

## Comparison of Sample of Facilities with Population

We were able to test for representativity of the sample for five out of the seven countries involved in the survey: France, Germany, Hungary, Japan and Norway.

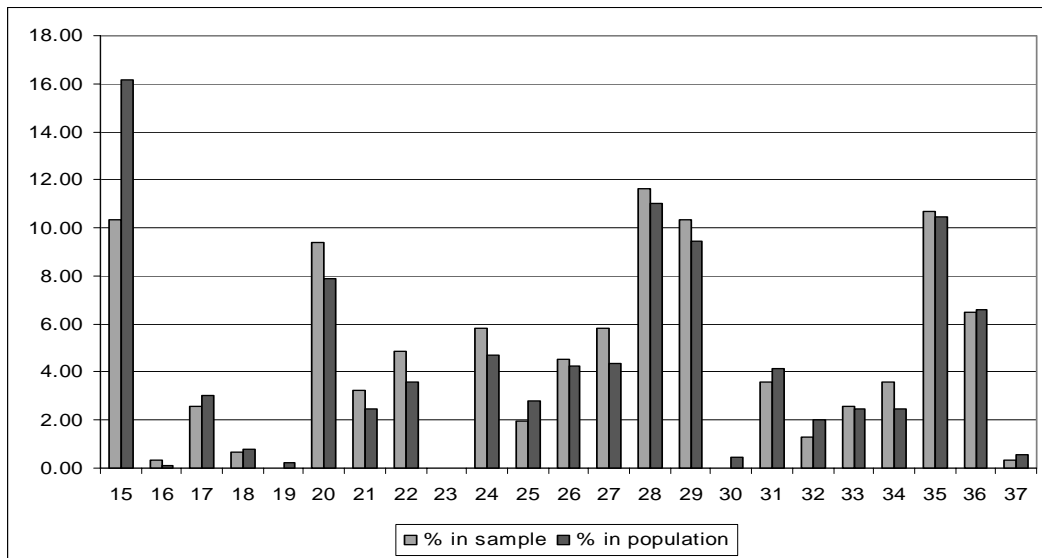
### Norway

Given the population size, the questionnaire was sent to all facilities with more than 50 employees in the manufacturing sector. Therefore, our survey collected information on 35% of the total population. We report the graphs of the sectoral and of the size composition of our survey compared with the actual distributions. We also performed two chi-square tests to test the representativity of our sample by sector and by size.

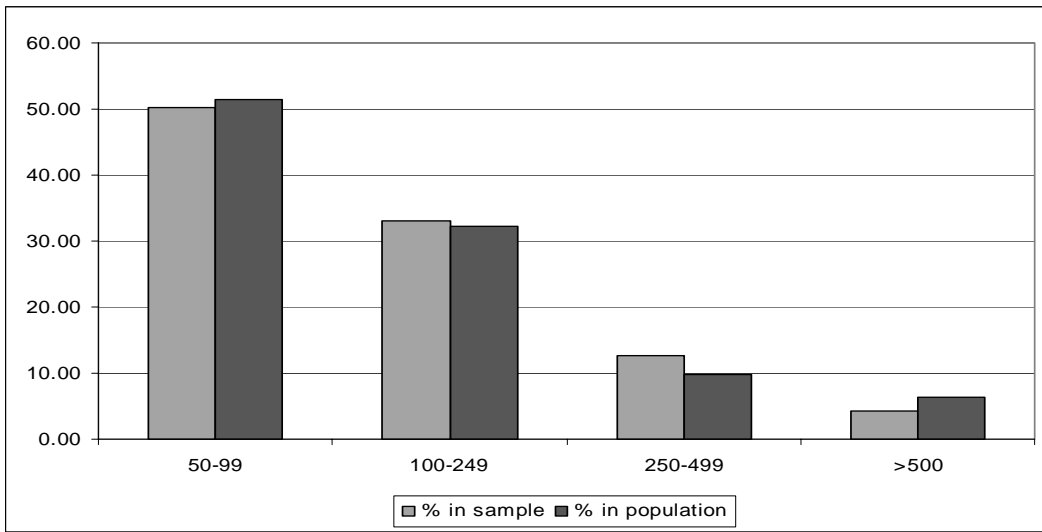
Sector:  $\chi^2 = 6.32$  and  $\chi^2(20, 0.05) = 31.41$   
 Size:  $\chi^2 = 1.55$  and  $\chi^2(2, 0.05) = 5.99$

In conclusion, the sample distribution is not significantly different to our population distribution in terms of sectors and size in Norway.

**Figure A5.1: Sectoral Composition in Norway (by Nace code)**



**Figure A5.2: Size Composition in Norway**



### Germany

Similarly to the Norwegian case, we report the graphs of the sectoral and of the size composition of our survey compared with the actual distributions. We also performed a chi-square test to test the representativity of our sample by sector.

Sector:  $\chi^2=59.94$  and  $\chi^2(20, 0.05)=31.41$

While visually, the comparison is reassuring at the 5% level our sample distribution is significantly different to our population distribution in terms of sectors in Germany.

**Fig A5.3. Sectoral Composition in Germany (by NACE code)**

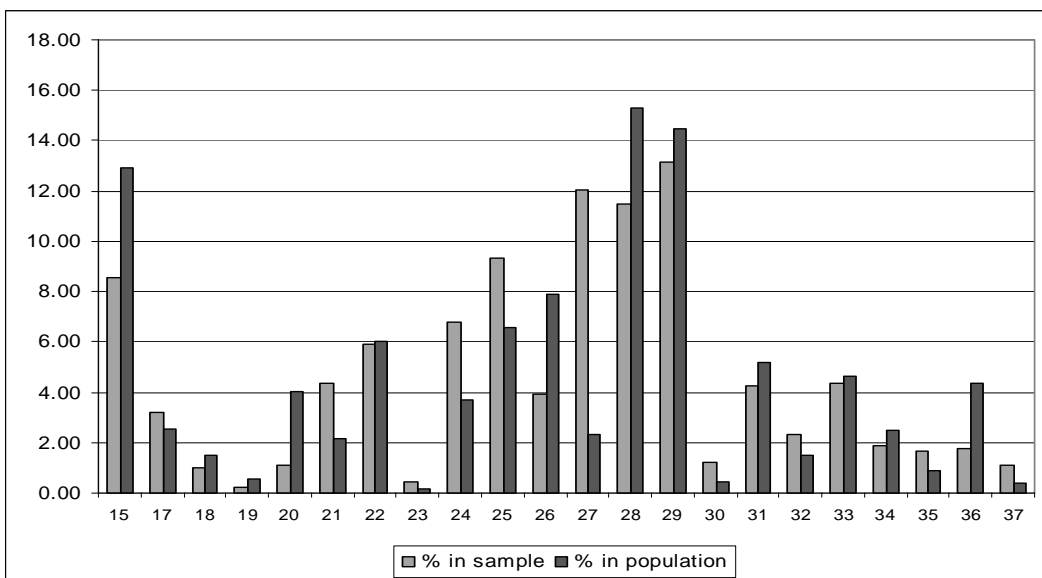
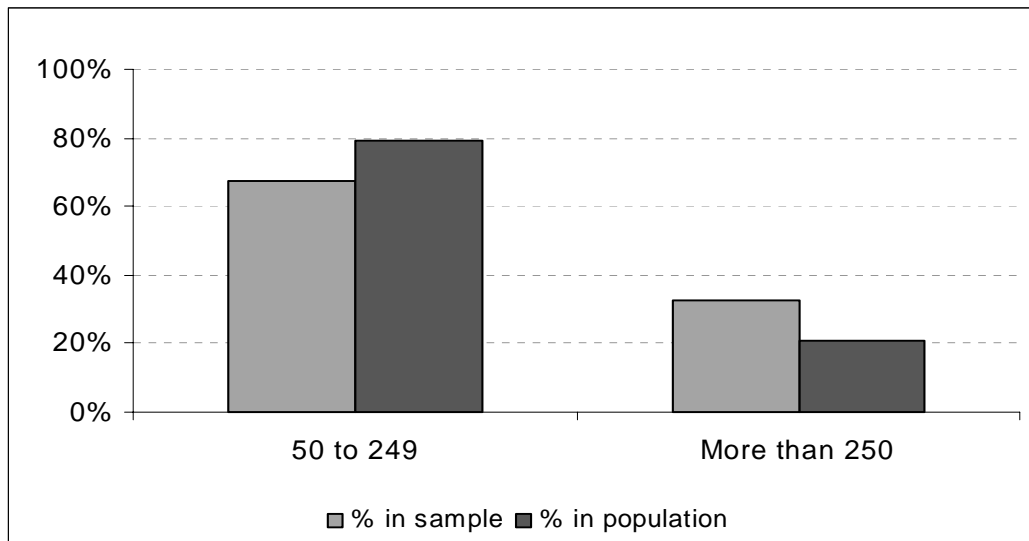


Figure A5.4: Size Composition in Germany



### Japan

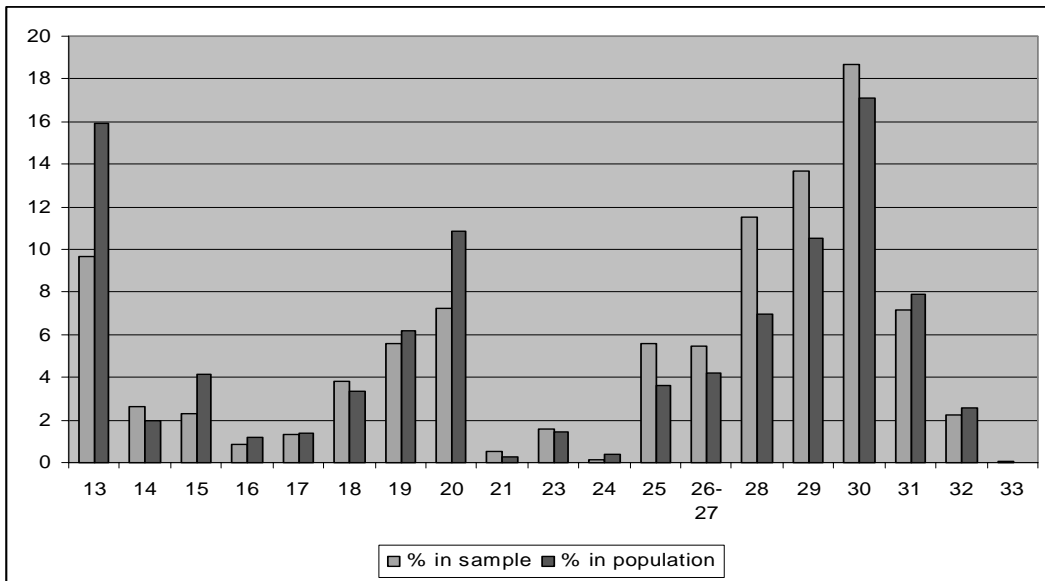
We report the graphs of the sectoral and of the size composition of our survey compared with the actual distributions. We also performed two chi-square tests to test the representativity of our sample by sector and by size.

Sector:  $\chi^2=15.39$   $\chi^2(17, 0.05) =27.59$

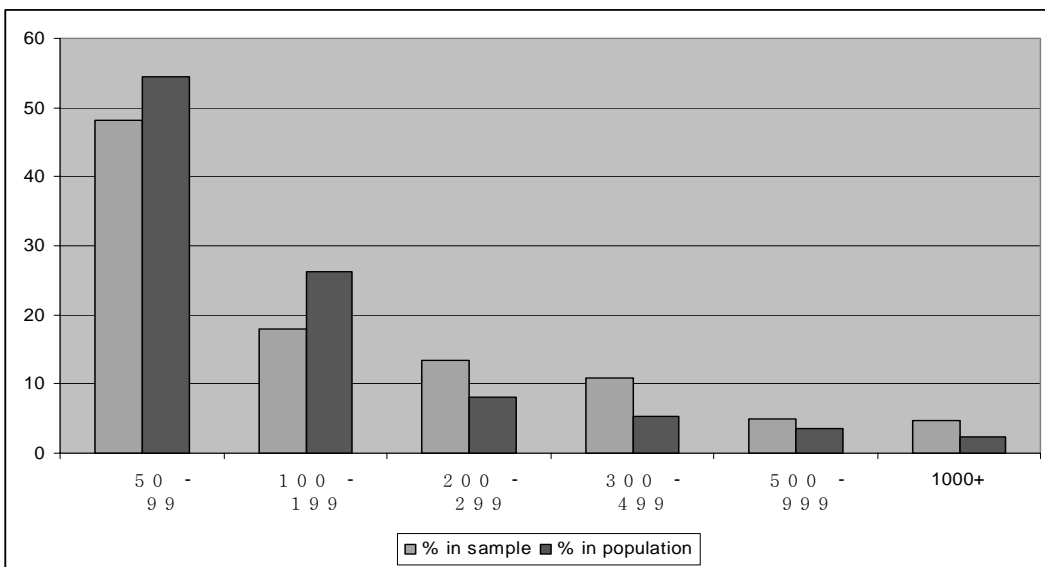
Size:  $\chi^2=12.93$   $\chi^2(4, 0.05) =9.49$

Our sample distribution is not significantly different to our population distribution in terms of sectors in Japan, but it is significantly different to our population distribution in terms of size.

**Figure A5.5: Sectoral Composition in Japan (by JSIC Code)**



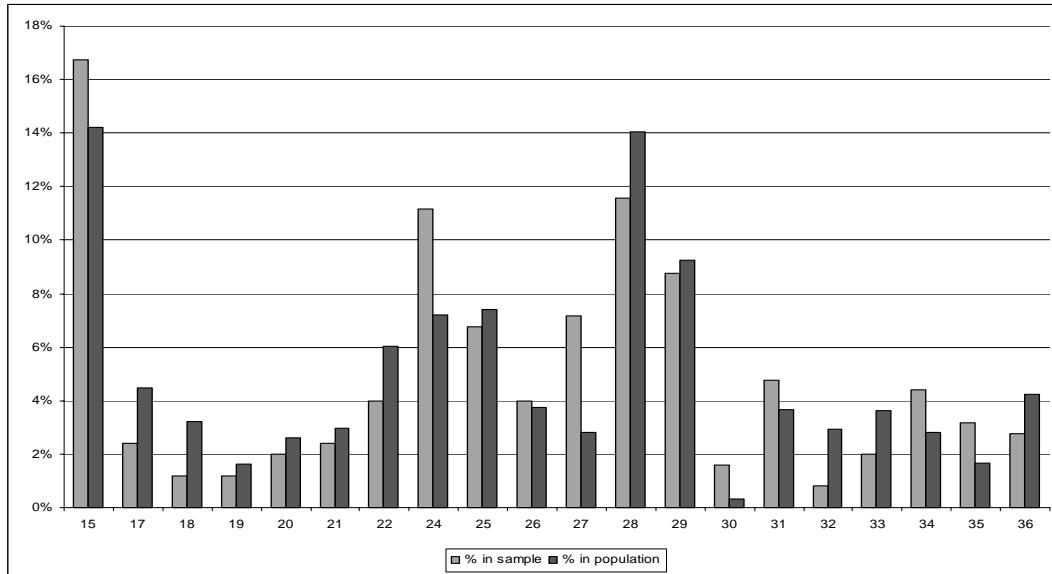
**Figure A5.6: Size Composition in Japan**



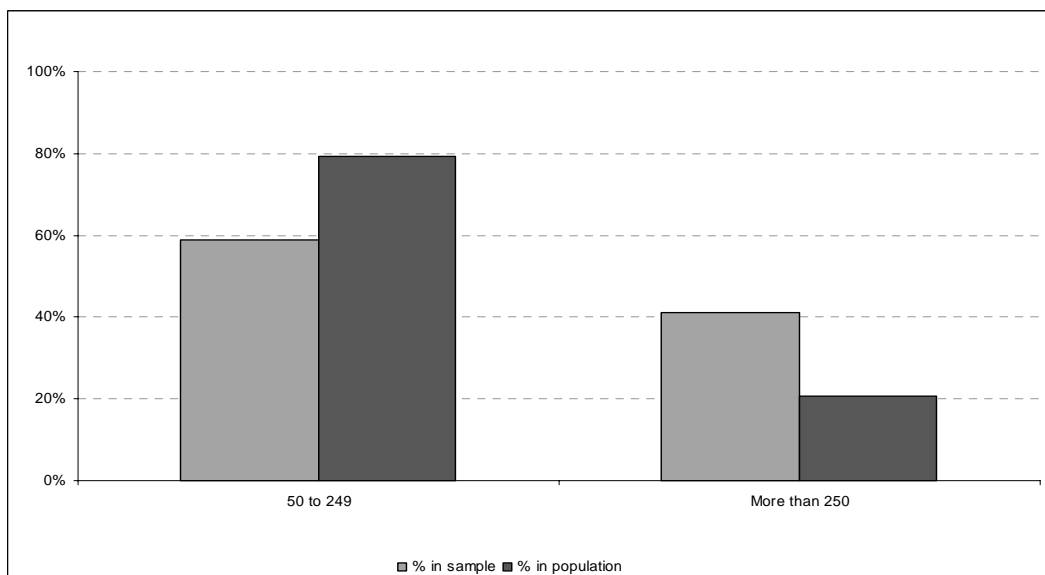
## France

The only data available to us was the distribution of firm (with more than 50 employees) by sector and by size. Since our survey targeted facilities and not firms we cannot use this data to test for our sample's representativity. Nonetheless, we provide the two graphs below in order to give a broad indication of the degree of representativity. Unless the number of facilities per firm varies significantly across sectors a similar graph would be obtained with the distribution of facilities.

**Figure A5.7: Sectoral Composition in France (by NACE code)**



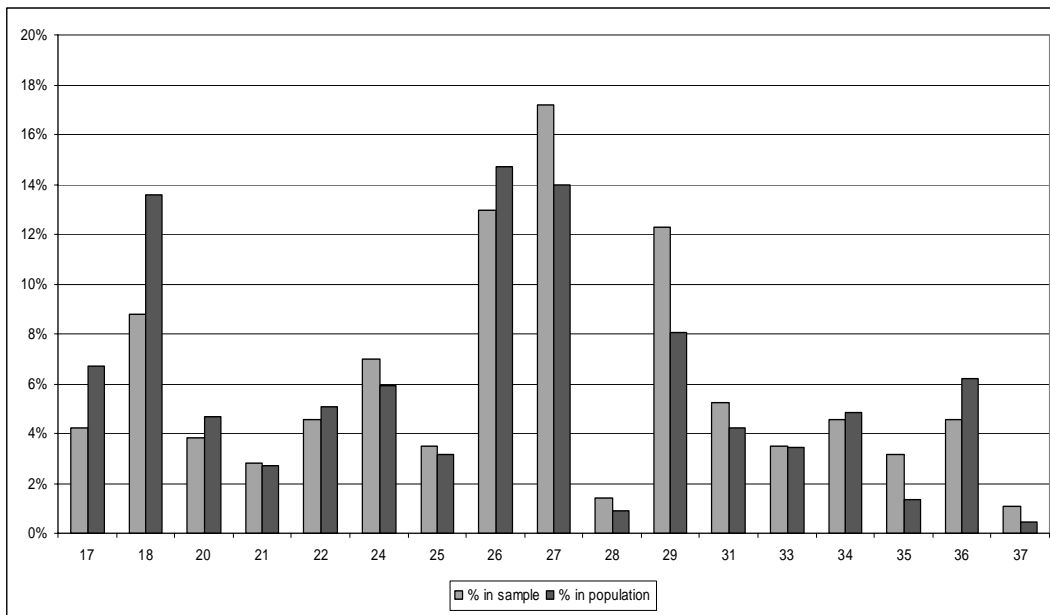
**Figure A5.8: Size Composition in France**



## Hungary

The only data available is the distribution of firm (with more than 50 employees) by sector and by size. Since our survey targeted facilities and not firms we cannot use this data to test for our sample's representativity. Nonetheless, as with the French data we provide the two graphs below in order to give an indication of the representativity. Unless the number of facilities per firm varies significantly across sectors a similar graph would be obtained with the distribution of facilities.

**Figure A5.9: Sectoral Composition in Hungary (by NACE code)**



**Figure A5.10: Size Composition in Hungary**

