

Are Immigrant Employees Disadvantaged in Western Europe?: A Comparative Analysis for Five EU Countries

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Purpose of the Study

- to examine the disadvantages /advantages of the immigrants in labour markets of Belgium, Germany, France, the Netherlands and the United Kingdom.
- to analyze the conditions in the current job, such as the inequality in the wages, the distribution of occupations among native and non-native individuals as well as the economic sectors, in which the immigrants are more likely to be hired

Hypotheses

- Regardless of economic sector, profession and other socio-demographic background characteristics, the individuals with immigrant background are paid lower wages compared to their native counterparts
- The immigrants have higher probabilities for working in less desired jobs and in less secured conditions

LITERATURE REVIEW

Four Types of Discrimination (Kogan, 2007)

- **Monopsonistic discrimination**: lack of competition for labour on demand side (Madden, 1973);
- **Error discrimination**: lack of information and false beliefs about the true productivity of the workers (England, 1992 and Cain 1976);
- **Statistical discrimination**: a false belief about the true productivity of potential workers, therefore using the information about the group (Phelps, 1972; Arrow, 1972; Aigner and Cain, 1977);
- **Taste discrimination**: the personal preferences of employers, employees or the costumers (Becker, 1971)

The effects of labour market regulations

- The degree of labor market flexibility in a given country is likely to influence employers' decision making in their recruitment policies, which particularly affect the immigrants (Kogan, 2006)
- Designs and regulations of temporary immigration programs do not treat the temporary immigrants exactly the same as otherwise identical natives (Bordvarson and Van den Berg, 2013).

Empirical Studies

- *Segmented labour market* in France, where immigrants engage in certain origin-specific occupations, (Meurs, et al, 2006)
- *Wage differential* between the selected immigrant groups and the native population in the Netherlands (Kee, 1995)
- *Unemployment* is the most important obstacle for the immigrants before their integration to German labour market. although no significant penalty in the entry to less skilled jobs are observed for the immigrants, *they cannot find the opportunity to enter to skilled or white collar jobs* (Kogan, 2004)

Empirical Studies (cont.)

- *Ethnic pay penalty* even after controlling occupational segregation in the UK (Elliot and Lindley, 2008)
- *Differences among employment characteristics* of the migrants in Sweden, the UK and Germany do not emerge only as a result of socio-demographic characteristics of the migrants, but also variation of social policies in each of these three countries (Kesler, 2006)

DATA AND METHODOLOGY

Data Sets

- Eurostat Statistics on Income and Living Conditions (EU-SILC) cross sectional data sets (2005-2012) [**MAIN DATA SOURCE**]
- Eurostat Labour Force Survey (EU-LFS) annual microdata (2005-2012) [**AUXILIARY DATA SOURCE**]

Target Population

- All men and women in 25-59 age group, who were currently working as employees and not in education at the time of the surveys

Descriptive Findings

Distribution of 25-59 individuals by broad country of birth categories by sex (EU-SILC), 2005-12 (%)

		Belgium			Germany			France			Netherlands			United Kingdom		
		Native	EU27	Non-EU	Native	EU27	Non-EU	Native	EU27	Non-EU	Native	EU27	Non-EU	Native	EU27	Non-EU
Total	2005	86.3	6.3	7.5	87.6	0.0	12.4	87.3	3.6	9.1	92.2	1.7	6.1	87.4	1.0	11.6
	2006	85.7	6.5	7.8	87.4	0.0	12.6	87.5	3.4	9.1	92.7	1.6	5.6	87.2	0.8	12.0
	2007	85.7	6.9	7.4	87.1	0.0	12.9	87.7	3.2	9.0	93.0	1.8	5.2	87.1	1.0	11.9
	2008	85.5	7.4	7.1	86.5	0.0	13.5	88.7	3.1	8.2	93.2	1.9	4.9	87.7	3.7	8.6
	2009	84.3	7.2	8.5	86.4	0.0	13.6	88.1	3.2	8.7	93.2	1.8	4.9	85.9	4.4	9.7
	2010	83.0	7.5	9.5	86.7	0.0	13.3	88.7	3.3	7.9	86.1	2.3	11.6	85.4	4.2	10.4
	2011	82.3	7.6	10.1	86.3	0.0	13.7	89.0	3.4	7.6	86.1	2.3	11.6	84.4	4.5	11.1
	2012	80.5	7.8	11.7	86.3	0.0	13.7	89.1	3.1	7.8	85.5	2.7	11.8	83.1	5.0	12.0
Male	2005	86.6	5.9	7.5	88.4	0.0	11.6	87.1	3.6	9.4	92.8	1.5	5.7	88.0	0.8	11.2
	2006	86.2	6.2	7.6	88.2	0.0	11.8	87.3	3.3	9.4	93.7	1.5	4.9	88.0	0.8	11.3
	2007	86.4	6.6	7.0	88.3	0.0	11.7	88.1	3.2	8.7	94.0	1.4	4.6	87.6	0.9	11.5
	2008	86.4	6.4	7.2	88.5	0.0	11.5	89.1	3.1	7.8	94.1	1.5	4.4	87.7	3.9	8.4
	2009	85.0	6.4	8.6	88.4	0.0	11.6	88.6	3.1	8.3	94.1	1.2	4.7	86.1	4.2	9.6
	2010	83.5	7.0	9.5	89.0	0.0	11.0	89.4	3.3	7.3	87.7	1.8	10.5	86.0	3.8	10.1
	2011	82.7	7.1	10.2	88.3	0.0	11.7	89.8	3.2	7.0	87.8	1.9	10.3	85.1	4.2	10.7
	2012	81.0	7.5	11.5	87.9	0.0	12.1	89.8	3.0	7.2	87.4	2.0	10.6	83.8	4.7	11.5
Female	2005	85.9	6.6	7.5	86.8	0.0	13.2	87.6	3.7	8.7	91.5	2.0	6.5	86.9	1.2	11.9
	2006	85.1	6.8	8.1	86.6	0.0	13.4	87.7	3.5	8.8	91.7	1.8	6.4	86.4	0.9	12.7
	2007	85.0	7.2	7.7	85.9	0.0	14.1	87.4	3.2	9.4	92.1	2.1	5.8	86.6	1.0	12.3
	2008	84.5	8.4	7.1	84.5	0.0	15.5	88.3	3.2	8.6	92.4	2.3	5.3	87.7	3.6	8.8
	2009	83.6	8.0	8.4	84.4	0.0	15.6	87.6	3.3	9.1	92.4	2.5	5.2	85.7	4.5	9.8
	2010	82.5	8.0	9.5	84.5	0.0	15.5	88.1	3.4	8.5	84.5	2.8	12.7	84.8	4.5	10.7
	2011	82.0	8.0	10.0	84.3	0.0	15.7	88.1	3.6	8.3	84.4	2.7	12.9	83.8	4.8	11.5
	2012	79.9	8.1	11.9	84.8	0.0	15.2	88.4	3.3	8.3	83.6	3.3	13.1	82.3	5.3	12.4

Note: No detailed country of birth data for Germany

Source: Eurostat EU-SILC cross-sectional data , author's own calculation.

Distribution of 25-59 individuals by broad country of birth categories by sex (EU-LFS), 2005-12 (%)

		Belgium			Germany			France			Netherlands			United Kingdom		
		Native	EU27	Non-EU	Native	EU27	Non-EU	Native	EU27	Non-EU	Native	EU27	Non-EU	Native	EU27	Non-EU
Total	2005	85.9	6.5	7.6	83.7	0.0	16.3	87.2	3.6	9.2	85.5	2.9	11.6	87.9	3.2	8.9
	2006	85.3	6.7	8.1	85.3	0.0	14.7	87.6	3.4	9.0	85.8	2.7	11.4	86.9	3.4	9.7
	2007	87.4	5.4	7.2	84.6	0.0	15.4	87.1	3.5	9.4	85.7	2.9	11.4	85.8	4.2	10.0
	2008	84.7	6.8	8.5	82.6	0.0	17.4	86.6	3.7	9.7	85.6	2.8	11.6	84.4	4.5	11.1
	2009	83.7	6.9	9.4	82.6	0.0	17.4	86.5	3.6	9.9	85.5	3.0	11.5	84.4	4.4	11.2
	2010	83.0	7.3	9.7	83.2	0.0	16.8	85.9	3.8	10.2	85.9	2.9	11.3	83.5	5.0	11.4
	2011	82.2	7.2	10.6	82.2	0.0	17.8	85.8	3.6	10.6	85.4	3.1	11.5	82.7	5.4	12.0
	2012	81.5	7.3	11.2	81.9	0.0	18.1	85.8	3.6	10.6	85.0	3.1	11.9	82.2	5.6	12.2
Male	2005	86.3	6.2	7.5	83.8	0.0	16.2	87.4	3.4	9.2	86.1	2.4	11.5	88.3	3.0	8.7
	2006	85.7	6.3	8.0	85.6	0.0	14.4	87.8	3.2	9.0	86.5	2.2	11.3	87.0	3.3	9.7
	2007	87.9	5.2	6.9	85.3	0.0	14.7	87.6	3.2	9.2	86.7	2.5	10.9	85.8	4.3	9.9
	2008	85.0	6.6	8.4	83.1	0.0	16.9	87.0	3.6	9.4	86.4	2.4	11.1	84.5	4.4	11.0
	2009	83.9	6.8	9.3	83.0	0.0	17.0	87.1	3.4	9.5	86.6	2.5	10.9	84.4	4.4	11.2
	2010	83.5	7.1	9.4	83.9	0.0	16.1	86.3	3.7	10.0	86.8	2.4	10.7	83.9	4.9	11.2
	2011	82.9	6.5	10.5	82.8	0.0	17.2	86.3	3.5	10.1	86.5	2.5	11.0	83.0	5.1	11.9
	2012	82.2	6.8	11.0	82.4	0.0	17.6	86.3	3.5	10.2	86.1	2.5	11.3	82.6	5.4	12.0
Female	2005	85.6	6.8	7.6	83.6	0.0	16.4	87.0	3.7	9.3	84.9	3.3	11.8	87.6	3.3	9.1
	2006	84.9	7.0	8.1	84.9	0.0	15.1	87.4	3.5	9.0	85.1	3.3	11.6	86.8	3.4	9.7
	2007	86.9	5.7	7.4	83.9	0.0	16.1	86.6	3.7	9.6	84.7	3.4	11.9	85.8	4.1	10.1
	2008	84.4	7.0	8.6	82.1	0.0	17.9	86.2	3.8	10.0	84.7	3.3	12.0	84.3	4.5	11.2
	2009	83.4	7.1	9.5	82.1	0.0	17.9	86.0	3.7	10.3	84.3	3.5	12.2	84.4	4.4	11.2
	2010	82.5	7.6	9.9	82.5	0.0	17.5	85.6	4.0	10.5	84.9	3.3	11.8	83.2	5.2	11.6
	2011	81.5	7.8	10.7	81.6	0.0	18.4	85.2	3.7	11.1	84.4	3.7	12.0	82.4	5.6	12.0
	2012	80.7	7.8	11.5	81.4	0.0	18.6	85.4	3.6	11.0	83.9	3.7	12.4	81.7	5.9	12.4

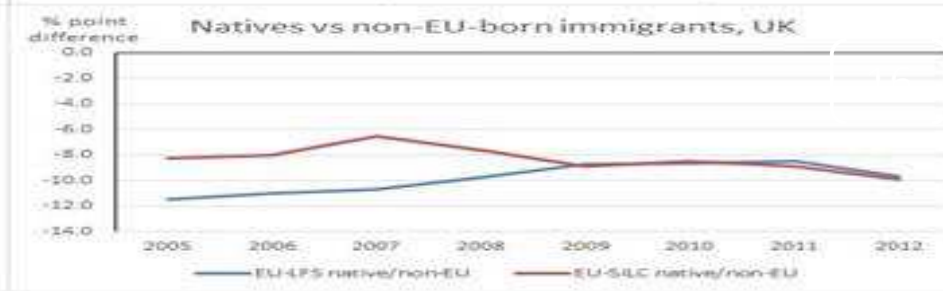
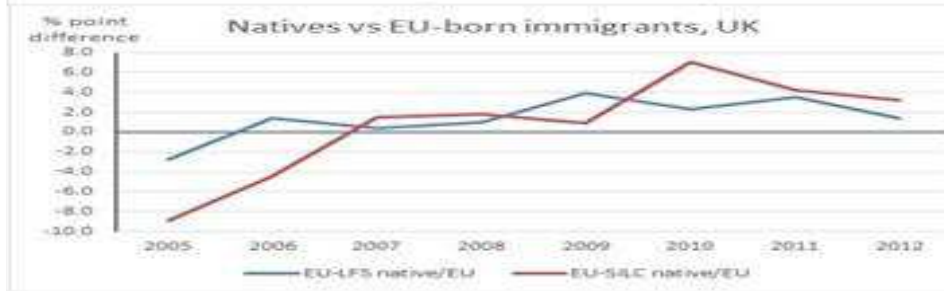
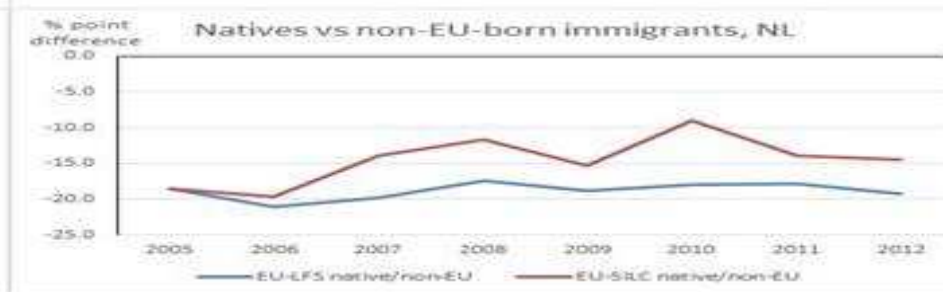
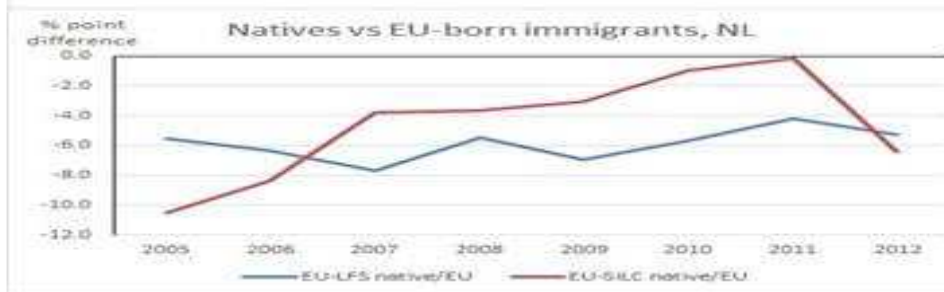
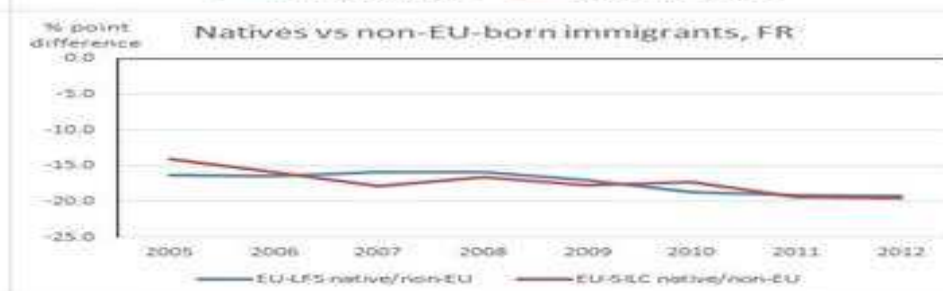
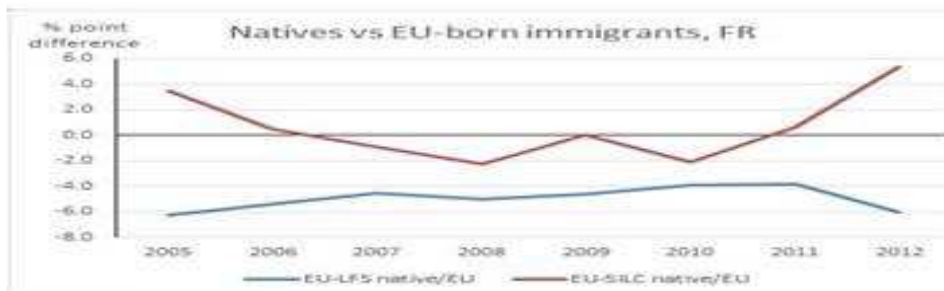
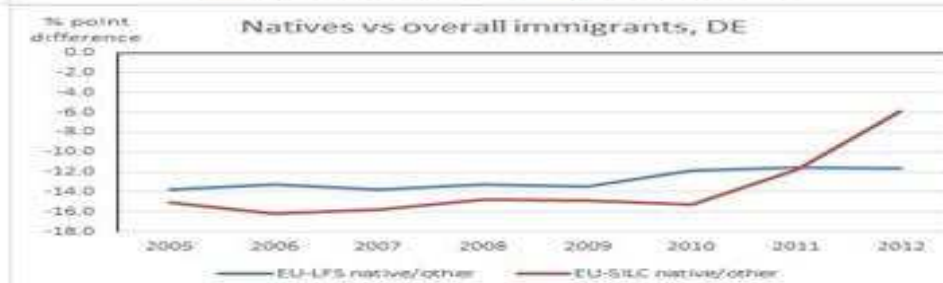
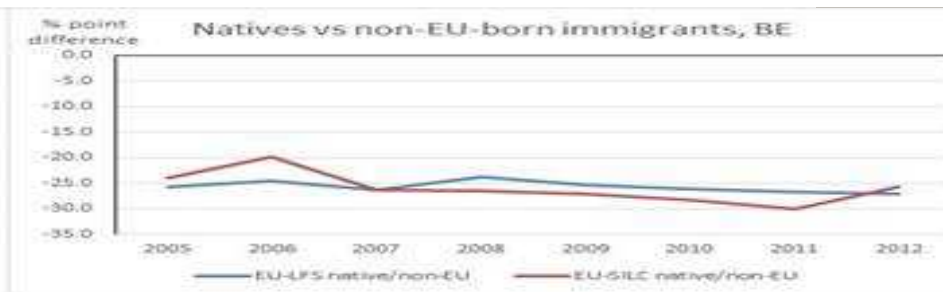
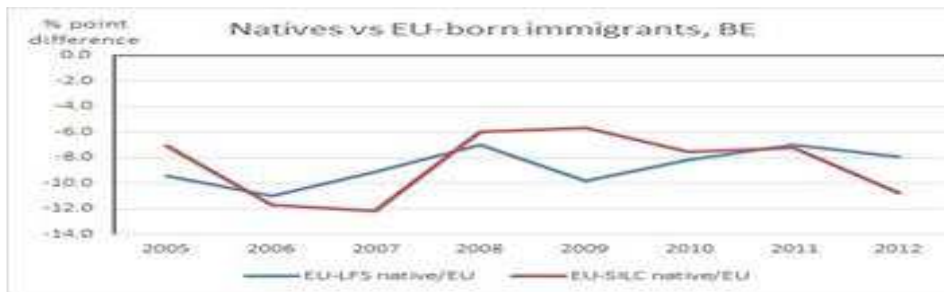
Note: No detailed country of birth data for Germany

Source: Eurostat EU-LFS annual data, author's own calculation.

Percentage point differences in employment rates between the native population and immigrants in 25-59 age group with different country origins, 2005-2012 (%)

Note: No detailed country of birth data for Germany

Source: Eurostat EU-SILC cross-sectional and EU-LFS annual data, author's own calculation.



Mean full-time equivalent employed months of 25-59 individuals not in education by broad country of birth categories and sex, 2004-11

		Belgium				Germany				France				Netherlands				United Kingdom			
		Native	EU27	Non-EU	Total	Native	EU27	Non-EU	Total	Native	EU27	Non-EU	Total	Native	EU27	Non-EU	Total	Native	EU27	Non-EU	Total
Total	2004	8.4	7.4	5.4	8.1	8.0		6.4	7.8	9.1	9.1	7.1	8.9	8.3	6.9	6.3	8.2	8.9	8.5	8.0	8.8
	2005	8.4	7.2	6.1	8.2	8.1		6.2	7.9	9.1	8.9	7.1	8.9	8.0	6.6	6.0	7.9	9.0	8.5	8.1	8.9
	2006	8.5	7.3	5.5	8.2	8.5		6.6	8.2	9.1	9.1	6.7	8.9	8.1	6.8	7.1	8.0	9.1	9.3	8.4	9.1
	2007	8.8	7.6	5.9	8.5	8.6		6.6	8.4	9.3	9.0	7.1	9.1	8.4	8.1	8.3	8.4	9.0	9.4	8.0	9.0
	2008	9.5	8.2	6.3	9.1	8.8		7.1	8.6	9.8	9.7	7.9	9.6	8.9	7.9	7.7	8.8	9.0	9.5	8.2	8.9
	2009	9.4	8.2	6.1	9.0	8.8		6.6	8.5	9.7	9.6	7.3	9.5	9.0	7.3	7.6	8.8	8.9	10.0	8.0	8.9
	2010	9.5	8.4	6.0	9.1	8.9		7.3	8.7	9.8	9.2	7.3	9.6	9.0	7.6	7.3	8.8	9.3	9.6	8.0	9.2
	2011	9.4	8.3	6.3	9.0	9.0		8.0	8.9	10.0	9.9	7.3	9.8	9.1	8.9	8.3	9.0	9.4	9.9	8.2	9.3
Male	2004	9.9	9.1	6.9	9.6	10.0		9.1	9.9	10.1	10.8	8.8	10.0	10.2	9.2	8.9	10.1	10.3	11.1	9.7	10.2
	2005	9.8	9.1	7.6	9.6	9.9		8.3	9.7	10.2	10.5	8.6	10.1	10.0	9.4	8.1	9.9	10.4	10.7	10.1	10.4
	2006	9.8	9.0	7.3	9.6	10.0		8.9	9.9	10.1	10.6	8.6	10.0	10.0	10.1	9.6	10.0	10.4	11.4	10.0	10.4
	2007	10.0	9.1	7.5	9.8	10.1		9.0	10.0	10.2	10.0	9.2	10.1	10.3	10.2	9.7	10.3	10.4	10.7	9.7	10.4
	2008	10.8	10.0	8.0	10.5	10.5		9.8	10.4	10.9	11.3	10.3	10.8	11.3	10.3	9.2	11.2	10.2	10.4	9.5	10.1
	2009	10.7	9.8	7.9	10.4	10.4		9.0	10.2	10.6	11.1	9.4	10.5	11.4	9.1	9.7	11.2	10.1	11.0	9.6	10.1
	2010	10.7	10.1	7.3	10.3	10.5		10.0	10.4	10.9	10.9	9.2	10.8	11.0	8.8	8.5	10.7	10.8	11.7	10.1	10.8
	2011	10.6	9.9	7.4	10.2	10.6		10.7	10.7	11.1	11.2	9.4	11.0	11.1	11.3	9.8	11.0	10.7	11.4	10.4	10.7
Female	2004	6.9	5.8	4.0	6.6	6.1		4.1	5.9	8.1	7.6	5.2	7.9	6.3	4.7	4.0	6.2	7.6	6.7	6.5	7.5
	2005	7.0	5.5	4.7	6.7	6.3		4.4	6.1	8.1	7.5	5.6	7.9	6.0	4.3	3.9	5.9	7.7	6.9	6.3	7.6
	2006	7.2	5.8	3.9	6.9	6.8		4.8	6.5	8.1	7.6	5.0	7.8	6.2	4.4	4.9	6.1	7.9	8.2	6.9	7.8
	2007	7.6	6.4	4.2	7.3	7.1		4.8	6.7	8.4	7.9	5.4	8.2	6.5	6.1	7.0	6.5	7.8	8.2	6.5	7.7
	2008	8.1	6.7	4.5	7.7	7.1		5.1	6.8	8.8	8.2	5.7	8.5	6.5	6.6	6.4	6.5	7.8	8.7	6.9	7.8
	2009	8.1	6.7	4.2	7.6	7.3		5.1	6.9	8.7	8.1	5.6	8.4	6.6	6.1	5.8	6.5	7.7	9.1	6.5	7.7
	2010	8.2	6.9	4.6	7.8	7.4		5.3	7.1	8.8	7.6	5.7	8.5	7.1	6.9	6.4	7.1	7.7	7.8	6.0	7.6
	2011	8.2	6.7	5.2	7.7	7.5		5.9	7.3	9.0	8.8	5.6	8.7	7.1	7.5	7.0	7.1	8.1	8.6	6.3	7.9

Note: No detailed country of birth data for Germany. Cells with bold and italic font indicate low statistical reliability due to small number of observations.

Source: Eurostat EU-SILC cross sectional data, author's own calculation.

Share of employees in total employed population in 25-59 age group not in education by broad country of birth categories in selected years, 2005, 2008, 2012 (%)

		EU-SILC				EU-LFS			
		Native	EU27	Non-EU	Total	Native	EU27	Non-EU	Total
Belgium	2005	88.0	85.2	86.3	87.8	85.0	84.9	83.4	84.9
	2008	89.3	88.1	91.4	89.3	86.1	83.2	86.2	85.9
	2012	90.3	87.4	90.3	90.1	86.2	83.5	87.8	86.2
Germany	2005	89.6		88.3	89.5	87.4		88.5	87.5
	2008	92.9		89.0	92.5	88.2		88.8	88.3
	2012	94.1		92.1	93.8	88.5		88.3	88.5
France	2005	90.7	92.4	89.5	90.7	89.0	86.5	87.2	88.8
	2008	91.4	92.6	90.8	91.4	89.4	88.5	88.4	89.3
	2012	90.5	88.6	89.7	90.4	88.6	87.3	89.0	88.6
Netherlands	2005	86.4	87.5	93.8	86.7	86.8	85.0	88.6	86.9
	2008	87.3	90.3	87.6	87.4	85.8	85.2	88.1	86.0
	2012	85.2	80.3	87.5	85.3	84.0	80.7	84.4	83.9
United Kingdom	2005	87.6	91.8	85.9	87.4	86.5	83.8	83.9	86.2
	2008	88.9	93.4	85.5	88.8	85.7	82.6	83.7	85.4
	2012	88.1	86.1	85.1	87.7	85.5	79.8	83.6	85.0

Note: No detailed country of birth data for Germany

Source: Eurostat EU-SILC cross-sectional data, EU-LFS annual data, author's own calculation.

Ratio of mean gross monthly employee earnings of immigrants relative to natives based on full-time equivalent employee months of 25-59 individuals not in education by broad country of birth categories 2004-11 (%)

	Belgium		Germany		France		Netherlands		United Kingdom	
	Native-EU27	Native-Non-EU		Native-Foreign-born	Native-EU27	Native-Non-EU	Native-EU27	Native-Non-EU	Native-EU27	Native-Non-EU
2004	170.6	83.7		91.3	98.4	106.7	112.7	93.3	133.0	98.5
2005	121.9	106.2		88.6	96.4	99.0	102.3	93.8	128.2	114.4
2006	117.5	89.9		91.3	98.1	97.4	103.0	88.4	119.6	109.7
2007	99.3	83.1		82.8	109.1	98.0	78.6	81.1	130.8	105.5
2008	112.4	84.4		86.9	105.5	92.0	81.7	88.3	95.2	100.8
2009	98.7	82.7		87.8	104.1	93.4	112.6	95.6	98.9	99.5
2010	96.7	79.2		84.5	114.0	85.8	104.8	88.7	95.5	89.5
2011	100.3	93.1		96.8	103.8	92.4	95.8	89.1	89.5	97.8

Note: No detailed country of birth data for Germany.

Source: Eurostat EU-SILC cross-sectional data, author's own calculation.

EU-SILC GENERAL LINEAR MODELS

1. Definitions

- Period: All reference income years in 2004-2011 period
- Population: Employees not in education at the time of the survey, who were in 25-59 age group in the end of the reference income year and who did not change job recently.
- SPSS Complex Samples Module is used in the analysis (Goedeme, 2010)
- Model: Main Effects

Variables

- **Dependent variable:** LN of annual gross employee earnings (company car included)
- **Independent variables:**
Factors: Sex of the individual, Type of contract, Supervisory Position, ISCO 1d, Grouped NACE 1d, Immigration Background (Country of Birth + Nationality)
Covariates: Full-time equivalent months in employment as employee, 5-year age groups, Highest ISCED level completed

R² values of general linear models for the annual employee earnings, 2004-2011

	2004	2005	2006	2007	2008	2009	2010	2011
Belgium	0.645	0.621	0.630	0.622	0.639	0.634	0.632	0.647
Germany	0.666	0.705	0.696	0.685	0.714	0.707	0.693	0.704
France	0.595	0.591	0.515	0.524	0.485	0.474	0.494	0.467
Netherlands	0.660	0.651	0.652	0.658	0.634	0.577	0.657	0.664
UK	0.541	0.597	0.612	0.582	0.639	0.586	0.591	0.527

Source: Eurostat EU-SILC cross-sectional data, author's own calculation.

EU-SILC General Linear Model Coefficients for selected reference income years, 2004, 2008, 2011

*Note: No detailed country of birth and nationality data for Germany.
Bold italic cells indicate statistically insignificant findings in 95%
confidence interval. Empty cells indicate no observations.*

Source: Eurostat EU-SILC cross-sectional data, author's own calculation.

	BE			DE			FR			NL			UK		
	2004	2008	2011	2004	2008	2011	2004	2008	2011	2004	2008	2011	2004	2008	2011
(Intercept)	8.592	8.654	8.721	8.330	7.878	7.957	8.396	8.626	8.650	8.602	9.114	8.901	8.884	8.806	8.809
Female	-0.135	-0.116	-0.121	-0.227	-0.187	-0.215	-0.148	-0.159	-0.154	-0.178	-0.242	-0.200	-0.259	-0.247	-0.284
Male	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
No contract/temporary	-0.242	-0.301	-0.239	-0.147	-0.182	-0.176	-0.221	-0.255	-0.263	-0.258	-0.172	-0.110	-0.098	-0.094	-0.137
Permanent	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Non-supervisory	-0.117	-0.135	-0.159	-0.107	-0.115	-0.087	-0.103	-0.160	-0.136	-0.140	-0.121	-0.119	-0.168	-0.162	-0.214
Supervisory	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Elementary occupations	-0.441	-0.420	-0.485	-0.718	-0.673	-0.695	-0.612	-0.486	-0.590	-0.310	-0.370	-0.351	-0.539	-0.675	-0.581
Plant and machine operators, and assemblers	-0.291	-0.323	-0.301	-0.467	-0.406	-0.602	-0.515	-0.483	-0.518	-0.147	-0.233	-0.209	-0.388	-0.530	-0.339
Craft and related trades workers	-0.407	-0.347	-0.383	-0.478	-0.392	-0.496	-0.521	-0.504	-0.550	-0.199	-0.329	-0.247	-0.362	-0.340	-0.306
Skilled agricultural, forestry and fishery workers	-0.406	-0.518	-0.399	-0.461	-0.536	-0.498	-0.674	-0.556	-0.752	-0.548	-0.421	-0.464	-0.469	-0.662	-0.388
Service and sales workers	-0.347	-0.325	-0.387	-0.505	-0.450	-0.523	-0.595	-0.631	-0.660	-0.246	-0.401	-0.262	-0.527	-0.646	-0.431
Clerical support workers	-0.286	-0.290	-0.298	-0.289	-0.201	-0.300	-0.451	-0.409	-0.459	-0.150	-0.225	-0.191	-0.371	-0.480	-0.362
Technicians and associate professionals	-0.245	-0.249	-0.252	-0.211	-0.141	-0.216	-0.318	-0.297	-0.345	-0.046	-0.097	-0.070	-0.187	-0.305	-0.186
Professionals	-0.140	-0.133	-0.163	-0.072	0.012	-0.063	-0.115	-0.113	-0.133	0.051	-0.022	0.032	-0.028	-0.112	0.029
Managers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A (A-B)	-0.010	-0.070	0.094	-0.201	-0.171	-0.215	-0.059	-0.084	-0.072	-0.008	-0.133	-0.028	-0.052	-0.115	0.048
B-E/F (C-E/F)	0.120	0.133	0.098	0.079	0.160	0.160	0.062	0.119	0.139	-0.005	0.090	0.075	0.038	0.065	0.047
G-I (G-I)	0.009	0.045	0.001	-0.073	-0.035	-0.021	0.023	0.051	0.110	-0.044	-0.028	-0.023	-0.084	-0.071	-0.148
J-N (J-K)	0.128	0.134	0.068	0.067	0.109	0.104	0.097	0.091	0.105	0.076	0.117	0.110	0.161	0.100	0.113
R-U (O-Q)	0.003	-0.012	0.062	-0.050	-0.093	-0.140	-0.137	-0.175	-0.055	-0.067	-0.030	-0.045	-0.147	-0.020	-0.142
O-Q (L-N)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Native/EU citizen	0.001	-0.029	-0.116				0.049	0.020	0.269	-0.173	-0.283	0.592	-0.207	0.230	-0.036
Native/Non-EU citizen	0.292	0.222	0.098	-0.044	0.162	0.107	0.180	-0.087	0.503			-0.172	0.457		0.057
EU-born/citizen	-0.094	-0.002	-0.003				0.061	-0.124	0.000	-0.012	-0.061	-0.023	0.348	0.094	-0.038
EU-born/EU citizen	0.084	-0.026	0.016				0.082	0.090	0.129	-0.030	-0.103	-0.083	0.110	0.040	0.021
EU-born/Non-EU citizen							0.134	-0.134				-3.968	0.507		0.507
Non-EU-born/citizen	-0.060	-0.072	-0.053	-0.008	0.043	0.001	0.012	0.006	0.036	-0.014	-0.020	-0.016	0.001	-0.058	-0.035
Non-EU-born/EU citizen	0.076	0.287	0.032				0.517	0.027	0.036	-3.625	0.246	-0.608	0.258		0.121
Non-EU-born/Non-EU citizen	-0.156	-0.168	-0.017	0.046	0.001	0.101	-0.100	-0.023	-0.049	0.018	0.079	-0.323	-0.045	0.372	0.034
Native/citizen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Full-time equivalent number of months worked	0.124	0.123	0.126	0.158	0.186	0.185	0.138	0.124	0.125	0.127	0.092	0.113	0.132	0.118	0.124
5-year age groups	0.057	0.053	0.056	0.046	0.042	0.042	0.048	0.038	0.039	0.043	0.040	0.048	0.005	0.002	0.029
Highest ISCED level attained	0.073	0.079	0.078	0.070	0.084	0.090	0.066	0.079	0.068	0.077	0.093	0.082	0.080	0.111	0.077

EU-LFS GENERAL LINEAR MODELS

1. Definitions

- Period: Years in 2009-2012 period
- Population: Employees not in education at the time of the survey, who were in 25-59 age group.
- SPSS Complex Samples Module is used in the analysis
- Model: Main Effects
- Variables are standardised according to EU-SILC categories

Variables

- **Dependent variable:** Monthly (take home) pay from main job (deciles)
- **Independent variables:**
Factors: Sex of the individual, Type of contract, Supervisory Position, ISCO 1d, Grouped NACE 1d, Immigration Background (Country of Birth + Nationality)
Covariates: Average weekly hours worked (grouped), 5-year age groups, Highest ISCED level completed

Table 9. R² values of general linear models for the monthly employee earnings, 2009-2012

	2009	2010	2011	2012
Belgium	0.622	0.629	0.665	0.608
Germany	0.576	0.576	0.589	0.565
France	0.593	0.600	0.598	0.604
Netherlands		0.663	0.672	
UK	0.530	0.524	0.524	

Note: No available data for the Netherlands in 2009 and 2011. No available data for the UK in 2012.

Source: Eurostat EU-LFS annual data, author's own calculation.

EU-LFS General Linear Model Coefficients, 2009-2012

Note: No available data for the Netherlands in 2009 and 2011. No available data for the UK in 2012. Bold italic cells indicate statistically insignificant findings in 95% confidence interval. Empty cells indicate no observations.

Source: Eurostat EU-LFS cross-sectional data, author's own calculation

	BE				DE				FR				NL				UK			
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012
(Intercept)	0.319	0.142	0.104	0.224	3.013	2.941	2.638	2.270	2.532	2.333	2.237	2.143	1.054	1.432			0.832	0.948	0.738	
Female	-1.095	-0.998	-0.853	-0.916	-1.294	-1.260	-1.218	-1.183	-0.739	-0.715	-0.707	-0.695	-0.731	-0.729			-0.479	-0.531	-0.455	
Male	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0.000	
No contract/temporary	-0.503	-0.390	-0.386	-0.532	-1.157	-1.137	-0.927	-0.869	-1.226	-1.219	-1.156	-1.131	-1.242	-1.588			-0.124	-0.207	-0.163	
Permanent	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0.000	
Non-supervisory	-0.308	-0.324	-0.353	-0.411	-0.730	-0.602	-0.791	-0.688	-0.698	-0.725	-0.518	-0.528	-0.413	-0.398			-0.376	-0.411	-0.407	
Supervisory	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0.000	
Elementary occupations	-2.908	-2.852	-3.062	-2.529	-1.802	-1.968	-1.600	-1.796	-2.931	-2.902	-3.005	-2.942	-1.547	-1.892			-1.268	-1.263	-1.223	
Plant and machine operators, and assemblers	-2.365	-2.053	-1.958	-1.447	-1.200	-1.403	-1.162	-1.280	-2.119	-2.023	-2.103	-2.001	-0.939	-1.155			-1.083	-1.164	-1.119	
Craft and related trades workers	-2.500	-2.308	-2.223	-1.775	-1.196	-1.501	-1.242	-1.291	-2.001	-2.003	-2.151	-2.049	-1.032	-1.322			-0.878	-0.871	-0.987	
Skilled agricultural, forestry and fishery workers	-3.244	-3.161	-2.899	-2.760	-1.774	-2.248	-1.610	-1.837	-2.835	-2.836	-3.002	-2.926	-1.954	-2.244			-1.423	-1.665	-1.496	
Service and sales workers	-2.690	-2.396	-2.398	-1.974	-1.404	-1.637	-1.279	-1.487	-2.703	-2.659	-2.640	-2.582	-1.144	-1.355			-1.018	-1.004	-1.035	
Clerical support workers	-1.662	-1.593	-1.600	-1.206	-0.697	-0.712	-0.568	-0.672	-1.952	-2.014	-2.040	-2.041	-0.780	-1.051			-0.903	-0.894	-0.958	
Technicians and associate professionals	-1.507	-1.159	-1.002	-0.628	-0.421	-0.593	-0.425	-0.531	-0.918	-0.922	-1.049	-0.987	-0.313	-0.472			-0.498	-0.432	-0.567	
Professionals	-0.733	-0.495	-0.410	-0.027	0.453	0.320	0.261	0.305	-0.028	-0.075	-0.180	-0.164	0.028	-0.043			-0.072	-0.030	-0.114	
Managers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0.000	
A (A-B)	-0.036	-0.469	-0.147	-0.011	-1.210	-1.196	-1.200	-1.189	-0.504	-0.379	-0.180	-0.279	-0.128	-0.011			-0.394	-0.523	-0.333	
B-E/F (C-E/F)	0.306	0.190	0.227	0.232	0.204	0.088	0.231	0.302	0.323	0.354	0.419	0.454	0.053	0.049			0.156	0.104	0.250	
G-I (G-I)	-0.165	-0.180	-0.091	-0.228	-0.474	-0.495	-0.331	-0.318	-0.149	-0.120	-0.007	0.035	-0.279	-0.283			-0.161	-0.178	-0.141	
J-N (J-K)	0.334	0.263	0.288	0.227	0.001	-0.055	-0.065	0.010	0.248	0.260	0.333	0.330	0.306	0.252			0.448	0.432	0.552	
R-U (O-Q)	-0.058	0.058	-0.086	0.050	-0.591	-0.661	-0.383	-0.437	-0.452	-0.493	-0.434	-0.402	-0.299	-0.439			-0.231	-0.220	-0.047	
O-Q (L-N)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0.000	
Native/EU citizen	0.225	-0.041	0.105	-0.173					0.949	0.223	0.213	0.147	0.013	0.205			-0.428	-0.980	-0.586	
Native/Non-EU citizen	-0.388	-0.397	-0.102	0.452	0.064	0.078	0.588	0.282	0.839	0.470	-0.324	-1.016	-0.054	0.109			0.544	-0.786	1.423	
EU-born/citizen	0.007	0.005	-0.119	-0.098					-0.086	-0.047	-0.193	0.004	0.014	-0.052			0.044	-0.074	0.314	
EU-born/EU citizen	0.278	0.174	0.300	0.055					0.172	0.368	0.062	0.151	0.121	-0.157			0.014	0.048	-0.017	
EU-born/Non-EU citizen	0.245	-0.980	-0.865	0.917					-0.739	-1.273	1.515	-0.940	-0.378				0.327	-0.025	-0.008	
Non-EU-born/citizen	0.192	-0.024	0.089	0.006	0.054	0.057	0.070	0.115	-0.110	-0.126	-0.228	-0.093	-0.090	-0.195			0.066	0.089	0.103	
Non-EU-born/EU citizen	0.698	0.347	0.133	0.251					-0.120	-0.322	0.506	0.186	-0.833	-0.754			-0.084	-0.032	-0.208	
Non-EU-born/Non-EU citizen	-0.065	-0.084	0.048	-0.157	0.061	0.116	0.009	0.048	-0.517	-0.336	-0.382	-0.299	-0.402	-0.343			0.087	0.078	0.050	
Native/citizen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0.000	
Average weekly hours worked	0.681	0.720	0.740	0.714	0.536	0.548	0.534	0.527	0.553	0.560	0.580	0.576	0.719	0.698			0.331	0.327	0.340	
5-year age groups	0.305	0.302	0.316	0.288	0.094	0.104	0.112	0.119	0.205	0.201	0.204	0.192	0.194	0.202			0.084	0.087	0.098	
Highest ISCED level attained	0.441	0.425	0.385	0.357	0.304	0.295	0.308	0.378	0.291	0.319	0.291	0.312	0.359	0.336			0.244	0.240	0.242	

Disadvantageous Jobs in Employee Earnings

- **Type of contract:** No contract or temporary contract;
- **Position at workplace:** Non-supervisory position;
- **Occupations:** ISCO-06 and ISCO-09 in BE and DE; ISCO-05, ISCO-06 and ISCO-09 in FR, the NL and UK;
- **Economic Activity:** NACE A and NACE G-I in FR; NACE A , NACE G-I and NACE R-U in BE, DE, the NL and UK.

EU-SILC & EU-LFS ORDINAL REGRESSION MODELS

1. Definitions

- Period: All years in 2005-2012 period (EU-SILC); All years in 2006-2012 period (EU-LFS)
- Population: Employees not in education at the time of the survey, who were in 25-59 age group in the end of the reference income year and who did not change job recently (EU-SILC); Employees not in education at the time of the survey, who were in 25-59 age group (EU-LFS)
- SPSS Complex Samples Module is used in the analysis
- Model: Main Effects

Variables

- **Dependent variable:** Total number of disadvantage items
(None, 1, 2, 3+)
- **Independent variables:**
Factors: Sex of the individual, Immigration Background
(Country of Birth + Nationality)
Covariates: 5-year age groups, Highest ISCED level completed

EU-SILC Findings

Pseudo R² values of ordinal regression models for disadvantageous jobs in employee earnings, 2005-2012

		2005	2006	2007	2008	2009	2010	2011	2012
Cox and Snell	BE	0.172	0.181	0.168	0.184	0.179	0.178	0.163	0.180
	DE	0.118	0.103	0.087	0.100	0.118	0.116	0.098	0.117
	FR	0.191	0.195	0.201	0.184	0.181	0.190	0.161	0.160
	NL	0.129	0.133	0.136	0.114	0.117	0.107	0.123	0.139
	UK	0.114	0.125	0.130		0.161	0.143	0.152	0.156
Nagelkerke	BE	0.192	0.201	0.186	0.205	0.200	0.197	0.182	0.202
	DE	0.132	0.114	0.097	0.111	0.132	0.130	0.110	0.133
	FR	0.210	0.214	0.220	0.204	0.199	0.210	0.178	0.176
	NL	0.142	0.146	0.150	0.126	0.129	0.119	0.136	0.154
	UK	0.124	0.137	0.141		0.176	0.156	0.165	0.169
McFadden	BE	0.082	0.086	0.080	0.090	0.087	0.084	0.079	0.089
	DE	0.056	0.046	0.040	0.046	0.055	0.055	0.047	0.058
	FR	0.087	0.089	0.091	0.087	0.082	0.090	0.074	0.073
	NL	0.058	0.060	0.062	0.052	0.053	0.048	0.056	0.063
	UK	0.048	0.054	0.055		0.070	0.061	0.065	0.066

Note: UK is excluded from the analysis in 2008 due to the absence of some of the items used in the analysis.

Source: Eurostat EU-SILC cross-sectional data, author's own calculation.

β coefficients of the ordinal regression models for the disadvantageous jobs in employee earnings for selected years, 2005, 2008, 2012

	BE			DE			FR			NL			UK		
	2005	2008	2012	2005	2008	2012	2005	2008	2012	2005	2008	2012	2005	2009	2012
Threshold 1 (No item)	-4.073	-4.736	-4.502	-3.880	-3.983	-3.959	-4.187	-4.269	-3.393	-4.362	-4.181	-4.967	-3.630	-4.577	-4.529
Threshold 2 (1 item)	-1.388	-1.949	-1.685	-1.312	-1.391	-1.102	-1.679	-1.788	-1.350	-1.885	-1.592	-2.353	-1.631	-2.490	-2.450
Threshold 3 (2 items)	0.609	0.453	0.709	0.978	0.760	1.225	-0.059	0.474	0.820	-0.072	0.172	-0.572	0.015	-0.736	-0.760
Female	0.867	0.814	0.648	0.662	0.559	0.657	1.151	1.023	1.019	0.473	0.543	0.593	0.410	0.709	0.395
Male															
Native/EU citizen	-0.742	0.519	-0.059				-0.902	-0.384	0.267	1.621	0.296	0.009	0.311	-2.130	0.360
Native/Non-EU citizen	2.718		-0.828	0.810	0.084	-0.390	2.814	-0.148	-0.413				-1.270		-0.487
EU-born/citizen	0.308	0.211	0.056				0.205	-0.011	-0.161	0.555	0.178	0.148	0.836	-0.041	-0.832
EU-born/EU citizen	-0.242	0.568	0.973				0.009	-0.084	0.190	0.222	0.583	-0.226	0.162	0.336	0.638
EU-born/Non-EU citizen		2.416					-1.825	0.748				2.810	-0.271		-0.133
Non-EU-born/citizen	0.534	0.857	0.813	0.545	0.457	0.268	0.413	0.164	0.410	0.257	-0.080	-0.038	0.227	0.687	0.089
Non-EU-born/EU citizen	0.990	0.688	0.757				1.338	1.150	-0.200	-0.524		4.477	0.657		-0.633
Non-EU-born/Non-EU citizen	1.470	1.283	1.781	0.452	0.533	0.702	0.549	0.568	1.141	0.220	1.145	-0.353	0.600	-0.028	0.247
Native/citizen															
5-year age groups	-0.093	-0.145	-0.094	-0.037	-0.036	-0.042	-0.160	-0.142	-0.105	-0.120	-0.111	-0.139	-0.015	-0.104	-0.084
Highest ISCED level attained	-0.543	-0.591	-0.579	-0.547	-0.512	-0.551	-0.593	-0.625	-0.538	-0.530	-0.488	-0.573	-0.563	-0.668	-0.618

Note: UK is excluded from the analysis in 2008 due to the absence of some of the items used in the analysis. Bold italic cells indicate statistically insignificant findings in 95% confidence interval.

Source: Eurostat EU-SILC cross-sectional data, author's own calculation.

Cumulative odd ratios of the ordinal regression models for the disadvantageous jobs in employee earnings for selected years, 2005, 2008, 2012

	BE			DE			FR			NL			UK		
	2005	2008	2012	2005	2008	2012	2005	2008	2012	2005	2008	2012	2005	2009	2012
Threshold 1 (No item)	0.017	0.009	0.011	0.021	0.019	0.019	0.015	0.014	0.034	0.013	0.015	0.007	0.027	0.010	0.011
Threshold 2 (1 item)	0.250	0.142	0.186	0.269	0.249	0.332	0.187	0.167	0.259	0.152	0.204	0.095	0.196	0.083	0.086
Threshold 3 (2 items)	1.838	1.573	2.032	2.659	2.138	3.402	0.942	1.607	2.271	0.931	1.188	0.564	1.015	0.479	0.468
Female	2.380	2.258	1.912	1.939	1.749	1.929	3.160	2.781	2.770	1.605	1.721	1.810	1.507	2.031	1.484
Male															
Native/EU citizen	0.476	1.680	0.943				0.406	0.681	1.306	5.058	1.345	1.009	1.365	0.119	1.434
Native/Non-EU citizen	15.154		0.437	2.248	1.087	0.677	16.671	0.862	0.661				0.281		0.614
EU-born/citizen	1.361	1.236	1.058				1.228	0.989	0.851	1.742	1.194	1.159	2.308	0.960	0.435
EU-born/EU citizen	0.785	1.765	2.647				1.009	0.920	1.209	1.249	1.792	0.798	1.176	1.400	1.893
EU-born/Non-EU citizen		11.202					0.161	2.113				16.608	0.763		0.876
Non-EU-born/citizen	1.707	2.356	2.254	1.725	1.579	1.307	1.511	1.178	1.506	1.293	0.923	0.963	1.254	1.987	1.093
Non-EU-born/EU citizen	2.692	1.991	2.132				3.810	3.157	0.819	0.592		87.950	1.928		0.531
Non-EU-born/Non-EU citizen	4.351	3.609	5.936	1.571	1.704	2.018	1.732	1.765	3.131	1.246	3.141	0.702	1.822	0.973	1.280
Native/citizen															
5-year age groups	0.911	0.865	0.910	0.963	0.964	0.959	0.852	0.868	0.900	0.887	0.895	0.870	0.985	0.901	0.919
Highest ISCED level attained	0.581	0.554	0.560	0.579	0.599	0.576	0.553	0.536	0.584	0.589	0.614	0.564	0.570	0.512	0.539

Note: UK is excluded from the analysis in 2008 due to the absence of some of the items used in the analysis. Bold italic cells indicate statistically insignificant findings in 95% confidence interval.

Source: Eurostat EU-SILC cross-sectional data, author's own calculation.

EU-LFS Findings

Pseudo R² values of ordinal regression models for disadvantageous jobs in employee earnings, 2006-2012

		2006	2007	2008	2009	2010	2011	2012
Cox and Snell	BE	0.124	0.121	0.121	0.124	0.124	0.144	0.140
	DE	0.096	0.104	0.119	0.103	0.119	0.168	0.134
	FR	0.142	0.146	0.141	0.142	0.142	0.148	0.154
	NL	0.134	0.148	0.142	0.149	0.141	0.160	0.160
	UK	0.127	0.127	0.131	0.131	0.131	0.137	0.134
Nagelkerke	BE	0.137	0.134	0.134	0.137	0.137	0.158	0.155
	DE	0.108	0.116	0.132	0.114	0.131	0.183	0.148
	FR	0.154	0.158	0.153	0.154	0.154	0.161	0.167
	NL	0.146	0.161	0.155	0.162	0.154	0.174	0.174
	UK	0.137	0.137	0.141	0.141	0.141	0.147	0.145
McFadden	BE	0.056	0.055	0.055	0.056	0.056	0.065	0.064
	DE	0.045	0.048	0.055	0.047	0.053	0.075	0.060
	FR	0.060	0.062	0.060	0.060	0.060	0.062	0.065
	NL	0.058	0.063	0.061	0.064	0.061	0.069	0.068
	UK	0.052	0.052	0.053	0.053	0.053	0.056	0.055

Source: Eurostat EU-LFS annual data, author's own calculation.

β coefficients of the ordinal regression models for the disadvantageous jobs in employee earnings for selected years, 2006, 2008, 2012

	BE			DE			FR			NL			UK		
	2006	2008	2012	2006	2008	2012	2006	2008	2012	2006	2008	2012	2006	2008	2012
Threshold 1 (No item)	-3.445	-3.436	-3.623	-3.847	-3.616	-3.277	-3.131	-3.030	-3.468	-2.768	-2.682	-3.001	-2.935	-3.081	-3.301
Threshold 2 (1 item)	-1.200	-1.183	-1.402	-1.269	-1.102	-1.034	-0.817	-0.705	-1.189	-0.674	-0.616	-0.964	-0.920	-1.065	-1.294
Threshold 3 (2 items)	1.411	1.378	1.209	1.352	1.498	1.380	0.889	0.988	0.528	1.511	1.564	1.107	0.579	0.411	0.213
Female	1.204	1.183	1.253	0.986	1.110	1.094	1.318	1.337	1.332	1.271	1.294	1.390	0.971	0.989	1.059
Male															
Native/EU citizen	-0.107	-0.212	-0.118				-0.864	0.037	-0.827	-0.014	-0.140	0.100	1.118	-0.157	-0.571
Native/Non-EU citizen	1.050	0.796	0.693	-0.117	0.122	0.080	0.298	0.172	0.637	2.201	0.552	-0.262	0.380	-0.036	-0.202
EU-born/citizen	0.041	0.106	-0.024				0.036	-0.113	-0.015	0.121	-0.186	0.010	0.075	0.022	0.052
EU-born/EU citizen	-0.341	-0.312	-0.349				-0.237	-0.218	-0.282	-0.227	-0.108	-0.047	0.318	0.212	0.335
EU-born/Non-EU citizen	-3.329	0.206	-0.272				1.601	1.614	-0.617	-1.546	2.427	-0.808	0.609	0.354	0.143
Non-EU-born/citizen	0.374	0.455	0.460	0.306	0.421	0.403	0.232	0.287	0.315	0.251	0.288	0.182	0.266	0.305	0.477
Non-EU-born/EU citizen	0.142	0.099	0.547				0.355	0.194	0.378	-0.524	0.691	0.147	0.925	0.387	0.321
Non-EU-born/Non-EU citizen	0.873	0.732	0.849	0.197	0.499	0.711	0.396	0.417	0.535	0.619	0.508	0.289	0.377	0.535	0.536
Native/citizen															
5-year age groups	-0.030	-0.038	-0.049	-0.050	-0.043	-0.024	-0.066	-0.056	-0.074	0.021	0.019	0.009	0.011	0.004	-0.034
Highest ISCED level attained	-0.320	-0.314	-0.349	-0.327	-0.334	-0.400	-0.322	-0.312	-0.364	-0.290	-0.295	-0.332	-0.406	-0.419	-0.411

Note: Bold italic cells indicate statistically insignificant findings in 95% confidence interval.

Source: Eurostat EU-LFS annual data, author's own calculation.

Cumulative odd ratios of the ordinal regression models for the disadvantageous jobs in employee earnings for selected years, 2006, 2008, 2012

	BE			DE			FR			NL			UK		
	2006	2008	2012	2006	2008	2012	2006	2008	2012	2006	2008	2012	2006	2008	2012
Threshold 1 (No item)	0.032	0.032	0.027	0.021	0.027	0.038	0.044	0.048	0.031	0.063	0.068	0.050	0.053	0.046	0.037
Threshold 2 (1 item)	0.301	0.306	0.246	0.281	0.332	0.355	0.442	0.494	0.305	0.510	0.540	0.381	0.399	0.345	0.274
Threshold 3 (2 items)	4.098	3.968	3.349	3.865	4.474	3.975	2.434	2.686	1.695	4.530	4.779	3.025	1.784	1.508	1.237
Female	3.333	3.264	3.499	2.681	3.034	2.986	3.736	3.809	3.789	3.564	3.647	4.014	2.640	2.688	2.883
Male															
Native/EU citizen	0.899	0.809	0.889				0.422	1.037	0.437	0.986	0.869	1.105	3.060	0.855	0.565
Native/Non-EU citizen	2.858	2.216	2.000	0.890	1.129	1.083	1.346	1.188	1.892	9.031	1.737	0.770	1.462	0.965	0.817
EU-born/citizen	1.042	1.112	0.976				1.037	0.893	0.985	1.129	0.830	1.010	1.078	1.022	1.054
EU-born/EU citizen	0.711	0.732	0.706				0.789	0.804	0.754	0.797	0.897	0.954	1.374	1.236	1.398
EU-born/Non-EU citizen	0.036	1.228	0.762				4.956	5.024	0.539	0.213	11.325	0.446	1.839	1.425	1.154
Non-EU-born/citizen	1.453	1.576	1.583	1.358	1.523	1.496	1.261	1.333	1.371	1.286	1.333	1.200	1.305	1.357	1.611
Non-EU-born/EU citizen	1.152	1.104	1.727				1.426	1.214	1.459	0.592	1.995	1.158	2.522	1.473	1.378
Non-EU-born/Non-EU citizen	2.395	2.080	2.337	1.218	1.647	2.035	1.486	1.518	1.708	1.856	1.662	1.336	1.458	1.708	1.710
Native/citizen															
5-year age groups	0.970	0.963	0.952	0.951	0.958	0.976	0.936	0.945	0.928	1.021	1.019	1.009	1.011	1.004	0.967
Highest ISCED level attained	0.726	0.731	0.705	0.721	0.716	0.670	0.725	0.732	0.695	0.748	0.745	0.718	0.666	0.658	0.663

Note: Bold italic cells indicate statistically insignificant findings in 95% confidence interval.

Source: Eurostat EU-LFS annual data, author's own calculation.

Conclusion

- Descriptive and multivariate analyses show that the level earnings of the employees in Belgium, Germany, France, the Netherlands and the United Kingdom are determined by highly segregated labour market conditions.
- The gender gap in employee earnings is the most striking result of the EU-SILC and EU-LFS data analyses.
- Despite the differences between the EU-SILC and EU-LFS findings, the analyses indicate variations in employee earnings and types of jobs across immigration background categories.

- Two types of segregation in the labour market: a) *the segregation in the earnings*; and b) *segregation in accessing the better-paid jobs*
 1. The labour market characteristics of the employee's job (i.e. contract type, position at work, occupation and economic activity and full-time/part time work) are the main determinants for the segregation in employee earnings.
 2. Gender, education level and age of the employee are influential on both segregation in earnings and segregation in accessing the better-paid jobs.
 3. The effects of the employee's immigration background are more significant on segregation in accessing the better-paid jobs in general. Besides, its impacts on segregation in earnings are evident for several immigrant groups in particular cases.

- EU-SILC annual income and economic activity history variables are useful, but insufficient tools for examining the differentiation in employee earnings.
- The immigrants are under-represented in EU-SILC data.
- More detailed country of birth and nationality categories are necessary for more reliable analysis.
- Absence of country of birth and nationality variables in the EU-SILC longitudinal data limits further analysis.

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