

# Labor market integration of ethnic minorities in Latvia

Hazans, Mihails

University of Latvia, IZA

2011

Online at https://mpra.ub.uni-muenchen.de/118465/ MPRA Paper No. 118465, posted 13 Sep 2023 13:25 UTC

### Labor market integration of ethnic minorities in Latvia

### **Mihails Hazans**

This is a draft chapter. The final version is available in *Ethnic diversity in European labor markets: Challenges and solutions* edited by Martin Kahanec and Klaus F. Zimmermann, published in 2011, Edward Elgar Publishing Ltd, pp. 163–197. https://doi.org/10.4337/9780857930613.00013

The material cannot be used for any other purpose without further permission of the publisher, and is for private use only.

### Abstract

This chapter departs by analysis of the labor market situation of minorities over the period of 2002-2009. The unexplained employment and earnings gaps between Latvians and non-Latvians declined during the growth period of 2002-2007 but increased again in the recession years 2008-2009. Minorities in Latvia face different types of labor market barriers, mostly related to Latvian language skills. The chapter proceeds with an overview of public perceptions and attitudes, as well as public policy towards ethnic minorities, followed by an evidence-based analysis of ethnic composition and use of languages at the enterprise level. Despite a lack of successful policymaking, impressive progress in the field of the labor market integration of minorities was achieved in Latvia between 1996 and 2008.

Keywords: Ethnic gaps, ethnic diversity, labor market segregation, language policy, Latvia

**JEL:** J15, J18

## INTRODUCTION

### Ethnic composition of population.

In Latvia, the majority (or titular) population consists of ethnic Latvians. By 2008, this group, however, accounts for less than 60 percent of total population, down from 77 percent in 1935, but well above the low 52 percent at the end of Soviet era. This dynamics was driven by massive inflow of population from other parts of the former Soviet Union in 1944–1990, followed by return migration in 1991–2005, after restoring of independent Republic of Latvia. Most of the minority population is of Eastern-Slavic origin: Russians, Belarussians, and Ukrainians accounted for more than one third of country's population in 2008 (compared to just 10 percent in 1935 but 42 percent in 1989). Poles and Lithuanians together account for less than 4 percent, and other ethnic groups – for less than 3 percent of population (Table 1).

Table 1 Population b	y ethnicity (beginning of	year, in percentages)

Table 1 Topulation by cumicity (beg	ginning of y	year, in pe	reentagesj		
	1935	1989	2000	2004	2008
Latvian	77.0	52.1	57.7	59.0	59.2
Russian	8.8	34.0	29.6	28.5	28.0
Belarussian and Ukrainian	1.5	7.9	6.8	6.3	6.2
Polish and Lithuanian	3.8	3.6	3.9	3.8	3.7
Jewish	4.9	0.9	0.4	0.4	0.4
Roma	0.2	0.3	0.4	0.4	0.4
Other	3.8	1.4	1.3	1.6	2.1
Total	100	100	100	100	100
Non-Latvian	23.0	48.0	42.3	41.0	40.8

Source: Central Statistical Bureau of Latvia (CSB).

More than 70 percent of non-Latvians live in seven largest cities, while for Latvians this proportion is two limes smaller. On the other hand, 41 percent of Latvians and just 17 percent of non-Latvians live in the countryside (see Figure 1 for details). Six of the seven largest cities feature very high share of non-Latvians in their population: in three cases it is between 45 and 50 percent, in two cases (including the capital city) – between 50 and 60 percent, and in one case more than 80 percent.

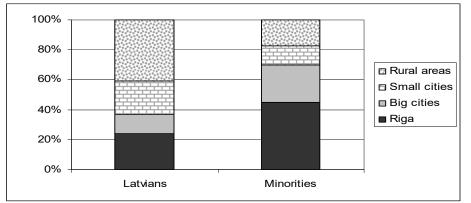


Figure 1 Distribution of majority and minority population by type of settlement, 2007 Source: Central Statistical Bureau of Latvia (CSB).

Region-wise, the largest non-titular community lives in Riga region, the most developed part of the country, which includes the capital city and its surroundings; almost half of the total population here are non-Latvians. On the other hand, the highest proportion of non-titular population (56 percent of the total) is found in Latgale, economically the least developed part of the country which is located at the south-east and has borders with Russia, Belarus and Lithuania. In the remaining three regions (Vidzeme in the north-east; Kurzeme in the west; and Zemgale in the south), minorities account for 15, 26 and 32 percent of the population, respectively.

### Language and citizenship as the key factors

From the labor market perspective, mother tongue and Latvian language skills are more important than ethnicity in Latvian situation. In fact, almost 95 percent of minority population belongs to ethnic groups which are not easily distinguishable from ethnic Latvians by how they look. Moreover, while typical Latvian-origin surnames and first names are easily identifiable, a significant part of ethnic majority population (as well of linguistic majority population) carries surnames and/or first names of Slavic origin: among ethnic Latvians, about one fifth of marriages in 1997–2008 were inter-ethnic<sup>1</sup>, while among population of Slavic ethnicities more than one fifth of marriages were with Latvians; Figure 2 provides evidence that substantial incidence of cross-marriage between the two ethnic groups goes back at least to 1950s.

The above evidence suggests that ethnicity as such has very limited potential as a factor of labor market discrimination in Latvia, as far as most of the non-titular population is concerned. "Visible" minorities, such as Jews, Roma, Armenians, Azerbaijanis, Tatars, Uzbeks, etc., which in principle can be discriminated against because of their looks, names, or surnames, account for less than 2 percent of total population<sup>2</sup>. On the other hand, mother tongue and Latvian language skills appear to be of prime importance for labor market integration and participation.

<sup>&</sup>lt;sup>1</sup> See Statistics Latvia (n.d).

<sup>&</sup>lt;sup>2</sup> Survey-based evidence for ethnic discrimination in hiring against visible minorities is found in Appendix (Tables A1, A2); see also LLU (2007, Tables 4 and 10 in Appendix 5.3.1).

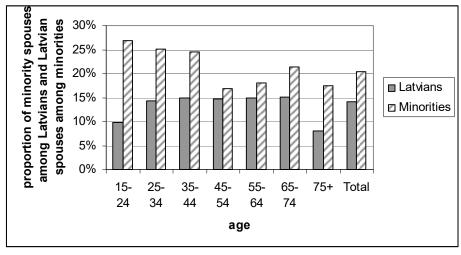


Figure 2 Proportion of minority spouses among married Latvians and Latvian spouses among minorities, 2007 Source: Own calculation with LFS data.

More than 80 percent of minority population are native Russian speakers; almost 90 percent use Russian as the main language at home (see Table 2). Within this group, Latvian language skills range from none to excellent (see more details below); however, some accent is almost always present. Thus, Russian-speaking minority in Latvia is "audible" rather than "visible". Latvian language proficiency is an important factor of production in many occupations; in most of such cases, legal language requirements exist. On top of this, mother tongue is an important signal of group belonging and as such can be used as a basis for employer, employee or customer discrimination. While "native Russian-speakers" is not exactly the same category as "ethnic non-Latvians", a vast majority of each of the two groups belongs also to the other group<sup>3</sup>.

Tuble - Hilliot	ny popula	aon og moen	ter tongue a	na language asea at nome
	2000	2004	2008	2005
Age range	All	15–74	15–74	18–74
		Mother tongue	e	Main language used at home
Russian	83.8	83.6	81.6	87.6
Latvian	7.2	4.2	4.8	11.5
Other	9.1	12.2	13.7	0.9
Survey used	а	b	b	с

Table 2 Minority population by mother tongue and language used at home

*Source*: Own calculation with survey data: <sup>a</sup> Census 2000 (CSB 2008); <sup>b</sup> Survey "Language" (Zepa et al 2008); <sup>c</sup> Survey "Quality of Life in Latvia" conducted by Faculty of Social Sciences, University of Latvia.

By 2005, about two thirds of minority population aged 15 to 74 were born in Latvia; this proportion varies from 95 percent among the youth to 31 percent among the elderly (Table 3). Just one percent of the minority population moved in the country less than 10 years ago. While virtually all ethnic Latvians are citizens of Latvia, about half of minority population did not hold Latvian citizenship in 2005 (ten years earlier, this proportion was

<sup>&</sup>lt;sup>3</sup> Latvian LFS does not provide information on mother tongue or language skills of the respondent, hence we will rely on ethnic break-down into Latvians and non-Latvians when using LFS data. When possible, we will provide additional results based on other surveys where language information is available.

about two thirds)<sup>4</sup>. Even among non-Latvians aged 15–34, more than 90 percent of whom are born in Latvia, proportion of Latvian citizens was less than two thirds in 2005 and three quarters in 2009. Citizenship is thus an ethnically loaded factor which affects directly labor market outcomes of the individuals (see below on occupational restrictions for non-citizens).

Table 3: Minority population by	age and	l origin	(2005),	age and	citizensł	nip (2005	5, 2009)
Age	15–24	25–34	35–44	45–54	55-64	65–74	15–74
Born in Latvia	94.5	90.0	71.7	56.6	46.9	31.1	65.9
Moved in more than 10 years ago	4.6	9.1	26.2	42.2	51.5	68.1	32.8
Moved in within the last 10 years	0.9	0.8	2.1	1.2	1.6	0.8	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Latvian citizens (2005)	65.0	60.9	53.7	41.4	40.6	34.6	49.5
Latvian citizens (2009)	77.8	71.2	63.4	53.0	50,8	44.7	59.3

Source: For 2005: Calculation with LFS data (N= 6831, N=11716 for 2009).

Only a small proportion (8.3%) of those Latvian residents who do not possess Latvian citizens, hold citizenship of other countries or are aliens. Others are so-called "Latvian non-citizens" – a status granted in 1995 to those stateless residents who were not citizens of the Republic of Latvia in 1918–1940 or their descendants. Most of non-citizens are either migrants, who moved in from other parts of the former Soviet Union in 1944–1990, or their descendants. Note that this part of Latvian population is not directly comparable to first and second generation immigrants in countries like Germany or France, because the (physical) migration eventually took place within the same country. When the independent Republic of Latvia was restored, they found themselves in a different country.

## LABOR MARKET SITUATION OF MINORITIES

The aggregate gap in employment rates between Latvians and non-Latvians, about nine percentage points in 1997, completely disappeared by 2007. This was possible thanks to a period of strong economic growth (83.5 percent in 2001–2007) accompanied by a massive outflow of labor force after EU enlargement in May 2004 (see Hazans and Philips 2009): shortage of workforce has improved labor market position of many disadvantaged groups, including ethnic minorities. Labor force participation rate of minority population remains higher than that of ethnic Latvians already since 2004. The unemployment rate, however, was still about 1.5 times higher among minorities than among ethnic Latvians in 2005–2008. As Latvia entered a recession in the second half of 2008, some gains in the relative position of minorities in terms of employment rates were lost; in 2009, the ethnic gap in employment reached 2.7 percentage points among men and 4.8 points among women (Figure 3, upper panel).

According to estimates for 2002–2009 based on Labor Force Surveys, the raw earnings gap in favor of Latvians ranged from 7.6 to 9.4 percent. This gap reached a minimum by the end of the growth period in 2007 but increased again during the crisis years 2008–2009. Average earnings of minority workers are positively related to their Latvian language skills. Females are especially strongly disadvantaged when they lack necessary language skills; this is because language is more important in predominantly female occupations.

The ethnic gap in employment rates is still very substantial and growing among population with tertiary education. Moreover, returns to tertiary (as well as to secondary general) education in terms of earnings have been substantially lower for minorities up until 2008, although it was no longer the case in 2009.

<sup>&</sup>lt;sup>4</sup> According to the Office of Citizenship and Migration Affairs (2008), 51.7% of non-titular population were Latvian citizens at the end of 2005; by mid 2008, this proportion reached 55.2%.

"Vertical" occupational segregation between ethnic Latvians and minority workers is not negligible but declining in recent years. In 2007, 43 percent of ethnic Latvian wage earners were employed in highly skilled non-manual occupations, while among minority employees this proportion was just 31 percent. This 12-point gap has shrunk to 10 points in 2009.

The distribution of the two ethnic groups among economic sectors is much less similar than occupational distribution. Ethnic Latvians are over-represented in non-market services (especially public administration) and agriculture, while minority employees are overrepresented in market services and industry.

## MAIN INTEGRATION CHALLENGES

The relatively large share of ethnic minority population in Latvia has several implications. First, labor market integration of ethnic minorities in Latvia is of utmost importance for the economy and society. Second, the financial, technical and human resources required to address integration issues need to be adequately large as well. Third, at the psychological level, such a large ethnic minority is often perceived by the majority population as competition or even a threat, especially due to the historical link between [part of] minority population and the former Soviet regime.

While inter-ethnic relations at the individual level are seen as being positive or satisfactory by most people, substantial ethno-political tensions, collective ethnic fears, as well as prejudice exist in the society. In the background of these tensions are conflicting views on important historical events, as well as separated media space sustaining the opinions divide. Furthermore some recent policy and real-life developments within and outside the country are contributing to the tensions from time to time. Examples include: the 2004 language reform in minority schools which lacked real dialogue between the involved parties and the target group during preparation and implementation<sup>5</sup>; the 2007 events related to relocation of the Bronze Soldier in Tallinn<sup>6</sup>; the 2008 conflict between Russia and Georgia.

At the political level, integration is complicated by the large number of institutions involved and the lack of political consensus among frequently changing coalition parties. Thus, the distribution and oversight of ministries and integration programs has been also changing frequently; thereby undermining the consistency of and support for these programs. Changes in government regulations passed in 2009 indicate a shift towards hardening and widening state language proficiency requirements in the labor market (including private sector), while other signals and data indicate shrinking (although intensifying) support among titular population in general, as well as within political elite for a hardline approach to ethnic policy.

## STATISTICAL OVERVIEW

### **Employment rates**

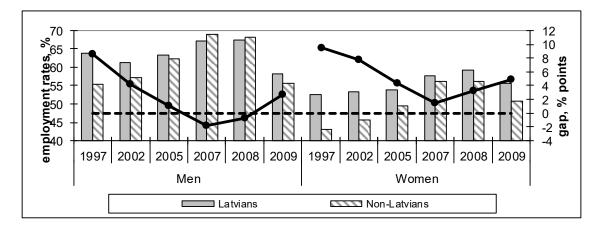
The single most informative indicator of labor market integration is of course the employment rate. Figure 3 illustrates evolution of the employment rates among titular and non-titular population by gender. Steady reduction of the ethnic gap in employment was observed for both genders in 1997–2007. By the end of this period, employment rate of minority men

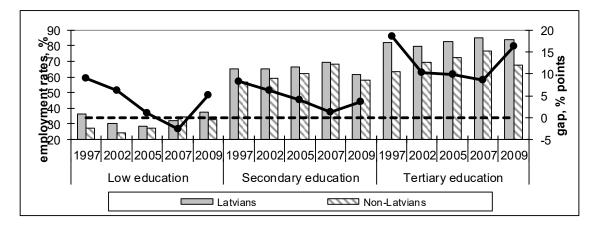
<sup>&</sup>lt;sup>5</sup> See Silova (2002, 2006), Zepa (2003), Zepa, Kļave *et al* (2004), Galbreath and Galvin (2005) and Hogan-Brun (2006).

<sup>&</sup>lt;sup>6</sup> See Halpin (2007).

exceed that of ethnic Latvian men by almost two points. Among women the ethnic gap was wider during the whole period and remained positive (at 1.5 points) in 2007. As Latvia entered a recession in the middle of 2008, the trend in the ethnic employment gap reversed. By 2009, the gap in favor of minority men was replaced by an almost 3-point gap in favor of Latvian men; whilst the gap in favor of Latvian women reached almost 5 points. Moreover, in the third quarter of 2009, minority employment rates for both genders were around 6 points lower than for ethnic Latvians.

The ethnic gap in employment for those with tertiary education, which was as wide as 19 points in 1997, was fluctuating around 10 points during 2002–2008 but increased to 16 points in 2009. As far as age and type of settlement are concerned, the largest ethnic employment gap is found among the 35–54 years old and in large cities (excluding the capital, Riga). Before the crisis, employment rate of minority youth was higher than that of their Latvian counterparts.





**Figure 3 Employment rates by ethnicity, 1997–2009** (*Upper panel by gender; lower panel by educational attainment*) *Notes:* Population aged 15–74. *Source:* Calculation based on LFS data.

### Labor force participation and unemployment rates

Inspection of labor force participation rates (details omitted) reveals that, since 2004, minority males have been more active in the labor market than Latvian males. The activity gap in favor of Latvian women was as wide as 5 points in 2002, disappeared by 2004 and stayed near zero until 2007, but in increased to 2 points in 2008. The strongest reduction of the ethnic gap in participation has occurred among the low skilled, as well as in the age groups 55–64 and 25–

34. Minority youth features activity rates above those of Latvians throughout the period. On the other hand, among persons with tertiary education, as well as among those aged 65 to 74 and among residents of large cities (except Riga), the gap declined just a little between 2002 and 2007, but bounced back in 2008.

Over the years, unemployment rates have been consistently higher among minorities than among ethnic Latvians. However, minority unemployment rates have been falling faster up until 2005 for men and up until 2007 for women (Figure 4). In 2007 (at the end of the growth period), both male and female unemployment rates were about 1.5 times higher among minorities. The recession-related increase in unemployment between 2007 and 2009 appears to be proportionally larger among Latvians compared to their minority counterparts, especially among males. As a result, in 2009 the ethnic ratio of unemployment rates reached an historic low of 1.29 for males and 1.43 for females.

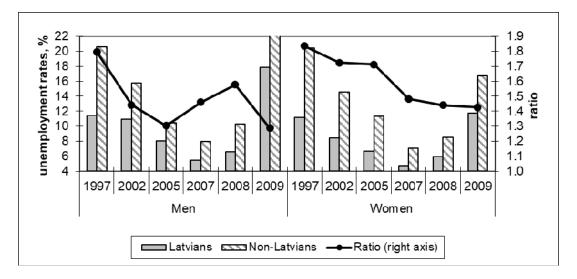


Figure 4 Unemployment rates by ethnicity and gender, 1997-2009. Source: Calculation based on LFS data.

#### **Occupational and sectoral segregation**

Table 4 compares occupational distribution of ethnic Latvian employees with distribution of their minority counterparts in 2002 and in 2007. It appears that these distributions are fairly stable over time. The proportion of highly skilled non-manual workers has increased slightly in both ethnic groups (more among Latvians) at the expense of low-skilled non-manual and unskilled manual workers. Overall degree of occupational segregation is measured by dissimilarity index DI (known also as Duncan index, see Duncan and Duncan 1955); it is a number between 0 and 100, with 0 indicating equal distribution of ethnic (or other) groups among occupations, and 100 indicating complete segregation; see Ehrenberg and Smith (2005: 396). In the given context, DI shows the minimal proportion (in percent) of non-Latvians which would have to change occupations in order to make their occupational distribution identical to that of Latvians. This measure suggests a modest vertical segregation between ethnic groups: when the four "super-groups" (highly skilled non-manual, low-skilled non-manual, skilled manual, and elementary occupations) are considered,  $DI_4 = 12.0$  in 2007 (almost two points up compared to 2002), while for the nine major groups of occupations DI9 = 13.1 (0.6 points up). Vertical segregation is more pronounced among women ( $DI_4$ =13.6) than among men  $(DI_4=10.7)$ .

Latvians are more represented in highly skilled non-manual occupations (especially the first two groups), while non-Latvians – in skilled manual and elementary occupations. In 2007, 24.7 percent of Latvian employees were senior officials, managers or professionals, while among non-Latvians this proportion was 15.2 percent. It is worth noticing, however, that proportion of persons with tertiary education is also higher among ethnic Latvian employees than among their minority counterparts: 27 vs. 21 percent (this gap is less than 4 points though among employees younger than 35 years).

								%
		Lat	vians			Non-	Latvians	5
	2002	2007			2002	2007		
	Total	Total	Men	Women	Total	Total	Men	Women
Occupation								
Highly skilled non-manual	39.5	43.0	32.1	53.9	29.3	31.0	21.8	40.3
Low-skilled non-manual	19.9	18.0	8.0	27.9	20.6	19.6	10.4	28.9
Skilled manual	27.8	27.4	46.5	8.5	34.1	35.1	54.8	15.4
Elementary occupations	12.9	11.6	13.4	9.8	16.0	14.2	12.9	15.5
Total	100	100	100	100	100	100	100	100
		Diss	•	index of o n Latvians		0	•	
by four "super-groups" of occupations (see above)	10.2	12.0	10.7	13.6	10.2	12.0	10.7	13.6
by nine major groups of occupations	12.5	13.1	13.0	15.2	12.5	13.1	13.0	15.2
by 27 two-digit groups of occupations	16.7	15.2	17.1	16.7	16.7	15.2	17.1	16.7
Sector of economic activity								
Agriculture, forestry and fishing	9.3	6.8	9.9	3.8	5.1	3.5	4.8	2.1
Industry and construction	24.9	26.0	39.8	12.4	33.1	35.5	46.9	24.1
Market services	29.5	35.8	31.1	40.4	38.7	42.7	38.0	47.3
Non-market services	36.3	31.3	19.2	43.4	23.2	18.3	10.2	26.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Dis			of segregat				
	17.4	16.4	14.1	18.6	17.4	16.4	14.1	18.6
Employed in the <b>public sector</b> , %	42.9	36.9	26.2	47.5	34.2	24.0	19.7	28.4
N observations	5107	9723	4651	5072	3452	5546	2692	2854

## Table 4: Occupation and sector of economic activity in the main job by ethnicity of employees aged 15–74, 2002 and 2007.

*Notes.* <sup>a</sup> Dissimilarity index *DI* (known also as *Duncan index*, see Duncan and Duncan 1955) is a number between 0 and 100%, with 0 indicating equal distribution of ethnic (or other) groups among occupations, and 100% indicating complete segregation. In the given context, *DI* shows the minimal proportion of non-Latvians which would have to change occupations in order to make their occupational distribution identical to that of Latvians.

Source: Calculation with LFS data.

The distribution of the two ethnic groups among the sectors of economic activity (also presented in Table 4) is much less similar than occupational distribution: index of dissimilarity calculated for the four "large" sectors (agriculture, industry and construction, market services and non-market services) in 2007 was 16.4 (one point below the 2002 level),

0/.

while it was just 12.0 in the case of the four "large" groups of occupations; moreover, dissimilarity index for the four "large" economic sectors exceeds also dissimilarity index for the 27 two-digit groups of occupations.

In 2007, nearly one third of Latvians and about one out of four non-Latvians work in non-market services; almost 7 percent of Latvians and just half of this proportion among minorities are employed in agriculture (recall that only hired employees are considered here). On the other hand, more than a third of minority workers are found in industry, as opposed to one out of four Latvians. 37 percent of Latvian employees were employed by state or local governments, NGOs, or publicly owned (by at least 50%) enterprises, while for minority employees this proportion was just 24 percent.

### Earnings

According to LFS data, in 2002–2009, minority workers earned, on average 8 to 9 percent less than ethnic Latvians. This gap remained quite stable, although it had narrowed somewhat by the end of the growth period in 2007 and increased during the crisis years 2008 to 2009. Moreover, the unexplained gap is concentrated among females working in the public sector (see Table 5). Plausibly, language skills (which are not controlled for in Table 5) explain at least part of this gap.

_	(decomposition results)									
_	Males Females									
							Private	Public	Private	Public
		Full-time w	vorkers <sup>a</sup>		All we	orkers	sector	sector	sector	sector
	2002	2007	2008	2009 d	2002	2009 d	2007	2007	2007	2007
-	A. Ratio of mean earnings (minority vs. Latvians, %)           91.4         92.4         90.7         90.6         91.7         92.4         98.4         90.4         92.6         79.2									
	91.4	92.4	90.7	90.6	91.7	92.4	98.4	90.4	92.6	79.2
	В.	Mean unex	xplained p	bay gap be	etween Latv	vians and o	therwise s	imilar mino	ority work	ers
					nean earnin					
b	11.3***	5.8***	7.2***	6.2***	11.1*** 7.7***	7.3***	0.1	1.8	-1.2	8.9***
c	7.8***	4.1***	5.5***	4.0**	7.7***	5.0**	-4.7	0.2	-0.4	4.8**

 Table 5: Evolution of the ethnic earnings gap, 2002–2009
 (decomposition results)

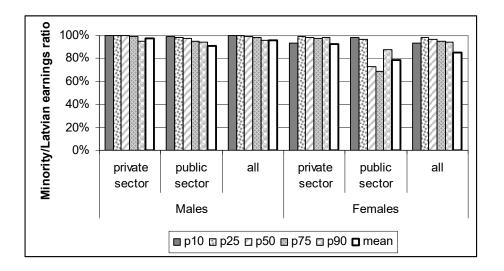
*Notes:* <sup>a</sup> Full-time status as reported by workers, but those working less than 35 hours per week excluded. <sup>b</sup> Controls include gender, educational attainment (7 categories), being a student or pupil, age and its square, marital/cohabiting status, degree of urbanization at residence (4 categories), type of contract, job tenure, usual weekly hours worked, ownership sector, sector of economic activity (12 categories), job location (5 regions and capital city), reference month.

<sup>c</sup> Additional controls: occupations (27 two-digit ISCO groups) and plant size (5 categories). Earnings functions not corrected for selectivity. \*\*\*, \*\* – estimates significant at 1% (respectively, 5%) level. <sup>d</sup> Results for 2009 refer to Q1–Q3.

Secure Colouistics based on LES do

Source: Calculation based on LFS data.

Figure 5 compares earnings of minority and Latvian workers by gender and ownership sector at various quantiles of the distribution. Among males, the ethnic earnings gap is virtually absent in the lower part and in the middle of the distribution of earnings (and also at the mean, as far as the private sector is concerned), while it is 5 to 6 percent at the 90<sup>th</sup> percentile. Among private sector female workers, the gap is 8 percent on average but is present only in the lower end of the distribution. The most substantial ethnic pay gap is found among public sector female workers: 21 percent on average, about 30 percent at the median and at the 75<sup>th</sup> percentile, and 12 percent at the 90<sup>th</sup> percentile.



**Figure 5 Ratio of earnings of minority and ethnic Latvian workers at mean and percentiles of earnings distribution, by gender and ownership sector, 2007.** *Source:* Calculation with LFS data.

## LABOR MARKET INTEGRATION BARRIERS

### Overview

Ethnic minorities in Latvia face several types of barriers which may affect employment rates and quality of jobs:

- occupation-specific state language proficiency requirements determined by government regulations;
- some occupations are reserved exclusively for citizens of Latvia;
- statistical discrimination caused by the fact that non-Latvians rarely have perfect Latvian writing skills;
- employer or employee discrimination based on ethnic prejudice;
- cultural or psychological barriers which discourage minority individuals from applying for jobs in institutions or firms, where employees are predominantly ethnic Latvians (e.g. central and local government institutions);
- quality of education in minority schools might suffer when subjects (e.g. mathematics) are taught in Latvian or bilingually by teachers (and/or to students) who are less than fully functional in the language;
- insufficiency of the *public* supply of general and professionally oriented Latvian language courses for adult population.

Many of these barriers are of mixed external/internal nature. Clearly, language skills and/or citizenship status are behind most barriers. We concentrate here on language skills.<sup>7</sup>

### Ethnicity effects on labor market outcomes

Existence of labor market integration barriers is manifested by differences in labor market outcomes which cannot be explained by differences in demographic and human capital

<sup>&</sup>lt;sup>7</sup> See Kahanec and Zaiceva (2009) for a study on the citizenship effects of labor market outcomes in Europe in general and in Latvia in particular.

characteristics (except for Latvian language skills) of the two groups.<sup>8</sup> Table 6 provides evidence that unexplained gap in employment rates has narrowed down substantially between 2002 and 2007, but increased again during the recession: the average for the first three quarters of 2009 reached 4 points for men and exceeded 5 points for women, and hence the gap is more persistent among women.

I able 0. I	Table 6. Evolution of the unexplained ethnic employment gap, 2002-2009							
Gap	Males Females							
(% points)	2002	2007	2008	2009 <sup>b</sup>	2002	2007	2008	2009 <sup>b</sup>
Total	4.2	-1.8	-0.8	1.8	7.7	1.5	3.3	4.7
Explained <sup>a</sup>	-0.5	-2.6	-3.4	-2.1	-0.4	-0.8	-0.4	-0.7
Unexplained <sup>a</sup>	4.6***	0.8	2.7***	3.9***	8.1***	2.3***	3.7***	5.4***

 Table 6. Evolution of the unexplained ethnic employment gap, 2002-2009

Notes: <sup>a</sup> Control variables include: age group, education (7 categories), family status, region, degree of urbanization, and quarter. <sup>b</sup> Results for 2009 refer to Q1–Q3.

\*\*\*, \*\* – estimates significant at 1% (respectively, 5%) level.

Source: Calculation based on LFS data.

The average unexplained ethnic pay gap has declined from 11 points in 2002 to 6 points in 2007 but bounced back to 8 points in 2009. Similar to the raw gap, it is most pronounced among public sector female workers: 9 points, five of which remain even within narrow occupation-firm size cells. The unexplained gap is virtually absent in the private sector and among public sector male workers (see Table 5).

### State language skills and their effects on labor market outcomes

We now turn to state language proficiency as the key factor behind the barriers. Table 7 shows that both occupational and sectoral segregation of minority workers (documented in Table 4) can be explained to a large extent by Latvian language skills. In a self-reported classification in a survey conducted between November 2005 and January 2006, 62 percent of employees aged 18 to 64 are native Latvian speakers, 20 percent have good knowledge of Latvian language, 12 percent – medium level knowledge, and 6 percent – poor knowledge. Among employees with good Latvian language skills only 6 percent would have to change occupation to make their occupational distribution identical to that of native Latvian speakers; for workers with medium and poor Latvian language skills this proportion is 24 and 49 percent, respectively (these figures refer to distribution between highly skilled non-manual, low-skilled non-manual, skilled manual, and elementary occupations, but the results are almost identical when 9 major ISCO groups are considered). Similar picture emerges as far as sectoral segregation is concerned: just 9 percent of minority employees with good Latvian language skills would need to change sector of employment in order to have both groups distributed among agriculture, industry, market services, and non-market services in the same proportions. For workers with medium and poor Latvian language skills the dissimilarity index is 15 and 22 percent, respectively.

Average earnings of minority workers are positively related to their Latvian language skills. In 2005, those with good knowledge of Latvian language earned, on average, 2 percent more than native Latvian speakers, while those with medium and poor Latvian language skills earned 9 and 12 percent less than natives, respectively (Table 7). However, there is no unexplained pay gap for workers with poor Latvian language skills (plausibly, they are

<sup>&</sup>lt;sup>8</sup> See Hazans (2005, 2007a, 2007b, 2007c), Hazans, Dmitrijeva and Trapeznikova (2007), LLU (2007), Hazans, Trapeznikova and Rastrigina (2008) and Vanhuysse (2009) for evidence and discussion.

occupied in jobs where this factor is not considered important), while employees with good and medium Latvian language skills earn, on average 4 and 6 percent less than native Latvian speakers with similar personal and job characteristics (Table 7).

							%
Knowledge	Share	e of workers	seg	rity index <sup>a</sup> of regation Latvian speakers	Ratio of mean earnings	*	ed earnings en the given
of Latvian language	All	Minority	By four super- groups of occupations	By four main sectors of economic activities	to those of native Latvian speakers	category and native Latvian speakers	
Native	62.5	1.3	—	_	_	b	с
Good	19.9	51.6	5.9	9.1	102.1	4.0**	3.7**
Medium	12.2	32.2	24.2	15.4	90.9	5.7***	6.4***
Poor	5.4	14.9	49.0	22.3	88.2	1.9	0.9

## Table 7 Occupational and sectoral segregation and earnings of minority workersby self-reported Latvian language skills level.Full-time employees aged 18–64, 2005.

*Note:* <sup>a</sup> Dissimilarity index *DI* (known also as *Duncan index*, see Duncan and Duncan 1955) is a number between 0 and 100%, with 0 indicating equal distribution of ethnic (or other) groups among occupations (or sectors), and 100% indicating complete segregation. In the given context, *DI* shows the minimal proportion of workers with good, medium and poor Latvian language skills which would have to change occupation (or sector of economic activity) in order to make their distribution among occupations (sectors) identical to that of native Latvian speakers. <sup>b</sup> Without occupation and plant size controls. <sup>c</sup> With occupation and plant size controls. \*\*\*, \*\* - estimates significant at 1% (respectively, 5%) level.

Source: Calculation with survey data, N=4040 (see Hazans 2007b: Tables 1.11, 1.13 and 2.7).

Based on another survey which refers to 2006 and provides information on respondents self-assessed language skills relative to those necessary for the given job, minority female workers, whose job does not require language skills except for their mother tongue, earn 8% less than their otherwise similar counterparts who need other languages at work (similar result holds for ethnic Latvians of both genders, while among minority males this effect is absent). Moreover, minority females earn 19% less (other things equal) when their Latvian language skills are insufficient for their job, and 7% less if they are not citizens of Latvia<sup>9</sup>.

Compared to employed wage earners, the minority registered unemployed exhibit a much lower incidence of [self-assessed] good Latvian language skills (30 percent vs. more than a half) and a much higher incidence of poor skills (28 vs. 15 percent). <sup>10</sup> One in four minority unemployed registered in 2005 to 2006 did not have any legal proof of their state language skills<sup>11</sup>; in this group, just 1.1 percent underwent occupational training at the State Employment Agency, while this proportion was 8.3 percent among those with the advanced level certificate and 6.5 percent among native speakers (Hazans, Dmitrijeva and Trapeznikova, 2007: Table 8.8 at p. 417 and table 10.1 at p. 432). Duration analysis of administrative data finds that other things equal, persons without any certificate of state language skills feature significantly lower probability to leave unemployment while not having found a job (Hazans, Dmitrijeva and Trapeznikova, 2007: Table 8.11 at p. 420).

<sup>&</sup>lt;sup>9</sup> See Hazans (2008: Section 3 and Table 4) for details on the survey and estimated earnings function.

<sup>&</sup>lt;sup>10</sup> See Table 7 for wage earners; for the registered unemployed the source is calculation with data from a survey of 10264 registered unemployed (Hazans, 2006) conducted at the same time.

<sup>&</sup>lt;sup>11</sup> This proportion stayed almost unchanged up until the third quarter of 2009.

Latvian language skills of the minority population in general show steady progress: Table 8 documents that the proportion of the minority population with good Latvian language skills tripled between 1996 and 2008. The improvement was especially rapid between December 2004 and March 2008; and importantly it was equally impressive across among the young, middle-aged and those older than 50 (see Zepa, Žabko and Vaivode, 2008, Figure 5.2).

(population aged 15–74 with other native languages)									
1996         2000         2004         2008           (June)         (March – April)         (Nov – Dec)         (March – Apr									
Good	9.0	13.0	17.0	26.2					
Intermediate	27.0	28.0	30.0	31.2					
Poor	43.0	50.0	43.3	35.6					
None	21.0	9.0	9.7	7.0					
Total	100.0	100.0	100.0	100.0					

Table 8 Self-assessed Latvian language skills, 1996–2008
(nonulation good 15, 74 with other native languages)

Source: Calculation with data from survey "Language" (Zepa, Žabko and Vaivode, 2008).

Plausibly, the combination of growing demand for and falling supply of labor (caused by post-enlargement growth and emigration) forced employers to lower *de facto* requirements towards new workers along all dimensions, including state language skills. Such liberalization gave a chance to work in a Latvian-language-intensive environment to many non-Latvians who previously had no or very few contacts with Latvians. Thanks to increasing number of inter-ethnic contacts at the workplace, both Russian-speakers and Latvian-speakers could improve their knowledge of the "second" language, while the dominating role of Latvian language has not been threatened. Data on language use at the workplace (Table 9) supports this argument: Between 2004 and 2008, among both native Latvian-speakers and native Russian-speakers, the proportion of workers who speak Latvian more than Russian shows the largest increase - at the expense of those who uses only the native language. This suggests that relatively liberal access to jobs for minorities can facilitate not only their labor market integration but also cultural (including language) and social integration. Language-based labor market restrictions, by contrast, are unlikely to lead to successful integration of a large minority. Such restrictions create a "lock-in" effect: often, necessary degree of fluency in Latvian is difficult to achieve just by learning in class, but in the workplace, a person with some knowledge of the language will almost surely reach the required level within one year or less; the problem is, how to get to the workplace.

Table 9	Table 9 Language use at the workplace, 1996–2008							
		Native F	Russian sj	peakers	Nat	ive Latvi	an speak	ers
	1996	2000	2004	2008	1996	2000	2004	2008
Only/Mainly Latvian	3.0	7.0	4.7	5.5	78.0	71.0	60.9	55.8
Latvian more than Russian	6.0	16.0	17.7	27.2	18.0	21.2	31.6	37.4
Russian more than Latvian	27.0	35.0	38.9	38.8	2.8	5.4	6.0	5.5
Only/Mainly Russian	63.6	41.0	36.5	26.6	0.8	2.0	0.8	0.4
Other	0.4	1.0	2.2	1.8	0.4	0.4	0.8	0.9
Total	100	100	100	100	100	100	100	100

*Notes:* Only employed persons were included. Non-response (less than 1 percent) was excluded. *Source:* Calculation with data from survey "Language" (Zepa, Žabko and Vaivode, 2008).

Duration analysis of administrative data (Hazans et al., 2007) finds a significant negative effect of non-titular ethnicity on probability of exit from registered unemployment to employment, but it is of substantial size only for those without any certificate of state language skills; moreover, this category is also much more likely to leave unemployment while not having found a job.

#### Public perceptions and attitudes towards ethnic minorities

At the individual level, "ethnic relations in Latvia are seen as being positive or satisfactory by most people. In a survey in Spring 2004, Latvians said, on average, that their relations with Russians can be rated at a level of 7.8 on a 10-point scale; Russians rated their relations with Latvians at a level of 8.35, while other non-Latvians rated their relations with Latvians at a level of 8.70" (Zepa et al., 2005: 41); this is despite the fact that at the time of the survey, on the eve of the education reform in minority secondary schools, tensions in inter-ethnic relations were at their high point (Zepa, 2004a, 2004b). Golubeva et al. (2007: 150) report that both Latvian and Russian-speaking teenagers see friendly inter-ethnic relationship as an ideal model. However, "people separate out two different issues – ethnic relations in society as a whole, and individual ethnic relations. The dominant discourse is one in which relations in society at large are evaluated in negative categories... while individual (my) relations are seen as neutral, neutrally positive or positive" (Zepa et al., 2005: 44). For a recent comprehensive analysis, see Zepa and Šūpule (2006); they point out to "collective ethnic fears... among both Latvians and non-Latvians, although the apprehension is more distinct among Latvians, who tend to respond by avoiding contacts with other ethnic groups." Table 10 illustrates that a large proportion (not a majority though) of Latvian population reveals a substantial ethnic prejudice. This sometimes translates into mono-ethnic or almost monoethnic workplaces (see details below).

(respondents who agree or strongly agree, in percentages)								
2004	Latvians (N=510)	non-Latvians (N=508)						
You cannot fully trust anyone of a different ethnicity	35.0	23.0						
It is not really possible to understand people of other ethnicities	43.0	37.0						
It would be better if people of each ethnicity were to live in their own country	53.0	20.0						
2006	All respon	dents (N=1072)						
Ethnicity is an important factor when you establish relations or contacts with other people		19.9						
You definitely would not want to have as neighbours: Roma		44.1						
Muslims		26.6						
Immigrants		12.6						
People of another race		8.9						
Jews		5.6						

 Table 10: Incidence of ethnic prejudice, 2004 – 2006

Sources: Zepa (2004b); SKDS (2006).

Developments in inter-ethnic relations in 2008–2009 are difficult to classify unambiguously as leading to more or less harmony<sup>12</sup>. On one hand, tensions around use of languages in public space and historic events seem to intensify, although it is not clear how big is the proportion of population (both minority and majority) which actively fuel these tensions. On the other hand, severe economic crisis made it clear to many that the two ethnic groups have more common than conflicting interests. After municipal elections in 2009, the ruling coalition in the city council of Riga, Latvia's capital, has been formed by two parties, one of which (the Concord Centre, known also as the Harmony Centre) was traditionally considered as "pro-Russian" while the other (*LPP/LC*) – as "mainstream Latvian", and the first ever ethnic Russian mayor has been elected. This is a turning point perceived as a chance by some (in both ethnic groups) but as a threat by others. While medium-term consequences

<sup>&</sup>lt;sup>12</sup> We refer to Muižnieks (2010) for a recent collection of studies on the issue.

of this event in a wider political and social context are yet to be understood, it has already triggered a range of activities among the political elite.

### PUBLIC POLICY

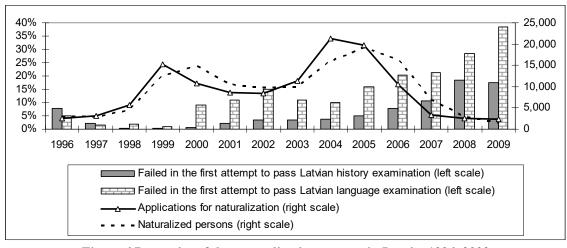
#### Relevant public policies: an overview

Main policy areas related to labor market integration of ethnic minorities can be divided into three categories. *At the EU level*, free movement of people and free movement of labor are the main issues. Until beginning of 2007, Latvian non-citizens, unlike other residents of the country, needed travel visas for entering most of the EU countries. After May 1, 2004, only citizens of Latvia obtained legal right to work without special permission in those EU countries which have opened their labor markets for new member states. As of October 2009, this situation has changed only slightly. Latvian non-citizens can now apply for the status of permanent resident of the EU, but this involves some monetary and time costs, assumes a proof of employment or other source of income (so that unemployed are in most cases ineligible), and requires passing an exam in Latvian language proficiency at the upper basic level. Thus, "the outside option" is worse for non-citizens, which has a negative effect on their bargaining position in Latvian labor market. Hazans (2008, Table 2) and Hazans and Philips (2009, Table 2 and Figure 11) provide evidence that in the post-enlargement period non-citizens were significantly less internationally mobile than citizens, both on average and after controlling for other factors.

At the country level, minority-related policies concern: ratification and implementation of international conventions; citizenship; education; state language requirements in the labor market; general policies towards integration of the society; active and passive labor market policies; mainstreaming the minority problems in publicly funded research and statistics. Finally, practices of implementation of language, education, integration, and active labor market policies are determined *at the local level*.

A national program for integration of the society was initiated in late 1990s by "a loose coalition of mid-level civil servants, researchers and NGO activists allied with international organizations" (Muižnieks (2006: 20) and was adopted by the government in 2001. However, the consensus within the expert community (as of 2009) was that the program had a number of inherent drawbacks in terms of general approach and implementation and has not achieved it goals (see Muižnieks, 2010).

As far as citizenship is concerned, 132.3 thousand persons have been naturalized between 1995 and September 30, 2009. Figure 6 provides evidence that the process has slowed down substantially in 2006 and even more so in 2007–2009, mostly due to falling demand, but to some extent also because of steadily increasing failure rates which have by 2009 have reached 18% in the history exam and 39% in the language exam and certainly have not just a direct but also a signaling effect. The question of providing the permanent residents of Latvia who do not hold citizenship with the voting rights at least at the municipal level is discussed in the public space from time to time but without any signs of progress.



**Figure 6 Dynamics of the naturalization process in Latvia, 1996–2009** *Notes*: 2009 data refer to Q1–Q3. *Source*: Calculation with data from the Naturalization Board of the Republic of Latvia.

As shown previously (see Table 8), a significant progress has been achieved between 1996 and 2008 in the field of improving Latvian language skills of minority population, but it is not clear to what extent this can be explained by the policies, and to what extent – by increasing employment rates and everyday use of Latvian language at the workplace. However, the contribution of the National Agency for Latvian Language Training (LVAVA) has been important in many respects and for many target groups, including minority school teachers and students.

Limitations in space do not allow for a more thorough and detailed analysis of all the relevant public policies here.<sup>13</sup> In particular, we touch only briefly on the education reform in minority schools. An important aspect is the fact that a substantial proportion of teachers and/or students are still unable to function to their full capacity when instruction is in Latvian. As the result, using quantitative restrictions imposed on the teaching process (rather than targets at the exit of each stage of the education) often undermines quality of education in subjects like mathematics or physics. These concerns are supported both by the trends in the exam results and, indirectly, by the fact that the minority school system is losing competition for students: while proportion of non-Latvians among full-time students in general (primary and secondary) schools remains stable around one third, the proportion of students in minority schools has declined from 35% in 1998 to less than 27% in 2008.

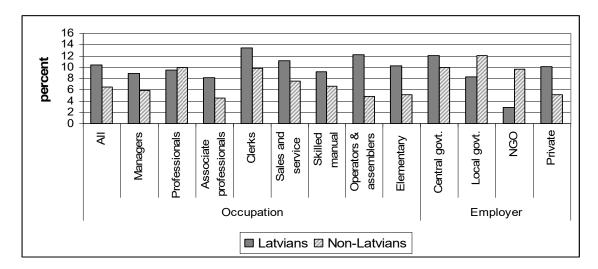
#### State language proficiency requirements

According to the State Language Law, the following categories of employed persons are subject to state language proficiency requirements: (i) Employees of state and municipal institutions, courts and agencies belonging to the judicial system, state and municipal enterprises, as well as the companies in which the state or a municipality holds the largest share of the capital; (ii) Employees of private institutions, organizations, enterprises, as well as self-employed persons, whose activities relate to legitimate public interests (public safety, health, morals, health care, protection of consumer rights and labor rights, workplace safety and public administrative supervision) or who perform certain public functions. The requirements for specific occupations are formulated in terms of one of the six levels: lower

<sup>&</sup>lt;sup>13</sup> For a discussion and analysis of a broad range of public policies related to minority issues see for instance Tsilevich (2001), BISS (2002), Silova (2002, 2006), Zepa (2003, 2006), Zepa et al. (2004a, 2004b, 2005, 2006), Galbreath and Galvin (2005), Zepa and Šūpule (2006), Hogan-Brun (2006), Muižnieks (2006, 2010), Zepa, Žabko and Vaivode (2008), Galbreath and Muižnieks (2009), and Vanhuysse (2009).

and upper basic (1A, 1B); lower and upper intermediate (2A, 2B); lower and upper advanced (3A, 3B). Each employer is responsible for preparing (within 3 month after registration) a list of required state language proficiency levels for all jobs in the firm/organization. The requirements cannot be lower than those in the government regulations; employees whose jobs are not listed in the regulations but who work directly with customers should provide to the clients necessary information on goods and services in the state language.

The first version of the regulations was issued in 2000, but the list of occupations was extended several times in 2001–2008. In a survey held in 2006/Q4–2007/Q1, employees were asked to compare their Latvian language skills, as well as language proficiency requirements imposed by employers (or by the law when relevant) with the level which is in fact necessary to perform their professional duties. Overall, 19 percent of the employees were not subject to any state language requirements, 71 percent consider the requirements as consistent with professional duties, 1 percent saw them as insufficient, and almost 9 percent believed the requirements were "substantially higher" than really necessary. Figure 7 presents the proportion of employees who expressed the latter assessment, by ethnicity, occupation and sector.



## Figure 7 Employees who believe that state language requirements imposed by employers for the position they occupy are substantially higher than necessary (by ethnicity, occupation and sector)

*Source*: Own calculation with data from a survey of wage earners (N=10177) conducted in October 2006 – February 2007 for the project "Specific Problems of the Labor Market in Latvia and its Regions", see LLU (2007, pp. 17–19) for details.

Noteworthy, the view that state language requirements for the position they occupy are excessively strict is more often expressed by Latvians (10.4 percent) than by non-Latvians (6.4 percent). For non-Latvian employees, the highest proportion (12 percent) of those who thinks that language requirements for hiring were too strict, is found in local government institutions, followed by central government institutions and NGOs, as well as among professionals and clerks in general (10 percent). At a more detailed level, the highest rates of perception of the state language requirements as too strict was found among stationary plant and related operators (20 percent).

Perceived strictness of state language requirements varies substantially by region and urbanization level: 18 percent of minority workers see them as too strict in predominantly Latvian Vidzeme region, while in Riga region this rate is less than 5 percent; in large cities, not including Riga, the disapproval rate among minority workers is 11 percent compared to just 5 percent elsewhere.

These results suggest that on the eve of 2007, the state language proficiency requirements were largely consistent with real needs implied by professional duties, although some liberalization could be useful in regulations for selected occupations, as well as in application of the requirements by some categories of employers. Moreover, the relationships between state language skills and labor market outcomes reported earlier in this chapter indicate that the labor market itself provided incentives of acquiring adequate Latvian language skills.

However, the second version of the government regulations (approved in July 2009), while based on the same above mentioned general approach, substantially extended the list of the occupations affected, especially in the private sector, and in some cases raised the required proficiency levels. For some occupations the requirements in the public sector are now higher than in the private sector. One of the factors which contributed to hardening of the regulations was temporary worsening of the quality Latvian language in the service sector in 2006–2007 labor shortage forced employers to lower *de facto* requirements towards new workers. However, in a survey conducted in 2008 (Zepa, Žabko and Vaivode 2008), only 18 percent of native Latvian speakers supported the legal regulation of language usage or applying restrictions to those who do not command Latvian as a way of promoting a Latvian language environment for non-Latvians.

Workers who have yet to be awarded a certificate of the required level have been given one to two years to do so. It is already clear however that these deadlines are not realistic. Experts assume that the new regulations will not result in mass layoffs, as they probably will not be enforced too strictly and the deadlines will be moved. However these regulations will have a strong signaling effect. In particular they are likely to increase emigration rates and reduce return migration among minorities.

## **BUSINESS POLICY**

### Attitudes of the corporate world towards ethnic minorities

This section provides evidence on employers' views related to ethnic composition of their workforce, as well on incidence of mono-ethnic enterprises in Latvian labor market (hereafter, term "mono-ethnic enterprise" is used loosely to denote a case when all employees have the same mother tongue, Latvian or Russian).

A study conducted in 2004 by Zepa and Karnīte (2004), which is based on a survey of enterprises (sampled at a 1 percent rate, N=422) and in-depth interviews with employers at some of these enterprises, confirms the existence of mono-ethnic enterprises (mostly small businesses but also public institutions): 29 percent of enterprises surveyed were "Latvian,' and 13 percent were "Russian"; the incidence of mono-ethnicity differed across regions and sectors (we discuss this later using more recent and representative data). Most enterprises (58 percent) however were "mixed", and the study pointed to an increasing tendency towards ethnically mixed companies. Both this study and LLU (2007) indicate that this tendency is driven by language legislation on one hand and by competition for customers on the other, as well as by globalization and an inflow of foreign capital. Furthermore there is increasing awareness of returns to diversity: Zepa and Karnīte (2004, p. 39) find that "87% of respondents feel that mixed collectives provide fertile soil for interesting ideas" and conclude that "in business relations, ethnic factors are not seen as a problem or as an important criterion for co-operation. Business interests dominate" (p. 14). A Latvian-speaking employer told in a discussion (LLU, 2007, p.140): "We have people of different nationalities, some speak Latvian, some – Russian. No problems, I think a mixed group is even better". However other employers, especially Latvians, pointed to "shortcomings - splits among colleagues, difficulties with communications, potential conflicts and differences in work culture" (Zepa and Karnīte, 2004,

p. 40). The authors conclude nonetheless that economic interests drive integration and that ethnically mixed companies contribute to integration via interethnic communication at the workplace. The study recommends among other measures to involve Russian companies in employers' associations and also to "make the state sector more accessible and open for non-Latvians, providing information to Russian speaking society about vacancies in this sector, showing and widening by this the potential field of job opportunities" (Zepa and Karnīte, 2004, pp. 12–13). Three years later this recommendation still seems to be up-to-date: according to the LFS 2007 the proportion of non-Latvians among non-manual workers in public administration is 2.3 times lower than the national average minority proportion among all employees (17 versus 39 percent).

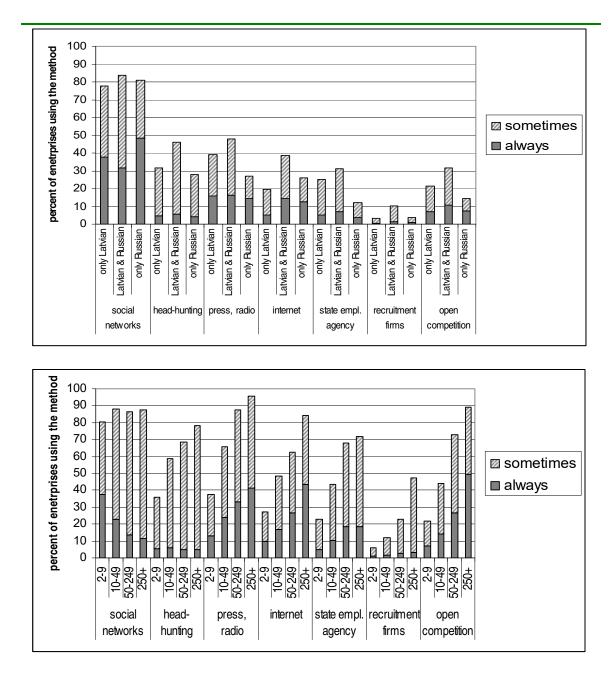
### Determinants of ethnic composition at the enterprise level

By 2006 the incidence of perceived labor market discrimination toward individuals of Slavic origin as well Lithuanians and Estonians (recall that together these groups constitute 93 percent of all non-Latvians, see Table 1) was rather low both at the worker and enterprise level (Tables A1, A2 in Appendix; see also LLU, 2007, Tables 4 and 10 in Appendix 5.3.1; the incidence of discrimination against Latvians was even lower according to the same sources). This suggests that at the enterprise level, pure discrimination has a limited impact on the breakdown of the workforce into Latvian and Russian-speakers. There are many other factors which might explain why enterprises are (or are not) mono-ethnic. Such enterprises are of course frequently found in regions with ethnically homogeneous population, such as Vidzeme, where 85 percent are Latvians; or the city of Daugavpils, where 82 percent are non-Latvians. The company's history also plays an important role: an enterprise with a history going back to the Soviet era is likely to have both Latvian and Russian-speaking workers (although one of the groups might dominate). Recruiting methods have a direct effect on the ethnic composition of a company's workforce. Large private enterprises, as well as enterprises with foreign capital (both existing and emerging), usually announce vacancies in both the Latvian and Russian language media as well as at the State Employment Agency and private employments services. This is why such enterprises are rarely mono-ethnic. Small enterprises usually rely on informal social networks and/or announcing vacancies in just one language simply to keep hiring costs low (recall that media space is divided). If a firm was originally a small enterprise with a single owner (or all owners were either Latvian or Russian-speakers), chances are high that the first group of employees came from the same linguistic group as the owners, even if there was no such intention. If the same recruiting methods prevail during the whole stage of initial growth, the firm can easily reach the "critical size" as mono-ethnic. After that, even if recruiting strategy changes, the firm is likely to remain completely or almost mono-ethnic, due to cultural and social barriers: a Russian-speaker might feel uncomfortable being just one among 10 or 20 Latvians. After that, even if recruiting strategy changes, the firm is likely to remain completely or almost mono-ethnic owing to cultural and social barriers: a Russian-speaker might feel uncomfortable being just one among 10 or 20 Latvians.

> It's not a secret that in Latvia there are Russian-speaking companies and Latvianspeaking companies. It is the mentality problem, it is not the employee qualification problem, it is not the problem of understanding, because we simply feel things differently (LLU, 2007, p.141)

Of course this scenario might be changed by individuals coming from ethnically mixed families or just consciously pursuing a strategy aimed at social integration or mastering their language skills.

To support the above story, Figure 8 (based on our own calculations with data of a representative survey of 6066 employers conducted in December 2006 - March 2007) presents the use of different recruiting methods by "Latvian-speaking", "Russian-speaking" and "mixed" enterprises.



### Figure 8: Use of recruiting methods in 2006-2007.

Upper panel: By languages used in the enterprise.

Lower panel: By the number of workers in the enterprise.

*Source:* Own calculation with data a survey of employers (N = 6066) conducted in December 2006 - March 2007 for the project "Specific Problems of the Labor Market in Latvia and its Regions", see LLU (2007, pp. 18-19) for details.

Networking is by far the most popular method in all categories of enterprises, but "Russian-

speaking" firms use it more intensively then the others. However in terms of recruitment method used, "Latvian-speaking" and "Russian-speaking" enterprises are much more similar to each other than to mixed enterprises, and the latter category complements networking with other methods to a much larger extent (Figure 8, upper panel). According to the same survey, intensity of systematic use of social networks decreases with firm size, while incidence of all other recruitment methods increases (Figure 8, lower panel).

While the factors mentioned above have little to do with employers' (or managers') intentions related to the ethnic composition of the workforce, some employers do have an agenda in this respect. In focus group discussions about discrimination (LLU, 2007, pp. 140-141) some employers acknowledge that it is easier to work with people of the same ethnicity or mother tongue; others however point to orientation toward ethnically mixed teams. Part of both Latvian and Russian employers emphasized that worker's ethnicity is not important for them, only qualification and skills matter (LLU, 2007, pp. 140).

In the 1990s and early 2000s some of the Russian-speaking employers used a "solidarity strategy": other things being equal they preferred to hire non-Latvians because they believed a Latvian applicant would easily find another job. In exchange they expected loyalty: Russian-speaking employees, especially with weak Latvian language skills, have fewer possibilities outside and hence would be more loyal and less likely to quit. These patterns seemed to be no longer at work in 2005-2007, when the labor market became very tight.

According to the above-mentioned survey of employers conducted in 2006 and 2007, "only Latvian" is used in 30.9 percent of the enterprises; "only Russian" is used in 3.3 percent (LLU, 2007, Table 10 in Appendix 4.1.1)<sup>14</sup>. These figures provide upper bounds to the incidence of mono-ethnic enterprises; hence at least two-thirds of all enterprises are ethnically mixed. In fact enterprises which use "only Russian" are very likely to be mono-ethnic or close to it, whilst enterprises which use "only Latvian" are not necessary mono-ethnic. Enterprises with fewer than ten workers ("micro") are much more likely to be monolingual: about one-third of "micro" enterprises and about a quarter of the others are "Latvian-only-speaking"; the proportion of "Russian-only-speaking" enterprises falls from 4.4 percent among "micro" firms to 2.3 percent (10 to 49 workers) to about one percent among enterprises with 50 employees or more (LLU, 2007, Table 11 in Appendix 4.1.1).<sup>15</sup>

The highest incidence of "Latvian-only-speaking" enterprises (42 to 56 percent) is found in small cities and rural areas; in Vidzeme and Kurzeme regions; in municipal and central government institutions; in public administration, agriculture, research and education. This is consistent with the fact that the proportion of minority employees is below average in each of these groups. The highest incidence of "Russian-only-speaking" enterprises is found in the six largest cities not including Riga, in the Latgale region, in the manufacture of food, textiles, metals and metal products, and in computer firms: the proportion is 9 to 10 percent in all these cases except computers, where it reaches 14 percent (Table A3 in Appendix).

### Is there a need for proactive business policies aimed at ethnic minorities?

It appears from the above discussion that ethnic configuration of Latvian enterprises and organizations is determined by a variety of factors, including regional demographics; employer and employee discrimination; statistical discrimination; stereotypes that are maintained in society and reproduced in the mass media; legal requirements of state language proficiency; real market needs for Latvian and Russian language skills in different occupations and regions; linguistic, cultural, and social barriers; recruiting procedures; divided media space; business interests (in particular, perceived returns to ethnic diversity). There seems to

<sup>&</sup>lt;sup>14</sup> These estimates in LLU (2007) are non-weighted; more appropriate weighted estimates are similar: "only

Latvian" is used in 30 percent of enterprises and "only Russian" - in 4.1 percent (Table A3 in Appendix).

<sup>&</sup>lt;sup>15</sup> According to weighted estimates, this proportion vanishes among enterprises with over 250 employees (Table A3 in Appendix).

be a matching process which allocates employees to mono-ethnic or mixed enterprises depending on their preferences and skills. Importantly, mono-ethnic workforce at the enterprise does not necessarily imply ethnic prejudice on employer's or employee's side.

In our opinion, enterprise level ethnic diversity as such should not necessarily be a general policy objective. Rather, the policies should be aimed at removing barriers (for instance, improving state language skills, rationalizing legal language requirements when necessary, promoting tolerance, removing the "glass doors", etc. However, in the field of public administration there is indeed a need for higher participation of minorities (see Zepa and Karnīte, 2004: 12-13; Zepa and Šūpule, 2006: 35-36).

### Promoting ethnic diversity: the case of Hansabanka.

AS Hansabanka (since 2009 Swedbank), one of the leading commercial banks in Latvia, was established in 1992 as a predominantly "Latvian" business. By April 2007, however, Hansabanka employed 381 non-Latvians, which constituted 15 percent of all employees (see Table 11 for details). The proportion of minority employees was slightly lower among front-line staff (14 percent) and middle level managers (12 percent), but slightly higher among professionals and associated professionals, as well as high-level managers (18 percent). These figures suggest that minority employees enjoy equal promoting opportunities. This case was chosen as a typical example of the Latvian way to ethnic diversity, the driving force being business interests rather than anything else.

Hansabanka has branches in every part of Latvia; there are hundreds of thousands of Latvian-speaking as well as Russian-speaking customers (the latter category also includes residents of neighboring countries), and customers at every level are served in the language of their choice. According to the head of the personnel department, Hansabanka does not have an explicitly formulated policy of promoting ethnic diversity: it comes naturally as a result of rational business strategy and selecting the best candidate for each job. The bank applies equitable, systematic and fair recruitment principles when employing staff. Furthermore the head of the personnel believes that this results in a better company reputation, a more qualified and motivated workforce, more diverse human and cultural capital, innovation, better marketing opportunities, and improved customer satisfaction.

Language requirements at the recruitment stage are fine-tuned to real needs and vary significantly (see Table 11). Given that Hansabanka is an industry's leader and one of the very visible enterprises in Latvian economy in general, its practice as an equal opportunities employer has a significant impact on the labor market integration of ethnic minorities.

	Latvian	Russian	English
Administrator at a customer center	good	good	-
Customer clerk, Customer consultant	good	good	-
Credit specialist	excellent	excellent	-
Transaction analyst	good	good	good
Enterprise projects manager's assistant	excellent	good	-
Website administrator	excellent	good	good
IT administrator; Java developer	-	-	good
Telesales specialist	very good	very good	
Head of department of telesales	good	good	(advantage)
Source: Hansabanka.			

Table 11: Language requirements when hiring for selected jobs at Hansabanka

## POLICY IMPLICATIONS

Impressive progress in the field of the labor market integration of minorities was achieved in Latvia between 1997 and 2008 despite a lack of successful policymaking. In the post-Soviet era each Latvian government has so far been based on a multiparty coalition; composition of the coalition and distribution of the ministries between parties have been subject to frequent changes; and different coalition parties have different priorities and favor different approaches to the integration (Zepa, 2006). Nils Muižnieks (2006), Latvia's first integration minister, remarks that:

Citizenship, language and education policy occasionally worked at cross-purposes, with different agencies simultaneously applying the "carrot" and the "stick" and liberalization in one realm accompanied by "tightening" in another, [and that the] lack of political consensus continues to hinder effective minority policy implementation.

A lack of consensus has resulted in stagnant policies. For example, no major policy changes have been adopted in the following fields over the corresponding time periods: in the field of citizenship since 1998; in the field of language requirements in the labor market since 2000; and in the field of minority education since 2004. The situation in the three areas can be described as a suboptimal non-cooperative equilibrium in which none of the parties is happy.

Muižnieks (2010) claims that the integration program approved in 2001 had many inherent problems, both conceptual (for example being in essence unidirectional and ignoring the idea that Latvians should do their part as well) and related to implementation (for example a lack of built-in success indicators and a monitoring system). He describes the current situation as: "No pressure from abroad - no integration policy. Both the elite and the society are still ethnically split. Integration policy will be mainstreamed again only when the new immigration wave will come."

Analysis suggests that relatively liberal access to jobs for minorities can facilitate not only their labor market integration but also cultural (including language) and social integration. Economic interests drive integration, and ethnically mixed companies contribute to integration via inter-ethnic communication at the workplace. Language-based labor market restrictions by contrast create a "lock-in' effect and are unlikely to contribute to the successful integration of a large minority. On the other hand any shift towards a more hardline language policy is likely to increase permanent labor emigration among the minority population; given the demographic situation in Latvia, there will be a need in the medium term to replace these emigrants with new immigrants from third countries.

At the EU level, labor mobility restrictions applied to Latvian residents (including Latvian-born individuals) who do not hold Latvian citizenship remains an unresolved issue.

## REFERENCES

Batelaan, P. (2002), "Bilingual Education: The Case of Latvia from a Comparative Perspective", in Indra Dedze (ed.), *Bilingual education in Latvia: International Expertise*. Riga: The Soros Foundation Latvia, pp. 4-19, https://providus.lv/article\_files/1026/original/Bilingv2002en.pdf?1326878842

BISS [Baltic Institute of Social Sciences] (2002), *Analysis of implementation of bilingual education*. Riga, Latvia: BISS, http://www.biss.soc.lv/downloads/resources/bilingvalEducation/bilingvalEducation2002.pdf

Crawford, A. N. (2002), "Bilingual education in Latvia", in Indra Dedze (ed.), *Bilingual education in Latvia: International Expertise*. Riga, Latvia: The Soros Foundation Latvia, pp. 23–40, <u>http://www.politika.lv/index.php?id=6111</u>

Duncan, O.T. and B. Duncan (1955), "A Methodological Analysis of Segregation Indexes", *American Sociological Review*, **20** (2), 210–217.

Galbreath, D. J. and M.E. Galvin (2005), "The Titularization of Latvian Secondary Schools: The Historical Legacy of Soviet Policy Implementation", *The Journal of Baltic Studies* **36** (4), 449–465.

Galbreath, D. and N. Muižnieks (2009), "Latvia: managing post-imperial minorities", in Bernd Rechel (ed.), *Minority Rights in Central and Eastern Europe*, London, UK: Routledge, 146–147.

Golubeva, I., M. Jermaks, T. Miks, B. Bela and N. Muižnieks (2007), "Latvijas jauniešu integrācija un vērtīborientāciju maiņa politiskās socializācijas procesā" [The Integration of Young People in Latvia and the Change of Value Orientations in the Process of Political Socialization", in: *Strategic Analysis Commission Reports 2006*, Riga: "Zinātne", pp.102–157.

Halpin, T. (2007) "Analysis: why the Bronze Soldier is so controversial", <u>http://www.timesonline.co.uk/tol/news/world/europe/article1715134.ece</u>, accessed 1 May 2009

Hazans, M. (2005). "Unemployment and the Earnings Structure in Latvia." *World Bank Policy Research Working Paper* No. 3504, 90 pp. Washington DC: World Bank. Available at SSRN: <u>http://ssrn.com/abstract=659103</u>

Hazans, M. (ed.) (2006), *Reģionālie pētījumi par bezdarbnieku sociālpsiholoģisko portretu: LATVIJA* [*Regional Studies on socio-psychologic portrait of unemployed: Latvia*], Riga: Market Lab. Available at <u>http://petijumi.mk.gov.lv/sites/default/files/file/LM\_2005\_Region\_petij\_par\_bezdarbn\_psihol</u> portretu petij\_atsk.pdf

Hazans, M. (2007a), "Looking for the workforce: The elderly, discouraged workers, minorities and students in the Baltic labor markets", *Empirica* **34** (4), 319–349.

Hazans, M. (2007b), "Coping with growth and emigration: Latvian labor market before and after EU accession", available at SSRN: <u>http://ssrn.com/abstract=971198</u>

Hazans, M. (2007c), "Latvian labor market before and after EU accession", *Beyond Transition Newsletter*, **18** (1), 10–11

Hazans, M. (2007d), "Social and labor market integration of ethnic minorities in Latvia", Background study for Zimmermann et al. (2008), Bonn, Germany: IZA (unpublished manuscript).

Hazans, M. (2008), "Post-enlargement return migrants' earnings premium: Evidence from Latvia", available at SSRN: <u>http://ssrn.com/abstract=1269728</u>

Hazans, M., J. Dmitrijeva and I. Trapeznikova (2007), "Determinants of unemployment risk and duration in Latvia", in R. Rungule (ed.), *Bezdarba un sociālās atstumtības iemsli un ilgums* [*Causes and duration of unemployment and social exclusion*], Riga: The Ministry of Welfare, pp. 81–125, 389–432.

Hazans, M., I. Trapeznikova, and O. Rastrigina (2008), "Ethnic and parental effects on schooling outcomes before and during the transition: evidence from the Baltic countries", *J. of Population Economics*, **21** (3), 719–749

Hazans, M. and K. Philips (2010), "The Post-Enlargement Migration Experience in the Baltic Labor Markets", in Martin Kahanec and Klaus F. Zimmermann (eds), *EU Labor Markets After Post-Enlargement Migration*, Berlin: Springer, pp. 255–304.

Hogan-Brun, G. (2006), "At the interface of language ideology and practice: The public discourse surrounding the 2004 education reform in Latvia", *Language Policy* **5** (3), 315–335.

Kahanec, M. and A. Zaiceva (2009), "Labor Market Outcomes of Immigrants and Non-Citizens in the EU: An East-West Comparison", *International Journal of Manpower*, **30** (1/2), 97–115.

LLU [Latvia University of Agriculture] (2007), "Latvijas un tās reģionu darba tirgus specifiskās problēmas" [*Specific Problems of the Labor Market in Latvia and its Regions*], Jelgava: The Ministry of Welfare,

http://petijumi.mk.gov.lv/sites/default/files/file/LM\_Latv\_un\_tas\_regionu\_darba\_tir\_spec\_pro bl.pdf

Muižnieks, N. (2006), "Government Policy and the Russian Minority", in Nils Muižnieks (ed.), *Latvian-Russian Relations: Domestic and International Dimensions*. Riga, Latvia: University of Latvia Press, 11–21.

Muižnieks, N. (ed.) (2010), *How integrated is Latvian Society? An Audit of Achievements, Failures, and Challenges.* Riga: University of Latvia Press.

Office of Citizenship and Migration Affairs (2008), "Latvian residents by ethnicity and citizenship", <u>http://www.pmlp.gov.lv/lv/statistika/iedzivotaju.html</u>. Accessed 12 March 2009

Silova, I. (2002), "Bilingual Education Theater: Behind the Scenes of Latvian Minority Education Reform", *Intercultural Education* **13** (4), 463–476.

Silova, I. (2006), From Sites of Occupation to Symbols of Multiculturalism: Reconceptualizing Minority Education in Post-Soviet Latvia, Greenwich, CT: Information Age Publishing.

SKDS (2006), *The most actual issues of the integration of the society. March–May 2006*, Riga: SKDS (in Latvian).

Statistics Latvia (n.d). "Marriages by ethnicity of spouses". Table ILN050 in online database.

Tsilevich, B. (2001), "Development of the Language Legislation in the Baltic States", *MOST Journal on Multicultural Societies*, **3** (2), 137–154.

Vanhuysse, P. (2009), "Power, Order, and the Politics of Social Policy in Central and Eastern Europe", in A. Cerami and P. Vanhuysse (eds.), Post-Communist Welfare Pathways: Theorizing Social Policy Transformations in Central and Eastern Europe, Basingstoke: Palgrave Macmillan, pp. 53–72.

Zepa, B. (2003), "Citizenship, Official Language, Bilingual Education in Latvia: Public policy in the Last 10 Years", in: C. Giordano, A. Žvinkliene and D. Henseler (eds.), Baltic States: Looking at Small Societies on Europe's Margin, Studia Ethnographica Friburgensia 28, Fribourg: University Press, pp. 83–97.

http://www.biss.soc.lv/downloads/publications/bilingvalaIzglitiba10g.pdf

Zepa, B. (ed.) (2004a). Ethnic tolerance and integration of the Latvian society. Riga: Baltic Institute of Social Sciences, 86 pp. http://www.biss.soc.lv/downloads/resources/Tolerance/Tolerance Engl.pdf

Zepa, B. (ed.) (2004b). Integration of Minority Youth in the Society in Latvia in the Context of the Education Reform, Riga: Baltic Institute of Social Sciences, 89 pp. http://www.biss.soc.lv/downloads/resources/minoritates/Minority Engl.pdf

Zepa, B. (ed.) (2006). "Integration practice and perspectives." Baltic Institute of Social Sciences: Riga. 205 pp. http://www.bszi.lv/downloads/resources/integracijas prakse/brosura EN.pdf

Zepa, B. and R. Karnīte (eds.) (2004), Society Integration and Business: The Ethnic Dimension. Riga: Baltic Institute of Social Sciences – LAS Institute of Economics, 85 pp. http://www.biss.soc.lv/downloads/resources/ekonIntegr/Ekon integr EN.pdf

Zepa, B., I. Šūpule, I. Klave, L. Krastina, J. Krišāne and I. Tomsone (2005). Ethnopolitical tension in Latvia: Looking for the conflict solution. Riga: Baltic Institute of Social Sciences, 81 pp. http://www.biss.soc.lv/downloads/resources/Etnopol krize/Repot.pdf

Zepa B., I. Lāce, E. Klave and I. Šūpule (2006)."Cost-effectiveness evaluation of implementation of bilingual education in Latvia". ECMI Working Paper # 31. http://www.ecmi.de/download/working paper 31.pdf

Zepa, B. and I. Šūpule (2006). "Ethnopolitical Tension in Latvia: Factors Facilitating and Impeding Ethnic Accord." In: N. Muižnieks (ed.) Latvian-Russian Relations: Domestic and International Dimensions. Riga: University of Latvia, pp. 33-40.

Zepa, B., O. Žabko and L. Vaivode (2008). Language. March – April 2008. Baltic Institute of Social Sciences: Riga. 105 pp.

Zimmermann, K. F., M. Kahanec, A. Constant, D. J. DeVoretz, L. Gataullina and A. Zaiceva (2008), Study on the Social and Labor Market Integration of Ethnic Minorities, IZA Research Report 16.

### Appendix

Ethnicity of a potential job applicant	Employees' survey: low chances to be hired by the respondent's enterprise (% of all answers)						
	Respond	lent's ethnicity	Type of employer				
	Latvian	non-Latvian	Central govt. institution	Local govt. institution	NGO	With private capital	
Latvian	0.9	1.2	1.4	2.5	1.8	0.7	
Russian and other Slavic	4.7	2.2	6.9	7.3	0.6	2.3	
Jewish	9.9	6.3	12.2	11.1	4.7	6.9	
Roma	24.6	29.9	26.7	20.6	9.5	28.0	
Other minorities	9.5	6.8	12.4	11.0	2.5	6.9	
N	6397	3780	2407	719	135	6815	

Table A1: Evidence of perceived ethnic discrimination in hiring, 2006 – 2	007
(by respondent ethnicity and by type of employer)	

*Source*: Own calculation with the data of a survey of wage earners (N=10177, October 2006 – February 2007), see LLU (2007, pp. 17–19) for details.

Ethnicity of a potential job applicant				hances to b	the hired by the ll answers)	e respondent's	enterprise	9	
	Languages used in the enterprise Type of employer								
	Only Latvian	Mainly Latvian	Only Russian	Mainly Russian	Central govt. institution	Local govt. institution	NGO	With private capital	
Latvian	0.5	0.2	0.4	0.3	0.0	0.0	0.0	0.4	
Russian and other Slavic	3.5	1.1	0.0	0.2	0.7	1.3	2.4	1.7	
Jewish	7.9	2.9	0.4	1.5	1.4	1.8	2.4	4.2	
Roma	27.2	17.0	27.5	26.6	9.4	7.0	9.5	23.5	
Other minorities	6.9	3.4	4.5	2.4	1.4	1.3	2.4	4.5	
Ν	1815	2805	245	1172	138	227	126	5574	

**Table A2: Evidence of ethnic discrimination in hiring, 2006 – 2007** (by languages used in the enterprise and by type of employer)

*Source*: Own calculation with the data of a survey of employers (N = 6066, December 2006 - March 2007), see LLU (2007, pp. 18-19) for details.

	(by location, ownership, size, and sector)							
	Communication languages used in the enterprise, %					Proportion of non-		
Group of enterprises	Only Latvian	Mainly Latvian	Mainly Russian	Only Russian	Total	Ν	Latvians, %	
Total	30.0	46.5	19.4	4.1	100.0	6066	43.9	
Location by urbanization								
Riga	16.2	49.2	29.3	5.3	100.0	1585	59.6	
Six largest cities (excl.								
Riga)	20.5	41.1	28.6	9.7	100.0	1207	62.4	
Other cities	44.1	46.2	7.7	1.9	100.0	1620	29.0	
Rural	48.4	44.4	6.2	1.0	100.0	1654	24.9	
Location by region								
Riga's region	19.1	49.3	26.7	4.9	100.0	2753	51.2	
Vidzeme	55.6	42.0	1.9	0.5	100.0	796	16.7	
Kurzeme	48.8	39.7	8.7	2.8	100.0	906	29.6	
Zemgale	40.1	50.4	7.6	1.9	100.0	805	34.8	
Latgale	19.1	40.4	31.8	8.7	100.0	806	58.9	
Type of enterprise								
Central govt. institution	42.0	52.2	4.3	1.4	100.0	345	37.3	
Local govt. institution	51.1	44.5	3.5	0.9	100.0	471	40.3	
NGO	28.0	60.0	12.0	0.0	100.0	112	49.1	
With private capital	28.9	46.1	20.6	4.3	100.0	5138	46.4	
Number of employees								
2-9	31.9	43.5	20.1	4.5	100.0	3517	38.9	
10-49	23.0	57.1	17.2	2.7	100.0	1698	44.4	
50-249	24.2	57.9	16.5	1.5	100.0	707	46.4	
250+	25.6	66.7	7.7	0.0	100.0	144	50.3	
Sector								
Agriculture Manufacture of food,	49.5	42.5	6.3	1.7	100.0	685	24.3	
beverages, and tobacco	18.6	55.5	16.7	9.3	100.0	101	44.7	
Textiles	31.1	37.8	22.2	8.9	100.0	85	67.4	
Wood, timber, & furniture	33.8	43.1	19.1	3.9	100.0	342	35.4	
Publishing & Printing	21.1	47.9	25.4	5.6	100.0	63	50.6	
Metals & metal products	11.2	36.7	41.8	10.2	100.0	129	63.6	
Other manufacturing	22.0	40.7	33.9	3.4	100.0	89	61.5	
Energy	37.8	46.7	15.6	0.0	100.0	78	49.6	
Construction	17.9	54.3	24.6	3.2	100.0	444	48.5	
Trade	23.7	44.9	25.9	5.4	100.0	1516	49.0	
Hotels & restaurants	31.0	42.9	23.5	2.6	100.0	215	41.8	
Transport &	51.0	72.7	25.5	2.0	100.0	215	41.0	
communications	18.3	49.0	28.0	4.8	100.0	331	54.5	
Finances, Real estate, and								
Renting	22.9	56.9	17.6	2.6	100.0	208	51.4	
Computers	18.3	45.2	22.1	14.4	100.0	63	45.3	
Research	44.8	47.1	3.4	4.6	100.0	65	34.3	
Public administration	55.8	42.3	1.9	0.0	100.0	304	26.8	
Education	42.9	46.2	8.8	2.2	100.0	241	34.6	
Health & social care	24.4	64.4	11.1	0.0	100.0	257	39.2	
Other services	27.0	52.9	16.5	3.7	100.0	838	44.8	

## Table A3: Language use and ethnic composition of workforce in Latvian enterprises, 2006 – 2007 (In Institute of the enterprise and enterprise)

*Source*: Own calculation with the data of a survey of employers (N = 6066, December 2006 - March 2007), see LLU (2007, pp. 18-19) for details.