

# **Immigrants Labour Market Segregation in Italy. A Multilevel Approach**

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## **Introduction**

The global economic crisis has had important effects on international migration and employment situation of foreign workers. Nevertheless, immigrants in Italy are continuing to grow although at a slowing speed, mainly due to the recent economic crisis. At the end of 2010, foreign residents are estimated at nearly 4.6 million units, while in 2007 they were 3.4 millions. The foreigners' quota in the total population have passed from 5.7% to 7.7% in the 2007-2010 period. In the same period the foreigners in the labour force increased from 1.5 million in 2008 to 2.4 in 2010, as to say from 6.5% to 9.1% of total labour force.

Recent comparative studies have shown that immigrants in Italy experience serious difficulties in entering regular and skilled jobs, whereas have fairly easy access to irregular, unskilled and semi-skilled jobs, with no chances of a future upward promotion (see, among the others, Causa and Jean, 2007). Moreover, inequalities between immigrants and autochthonous workers often lead to situations of labour "ethnicization" and segregation (Strozza et al, 2009).

In general, the Italian labour market is characterized by significantly different levels and patterns in occupation conditions, according to geographic areas and gender. This heterogeneity grows if we observe also the foreign presence by country of origin (Tedesco et al., 2012).

The goals of this contribution are twofold: first, obtain descriptive measures of segregation in labour market according to different geographic areas and countries of origin; secondly, estimate different levels of segregation via a cross-classified multinomial multilevel model for the cohorts of ISTAT Labour Force Survey of 2007 and 2010. The latter analysis allows to overcome the problem of overestimation of magnitude of segregation due to descriptive indexes. In particular, estimates of variances by areas or by countries of origin through a multilevel model, will provide the measures of labour market segregation stratified in different groups and/or times (Leckie et al., 2012), while estimated parameters will offer measures of associations with potential predictors.

## **Theoretical background**

Recent literature highlighted that the structure of the Italian labour market is rigid and characterized by high labour costs. The productive system is largely biased towards low-skilled labour demand, underground economy is spread and there is a sharp segmentation. High unemployment can coexist with large labour shortages for poorly qualified jobs (Fullin and Reyneri, 2011; Strozza, 2002). This is due to the growing presence of natives having high social expectations, and immigrants, regulars or irregulars, that are immediately forced to find a source of earnings (Bernardi et al., 2011; Gabrielli and Salaris, 2011; Tedesco et al., 2012).

It was showed that ethnicization and specialization processes lead to occupational segregation in specific sectors of the economy for many different foreign community. This form of ethnic segregation is not only difficult to eradicate, but may also hinder a real integration of migrant. It interacts and reinforces other existing forms of labour market segregation based on gender, education, residence, and professional qualifications. Moreover, occupational segregation of immigrants workers may stress the existing segmentation of local labour markets in the country (Strozza et al., 2009). Studies on segregation have a long history in social science research (e.g., Duncan and Duncan, 1955; Wright, 1937). In the United States, many researchers tried to measure segregation, particularly in relation to race and ethnicity. Although these studies mostly referred to populations' spatial distribution (e.g. Massey and Denton, 1993; Taeuber and Taeuber, 1965) and students' scholastic (or university) distribution (e.g. Clotfelter, 1999; Zoloth, 1976), other types of segregation (occupational, social, etc.) have also been explored. Referring to labour market, the issue most frequently considered corresponds to the gender-specific segregation. Little attention has been paid to analyze the segregation in a comparative perspective between the native and the immigrant workers, stratified by countries of origin, and/or different geographic areas of settlement.

From a methodological point of view, the most common approach to measure segregation is based upon descriptive indices, and significant debate exists over their characteristics. Mostly, these indices are functions of the observed proportions in the groups of interest (Emerek et al., 2003). A recently proposed method is multilevel techniques, aimed to model statistically the underlying process that generates the variation in the groups of interest (Goldstein and Noden, 2003). This consists in setting up a multilevel binomial response model. According to the authors, the estimates of the variance existing between groups provide a measure of the underlying degree of segregation; moreover, this technique enables to describe patterns of segregation and to explain them by modelling variances as functions of various characteristics of individuals (Leckie et al., 2012).

## **Data and Methods**

The used micro data comes from ISTAT "Continuous survey on labour forces" carried out by Istat annually, which interviews on average 165 thousands individuals, of which 6 % are immigrants. Data refers to year 2007 and 2010 and are here analyzed using weighted average values for the entire year. The focus is on population 15-64 years.

Data is firstly analyzed at macro level by means of the index of dissimilarity (ID) which provide a measure of segregation (Emerek et al., 2003). The variables considered are the following: gender, age (10 year classes), educational level, macro area of residences, area of origin - which identifies three large groups: Italians, MC countries (high migration pressure countries), DC countries (developed countries) – and, for foreigners, length of stay in Italy.

Multilevel analysis considers 2-level random intercept model, where response variable is segregation rate according to principal countries of origin. In this model the variance of 2-level units provide a further measure of segregation (Leckie et al., 2012). The higher is this estimated variance the larger is the segregation among groups.

## Preliminary findings

The results of descriptive analysis of the index of dissimilarity (ID) reveal that from 2007 to 2010 it occurred a worsening of immigrants conditions in Italian labour market in terms of segregation. We observe higher ID percentages in 2010 compared to 2007. More in details, immigrants coming from MC (high migration pressure countries) are the most penalized compared to those from DC (developed countries).

The major increments are recorded among females, older workers (55-64 years old), tertiary educated individuals, residents in central and south area of the country, immigrants residing from 3-5 years in Italy (see table 1). Among MC immigrants the most penalized are Romanians, followed by immigrants coming from Eastern Asia and Central-Southern America (see table 2).

Tab. 1 – Index of dissimilarity (ID) in Italian labour market in 2007 and in 2010 according to some selected variables: a comparison between Italian and Immigrants (MC and DC)

Variables	ID 2007 (%)		ID 2010 (%)		Diff. ID 2007-2010 (%)	
	MC	DC	MC	DC	MC	DC
<b>Gender</b>						
Males	24.4	5.9	26.9	8.7	+2.5	+2.8
Females	38.3	5.4	45.9	5.2	+7.6	-0.2
<b>Age</b>						
15-24	19.7	19.2	24.1	17.4	+4.4	-1.8
25-34	26.9	7.9	31.5	7.0	+4.6	-0.9
35-44	30.2	6.1	31.8	5.5	+1.6	-0.6
45-54	31.4	11.4	35.2	10.7	+3.8	-0.7
55-64	33.3	27.7	41.7	22.2	+8.4	-5.5
<b>Educational level</b>						
Primary or lower	16.5	23.4	15.2	25.4	-1.3	+2.0
Lower secondary	22.6	6.0	24.8	6.4	+2.2	+0.4
Upper secondary	32.9	8.0	36.4	8.3	+3.5	+0.3
Tertiary	38.6	12.3	42.8	13.9	+4.2	+1.6
<b>Macro Areas</b>						
NW	27.1	9.9	30.3	11.2	+3.2	+1.3
NE	25.5	5.9	28.3	6.8	+2.8	+0.9
C	37.5	11.3	44.2	12.1	+6.7	+0.8
S	33.7	11.3	40.4	10.1	+6.7	-1.2
I	49.1	11.6	43.9	10.4	-5.2	-1.2
<b>Length of stay in Italy</b>						
born in Italy	*	*	*	*	*	*
1-2 years	34.9	*	37.6	*	+2.7	*
3-5 years	31.8	24.3	41.7	30.0	+9.9	+5.7
6-10 years	32.6	18.7	35.6	26.8	+3.0	+8.1
11-15 years	29.8	19.7	32.5	15.4	+2.7	-4.3
16-20 years	26.5	15.4	32.3	24.3	+5.8	+8.9
over 20 years	11.8	4.9	16.6	5.6	+4.8	+0.7

Tab. 2 - Index of dissimilarity (ID) in Italian labour market in 2007 and in 2010 according to area of origin

Italians vs.	ID 2007 (%)	ID 2010 (%)	Diff. ID 2007-2010 (%)
Immigrants (total)	21.9	26.8	+ 4.9
DC	4.9	6.5	+ 1.6
MC	27.9	31.7	+ 3.8
<i>of which:</i>			
Albanians	37.5	40.6	+ 3.1
Romanians	32.0	40.3	+ 8.3
Ukrainian	56.2	59.7	+ 3.5
Moroccans	28.1	30.1	+ 2.0
Filippinos	64.2	62.6	- 1.6

## Further analysis

As a further step of our analysis, “Continuous survey on labour forces” data 2007 and 2010 will be analyzed applying a cross-classified multinomial multilevel model with 3 levels for each year (2007 and 2010), in order to measure and compare the level of segregation by area or country of origin. The model results allow to obtain random parameters for each macro-area or nationality of origin of immigrants, which will be estimated on the basis of the new indices of dissimilarity, purified with random effects.

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