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Session I – Invited paper

**Migration and migrant statistics in the 2001 Round of Population and Housing
Censuses in Europe. Snapshots of reliability and comparability.**

Submitted by Statistics Norway¹

Introduction

My point of departure is the well-known lack of reliable and comprehensive statistics and other information on migrants and migration across Europe. Some countries have population by citizenship as their only source for information concerning the population with foreign background, others have some information on country of birth of the person herself or of the parents of the person, and some countries give ethnicity (mostly self-declared and on a non-comparable classification). The number of immigrants in Europe, and their integration is said to be of crucial political importance, on the national and international level. Without knowing the number of immigrants and who they are, it is very difficult to say anything on their impact on the host country, or on their integration. It surprises a person from a EU-nonmember state that this political importance can exist side-by-side with lack of information.

A number of meetings and publications on migration statistics organized by UN/ECE and Eurostat show that data on migration flows are even less than stock data suited for comparisons, as they are partly missing, and we have seen convincingly demonstrated by Michel Poulain that flows that in principle should be the same (between country A and B, measured by country A and by country B) are differing to a magnitude that makes it difficult to build any migration analyses on them.

My ambition was to see if the recent censuses in Europe could be used for improving the situation, for flow statistics as well as for statistics on stocks. One year ago, we believed firmly that the standard tabulations from the Census to be made for Eurostat and UN/ECE² should be available from Eurostat for the majority of the Member States of the European

¹ Paper prepared by Lars Østby.

² Guidelines and Table programme for the Community Programme of Population and Housing Censuses in 2001. Eurostat Working Papers. Population and social conditions 3/1999/E/no10, Luxembourg May 1999

Economic Area and the 12 applicant countries for membership in the European Union. Based on these census results, the intensions were:

1. To compare the different sources for migrant stock information within the Census: Population by citizenship, and population by country of birth, and compare these results to other, independent data, if any sources of this kind existed. We also hoped to have access to data by parental country of birth (optional variable in the Census) to see the relationship between citizenship data, country of birth data, and parental country of birth. These variables should to some extent be possible to use also for comparing integration of migrants, since we could give some social background data by migration status from the different definitions.
2. To compare migrant flow data, to see if the Census could improve migration estimates when using information on address one year prior to the Census, and to compare stock data with information on flows. However, the Census can never be a major source for flow information.
3. As my personal interests is more on data content than data quality, it was also my ambition to see what kind of substantial conclusions that could be drawn from this first round of Census results.

The deadline for the tables for Eurostat was 30 June 2003, and it turned out that not many countries would send in their tables before the deadline. Consequently, we had to ask the countries to send, if possible, some tables before the deadline. The countries had been asked not to wait with the tables until the last one was ready, but to send batches as they became available. In cooperation with Mr. Aarno Laihonen, responsible for censuses at Eurostat, we decided in a letter just before the end of 2002 to ask for the standard program (see reference in footnote 1) tables 3, 4, 5, 12, 15, 17 and 23, and table 33 if also some other sources existed for this table. We also asked for tables on parental country of birth. We did not receive anything on parental country of birth, and only one country had a table 33 to offer. In the presentation, the original numbers from the standard program of tables will be used for the seven tables we received.

These Census data could be used for analyzing cross-country differences, for data quality assessments as well as substantial analyses of migration and migrants. In due time, I expect both purposes will be addressed frequently. For the purposes of this presentation, we cannot go that far. For the data quality assessment, we have the European LFS as the best among very few comparable sources. Mr. Jonny Johansson of Unit E1 in Eurostat was kind enough to give me not only LFS-data for our purposes, but he also processed the data in the manner needed for these comparisons. I am very grateful for his valuable help. LFS-data is included in the tables 3, 4, and 15 in the paper.

Related to some of the tables, I will present some ideas for how substantial analyses could be approached, but it has not been any opportunity for starting these analyses.

Experiences with the data collection

I must admit that I was rather disappointed when I received the answers for the countries; not with those I got, but with those I did not get. I had hoped for more than 12 countries, and I had hoped to receive data that was closer to the specifications given in the letter from Eurostat. But, of course, we are very grateful to those of you who took the trouble to speed up the preparation of these tables. We received answers from Austria, Denmark, Finland, France, the Netherlands, Sweden, Norway, Estonia, Hungary, Latvia, Slovakia and Cyprus.

Cyprus was the first one to send their data, and together with five other countries (mostly new member states in the EU), they could send all seven tables.

I have indeed made my reflections around whose priorities a humble researcher from the far North can influence, and whose cannot be influenced. Seemingly, it is still in the era of electronic data processing easier for small countries with a limited number of immigrants to send data than it is for countries with millions of immigrants, or is the good will not evenly distributed across Europe? There are a number of significant migration countries in Europe that are missing. I am very sorry for that, as my analyses are less interesting. The Nordic countries have based their Census on registers, so their relevance in my context is not very strong as the main parts of their Censuses by definition contain the same information as the registers. We can, however, use their information to compare with the LFS.

None of the countries not having been able to send data informed me about their problems, or offered to send only some tables. It would have been nice to know what to expect and what not to wait for. Further, it has also been a number of national solutions for the tables that have put gray hair in the head of my assistant. We have not worked with a big number of original national tables before, and I hope in the future to base comparative analyses on data controlled and prepared by Eurostat. With the background in this work, it is easy to appreciate their efforts in data control and entry.

What I have learned is that establishing comparative data collections seems to have much goodwill but low priority in many countries. I hope this does not mean that comparative data lacks importance, but that other tasks are even more important in a busy day. The Census data I got is still one of the small footpaths that can lead us to improved migration data in Europe. Consequently, I will use the data I have with the greatest appreciation to those who have speeded up the production of tables and sent them to me.

Results

Table 3 Usual resident population by country of citizenship.

The proportion foreign citizens varies between one and 20 per cent in the responding countries, and even down to 0,1 percent in the LFS. Estonia is at the top, and Slovakia, Hungary and Finland at the bottom. Austria and Cyprus were close to nine per cent. Except for Finland, the rest of the "old" member states had around five per cent foreign citizens in their population, even though their migration history is quite different.

We have also an estimate of the proportion foreign citizens from LFS. The two sources gave surprisingly consistent results; Latvia is the major exception with four per cent foreign citizens in the Census and 14 per cent in LFS. The population of Russian origin must have been treated differently in the two sources. In Slovakia and in the register countries (Denmark, Finland, Norway and Sweden) the LFS underestimated the proportion foreign citizens, probably due to selective non-response in the LFS. The proportion non-EU foreigners were mostly in better accordance in the two sources than were the proportion EU foreigners. It would probably be very interesting to analyse these differences between LFS and the Census more thoroughly, for the benefit of both the LFS and the Census. I believed the Census to be the better source wherever there were differences, but the LFS performed better than I expected a priori.

The gender balance among foreigners in the Census was very good in the register countries and Slovakia, whereas it was a male majority among foreign citizens in Austria, France, Latvia and Estonia. Cyprus was the only country with a clear female majority among foreign citizens. May be North-Western European females working in the tourist industry easily fall in love with a Cypriote good-looking guy, and his climate?

Table 3. Usual resident population by country of citizenship. Percent

Country		Total population in 1 000s	Total	Parent country	Foreign citizens		
					Total	Other EU and EFTA	Non-EU
Austria	Census	8 033	100,0	91,1	8,9	1,4	7,4
	LFS	7 929	100,0	91,0	9,0	1,4	7,5
Denmark	Census	5 349	100,0	95,2	4,8	1,4	3,2
	LFS	5 321	100,0	96,5	3,5	0,8	2,7
Finland	Census	5 181	100,0	98,2	1,8	0,3	1,3
	LFS	5 166	100,0	98,6	1,4	0,2	1,1
France	Census	58 514	100,0	94,4	5,6	2,1	3,5
	LFS	57 616	100,0	94,3	5,7	2,0	3,8
The Netherlands	Census	15 987	100,0	95,8	4,2	1,3	2,9
	LFS	15 821	100,0	95,0	4,1	1,3	2,8
Sweden	Census	8 883	100,0	94,6	5,4	2,5	2,9
	LFS	8 885	100,0	95,1	4,8	1,6	3,2
Norway	Census	4 521	100,0	95,9	4,1	1,9	2,2
	LFS ¹	3 201	100,0	96,6	3,4	1,7	1,6
Estonia	Census	1 370	100,0	80,0	20,0	0,1	19,9
	LFS	1 361	100,0	80,9	19,1	-	19,1
Hungary	Census	10 198	100,0	99,1	0,9	0,1	0,8
	LFS	9 900	100,0	99,6	0,4	0,1	0,4
Latvia	Census	2 377	100,0	95,7	4,3	0,0	4,3
	LFS	2 365	100,0	85,7	14,3	0,1	14,2
Slovakia	Census	5 379	100,0	98,1	1,9	0,0	1,9
	LFS	5 376	100,0	99,7	0,1	0,0	0,1
Cyprus	Census	690	100,0	90,6	9,4	4,7	4,6
	LFS	649	100,0	91,5	8,5	4,3	4,2

¹ Age 16+

Table 4. Usual resident population by country of birth

All countries have significantly more foreign born than foreign citizens. This is quite natural as a person's country of birth is (almost) fixed, whereas citizenship can be changed, easily in some countries, rather difficult in others. Estonia and Latvia is on the top with 19 per cent foreign born. For Estonia, the LFS gives nearly the same percentage, but country of birth is not reported in the Latvian LFS.

It is between 10 and 12 per cent foreign born in Austria, France, the Netherlands, Sweden, Cyprus and Slovakia (special case, probably due to the split of Czechoslovakia). Finland and Hungary have the clearly lowest percentage, around three in the Census and even less in LFS. Do they have the most "atypical" languages in Europe?

Everywhere, there are far more born outside EU than in (other) EU countries, 3-4 times as many non-EU born as EU-born in many countries. The country with the best balance between EU- and non-EU born in LFS is Norway, the only non-member state that has answered. The EU-member states have a larger majority of non-EU born foreigners.

The number of foreign citizens is almost always much lower than foreign born. The number of foreign born is more than twice as high as foreign citizens in the Netherlands and Sweden, and, although small numbers, in Hungary. It is almost twice as many in Norway and France, and smaller differences in the rest of the countries. This is an important fact to bring along when deciding which kind of statistics that should be used for comparative purposes.

Foreign citizen in Austria, or probably even more pronounced in Germany, means something very different from foreign citizen in the Netherlands. In the Netherlands, most foreign citizens are newcomers, on their way into the Dutch society or on their way back home. In Austria and Germany, many immigrants have stayed for a very long period without being naturalized, and more foreign citizens will probably be born in these countries than in countries like the Netherlands and Sweden. The difference between the two measures is in most countries very significant for non-EU citizens. Finland is one exception, both sources give slightly more foreign citizens than foreign born from non-EU countries. Non-EU citizens, and in particular refugees, have often strong reasons for naturalizations. For citizens in another EU country, there are not many incentives for naturalization. Migration statistics based on citizenship can by no means be compared with data based on country of birth, and I hope this simple paper can contribute to avoid this mix of definitions.

Table 4. Usual resident population by country of birth. Percent

Country		Total population in 1 000s	Total	Parent country	Country of birth		
					Total	Other EU and EFTA	Non-EU
Austria	Census	8 033	100,0	87,5	12,5	2,6	9,9
	LFS	7 929	100,0	88,8	11,2	2,2	9,0
Denmark	Census	5 349	100,0	93,3	6,7	2,0	4,4
	LFS	5 321	100,0	94,7	4,9	1,1	3,8
Finland	Census	5 181	100,0	97,4	2,6	0,8	1,1
	LFS	5 166	100,0	98,4	1,6	0,4	1,0
France	Census	58 514	100,0	90,0	10,0	3,3	6,7
	LFS	57 616	100,0	90,2	9,8	3,0	6,8
The Netherlands	Census	15 987	100,0	90,4	9,6	2,0	7,6
	LFS	15 821	100,0	89,4	10,6	1,9	8,1
Sweden	Census	8 883	100,0	88,7	11,3	4,3	6,8
	LFS	8 885	100,0	91,2	8,8	2,8	5,9
Norway	Census	4 521	100,0	93,1	6,9	2,4	4,6
	LFS ¹	3 201	100,0	94,0	6,0	2,3	3,7
Estonia	Census	1 370	100,0	80,8	19,2	0,2	19,1
	LFS	1 361	100,0	82,3	17,7	0,1	17,6
Hungary	Census	10 198	100,0	97,1	2,9	0,2	2,7
	LFS	9 900	100,0	98,6	1,4	0,1	1,2
Latvia	Census	2 377	100,0	81,5	18,5	0,2	17,6
	LFS	Not stated	100,0	-	-	-	-
Slovakia	Census	5 379	100,0	87,8	12,2	0,1	12,2
	LFS	Not stated	100,0	-	-	-	-
Cyprus	Census	690	100,0	87,1	12,9	5,0	7,9
	LFS	649	100,0	90,1	9,9	3,6	6,1

¹ Age 16+

Table 5 Usual resident population by place of residence one year prior to the Census

For this table (not shown), we are down to seven answers, and some of the results are very difficult to believe. One country had 10 per cent of the population living abroad one year prior to the Census, in another exactly fifty percent changed address during this year. There must be technical reasons, and not real migration differences behind such figures. Other countries had around 0,5 and 10 per cent, respectively. This table can be very useful for comparative analyses of *internal migration*, to supplement the analyses done by Phil Rees et. al³ for the Council of Europe. Their comparisons were based on theoretical measures, but as far as these scattered Census results can be judged, the theoretical results are interestingly enough close to the Census. The use of the Census for analyzing internal migration has to wait for more countries and better data quality control.

Table 12 Population in private households by citizenship and household size

Nine of the twelve countries have sent this table, but we have not been able to establish any independent basis for comparisons. Both the LFS and ECHP (for some countries) could have been used. In one of the countries the figures are definitely wrong, and had to be omitted, other consistency problems have been solved by using only the defined answers.

In the new member states in EU, the non-nationals live in small or very small households, whereas in Denmark, France and the Netherlands, the proportion non-EU foreigners living in households with five or more members is twice as high as in the total population. If making the same table as table 12 by age (not shown), we would have seen this difference be even greater among children and young persons. Especially in France, the young non-EU foreign citizens live in large households, whereas in the Netherlands, they are closer to the distribution of the nationals.

With Cyprus as an exception, around one third of the population above the age of 60 live alone in these countries; between 28 per cent in Hungary and 38 per cent in Denmark. The proportion living alone is much the same among other older EU citizens, but even among non-EU foreign citizens, the percentage living alone is around or above 20. We cannot take for granted that immigrants from distant countries have a family around them to give care and support in old age. The proportion old among the foreigners is expected to grow quickly in the years to come, and might turn out to be important that the Census can be used for analyzing this future development.

Household and family analyses are missing on a comparative basis in Europe, and even more so analyses of immigrant household structure. The Census, when it becomes available for the majority of countries will be able to fill this gap. Even the very scattered data I have got access to, is already interesting.

³ Rees and Kupiszewski: Internal migration and regional population dynamics in Europe: a synthesis. Council of Europe population Studies no. 32. Strasbourg 1999.

**Table 12. Population in private households, by citizenship and household size.
Percent**

	Den- mark	Finland	France	The Nether- lands	Estonia	Hungary	Slovakia	Cyprus
All								
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1 person	15,5	16,9	12,9	15,6	14,4	10,2	11,0	5,2
2 persons	28,1	28,4	25,9	28,6	24,4	22,3	18,0	17,7
3 persons	15,9	18,5	20,2	16,9	24,3	23,0	20,8	16,8
4 persons	20,0	20,1	22,9	24,0	22,9	25,6	30,3	28,6
5+ persons	20,5	16,2	18,1	14,8	14,1	18,8	19,8	31,6
Non-National other EU citizens								
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1 person	15,1	18,1	11,1	24,1	30,3	18,3	22,9	7,5
2 persons	31,0	32,0	28,2	30,5	28,7	29,7	25,2	27,2
3 persons	19,2	17,8	21,5	17,9	17,8	21,1	25,4	17,1
4 persons	18,9	18,4	23,4	18,5	14,3	20,0	17,0	27,4
5+ persons	15,8	13,7	15,8	8,9	8,9	10,9	9,4	20,8
Non-Nationals non-EU citizens								
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1 person	6,9	10,7	8,8	19,2	13,5	13,5	16,6	8,9
2 persons	16,3	21,5	13,4	18,0	26,7	21,5	17,6	24,4
3 persons	17,9	23,5	13,6	16,6	28,2	25,2	20,5	22,6
4 persons	22,4	21,6	16,4	18,3	22,5	23,3	26,7	20,3
5+ persons	36,6	22,7	47,8	27,9	9,0	16,5	18,5	23,9

Table 15 Employed persons aged 15 and over by citizenship and occupation

The eight countries in table 15 have more or less the same distribution between the three main occupational groups. In the Census, they have 30-40 per cent in ISCO1-3 (Legislators, senior officials and managers, professionals, and technicians and associate professionals), 20-30 per cent in ISCO 4-5 (Clerks and service workers) and 40-50 per cent in ISCO 0, 6-9 (Unskilled or semi-skilled). Citizens from other EU countries have a smaller proportion in ISCO 4-5, and more in ISCO 0 and 6-9 in Denmark and France. For the new member states in East and Central Europe, foreigners from EU countries are frequently among professionals, according to the Census as many as 90 per cent in Latvia. This might illustrate the different role of EU-foreigners in the old and new member states. Foreigners from non-EU countries have a different distribution. They are more often in unskilled or semiskilled work, and less in the group of professionals.

From other sources we know that the employment rates are much lower and the unemployment is much higher for non-EU foreigners. In table 15, we can see that when non-EU foreigners are employed, they are in the lower occupational categories. The data for this and other tables should be used for comparing the differences between naturalized and non-naturalized foreigners, and most important to see whether the skill profiles can justify the differences in occupational structure shown in table 15. It could be of value to

do more research on the different impact in the labour market and on integration when data from more countries become available. This would in my opinion present us with highly needed comparative information on integration and discrimination across Europe.

Occupational distribution can also be taken from the LFS. For some countries, however, we have very different results in the Census and the LFS for occupational structure. The difference is too large to be attributed to sampling errors, and I do not have the opportunity to go into the coding schemes. The difference is very large for Denmark and Finland, but insignificant for France and Cyprus. The difference for the rest of the countries could have been explicable.

Table 15. Employed persons aged 15 and over by occupation. Census and LFS. Percent

	Denmark	Finland	France	Estonia	Hungary	Latvia	Slovakia	Cyprus
All								
ISCO-COM 1-3								
Census	28,2	37,2	36,9	39,2	35,3	38,3	35,9	28,4
LFS	41,2	45,0	36,1	36,0	31,0	34,1	34,6	28,1
ISCO-COM 4-5								
Census	23,2	24,8	25,5	18,3	22,5	20,0	18,7	30,7
LFS	25,8	20,2	26,4	16,7	23,3	18,9	20,4	30,2
ISCO-COM 0, 6-9								
Census	48,6	38,0	37,6	42,5	42,2	41,7	45,4	40,9
LFS	33,0	34,9	37,5	47,3	45,7	47,0	45,0	41,7
Non-National other EU citizens								
ISCO-COM 1-3								
Census	29,4	52,3	23,6	52,2	65,9	90,3	81,5	25,2
LFS	47,5	58,8	21,1	-	88,0	54,8	-	25,4
ISCO-COM 4-5								
Census	16,8	20,7	15,4	5,0	16,8	4,5	8,5	27,0
LFS	24,8	16,8	15,8	-	9,7	11,4	-	33,3
ISCO-COM 0, 6-9								
Census	53,7	27,0	61,0	12,8	17,3	5,2	10,0	47,8
LFS	27,7	24,3	63,1	-	2,3	33,8	-	41,3
Non-Nationals non-EU citizens								
ISCO-COM 1-3								
Census	12,4	32,3	20,9	22,8	35,3	29,6	36,0	16,4
LFS	29,0	38,4	18,8	17,5	35,5	27,4	56,1	15,9
ISCO-COM 4-5								
Census	16,0	23,9	19,8	15,0	27,4	16,8	18,2	13,8
LFS	25,8	25,8	22,2	14,7	20,5	19,4	5,9	14,3
ISCO-COM 0, 6-9								
Census	71,6	43,8	59,4	62,3	37,3	53,7	45,8	69,8
LFS	45,2	35,9	59,1	67,8	44,1	53,2	38,0	69,8

Table 17 Employed persons aged 15 and over by industry

The table shows that there are not great differences between the countries in industrial structure. Consequently, we do not reproduce it in the paper. NACE A and B (Agriculture, forestry and fishing) has between 2 and 8 per cent in the nine countries included in the table. NACE C-F (Mining and manufacturing) has between 23 and 36 per cent, and NACE G-Q (Services) has from 57 to 73 per cent. Foreigners, from EU countries or other countries have frequently even higher proportions in services, and sometimes less, some times more in industry. The large differences we saw in occupational distribution are not visible on this level of aggregation, but are certainly worth looking for at finer specified industrial groups. The second and third level of NACE (and ISCO-COM) should be sufficient for describing fundamental differences in immigrant economic activities.

Table 23 Private households by type and citizenship composition

As only six countries could send this table to me, it will not be reproduced. It can be used for studying integration and cross-national contacts at the household level, in addition to present an interesting basis for studying household differences between countries. Two of the six countries used their registers for household information. Estonia with the great population of Russian origin is always an interesting case. In Estonia, only 70 per cent of the one family household consisting of a married couple and children have members that are all Estonian citizens, in 11 per cent all are of the same non-EU country background, and as much as 20 per cent have members with different citizenship, 15 per cent involve at least one Estonian citizen.

Conclusions

Migration statistics and statistics on migrants in Europe is surprisingly inferior for comparative purposes. Even though this may always have been the situation, it surprises me that the situation can carry on like this, under circumstances where migration and integration is placed high on the European agenda. The scope of this paper was to have a first exploitation of the results from the 2001 round of Censuses in Europe, to see what quality improvements the Census brought with it, and to assess its quality against other independent sources. For this purpose, we asked in cooperation with Eurostat to have a first batch of tables from the standard program of tables. As only 12 countries sent some tables, and only six gave a complete set of seven tables, this exercise was not completely successful. However, the tables we got have shown to be very useful. Already now, it is clear that the Census results will give much information needed for migration analyses, and they give advice on where to look for quality improvements, and for substantial analyses.

Based on the work with this short paper, we will underline that "citizenship" is not a good variable for describing or analyzing immigrants, especially not on a comparative basis. Some countries will have only a minority of their "foreigners" as foreign citizens, other countries will have foreign born and foreign citizens as more or less the same group. The selectivity in the naturalization process makes comparisons of the two meaningless. No country reported parental country of birth. I hope that does not imply that no one used that variable.

We have also seen small pieces of useful and for me new information related to household composition. That should be exploited when more countries are ready with their data.

The LFS has as far as I can understand shown to have better potential as source for migration analyses than I expected when I started the project. To use the LFS for such analyses is by no means a trivial task, but it is possible that a combined use of the Census and LFS for analytical purposes will be the easiest way to establish some kind of regular statistical basis for following selected aspects of immigration and integration of immigrants in Europe.

The Census gives also basis for describing integration in the labour market on a comparative basis. For doing this, one will need more detailed classifications than we have for our purposes. This could also be used for analyses of discrimination, as discrimination increasingly is understood as differences in results, not as acts involving evil will.

I hope that international organizations will be able and willing to involve themselves in such activities as described in this Conclusion. These topics are too important, but also too complicated to be done as "private enterprise". The work seems to involve many practical problems, with collecting and processing the data, but our users need the analyses as basis for their policy implementation.