-15 citizens of both sexes exist at the national and the local level. But these gaps are not the same in all places and for all populations. The study also shows that trends over time are not uniform. They have been growing in Germany and Austria but narrowing in Denmark. An important improvement on this study would be to look at citizen and non-citizen populations by the year in which they entered the labour market rather than in the aggregate as we were forced to do here.

A proper causal analysis could not be carried out within the confines of this study. In order to explain the employment gaps three dimensions of employability – cognitive skills, non-cognitive skills, and language skills – were considered along with networks and discrimination. An attempt was made to assess their conceptual usefulness and their function inside and outside the labour market. Overall, the good news seems to be that education, skills, sociability of immigrants and minorities probably do get rewarded in the labour market and in employment but the bad news is that they do not get rewarded as much. Policy makers are called upon to assist fairness in getting a chance.

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