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The Italian growth model between low fertility and immigration

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“Wenn jemand ein brauchbarer Lehrer ist, dann ist es seine erste Aufgabe, seine Schüler *unbequeme* Tatsachen anerkennen zu lehren, solche, meine ich, die für seine Parteimeinung unbequem sind; und es gibt für jede Parteimeinung – z. B. auch für die meinige – solche äußerst unbequeme Tatsachen.“

Max Weber (*Wissenschaft als Beruf*)

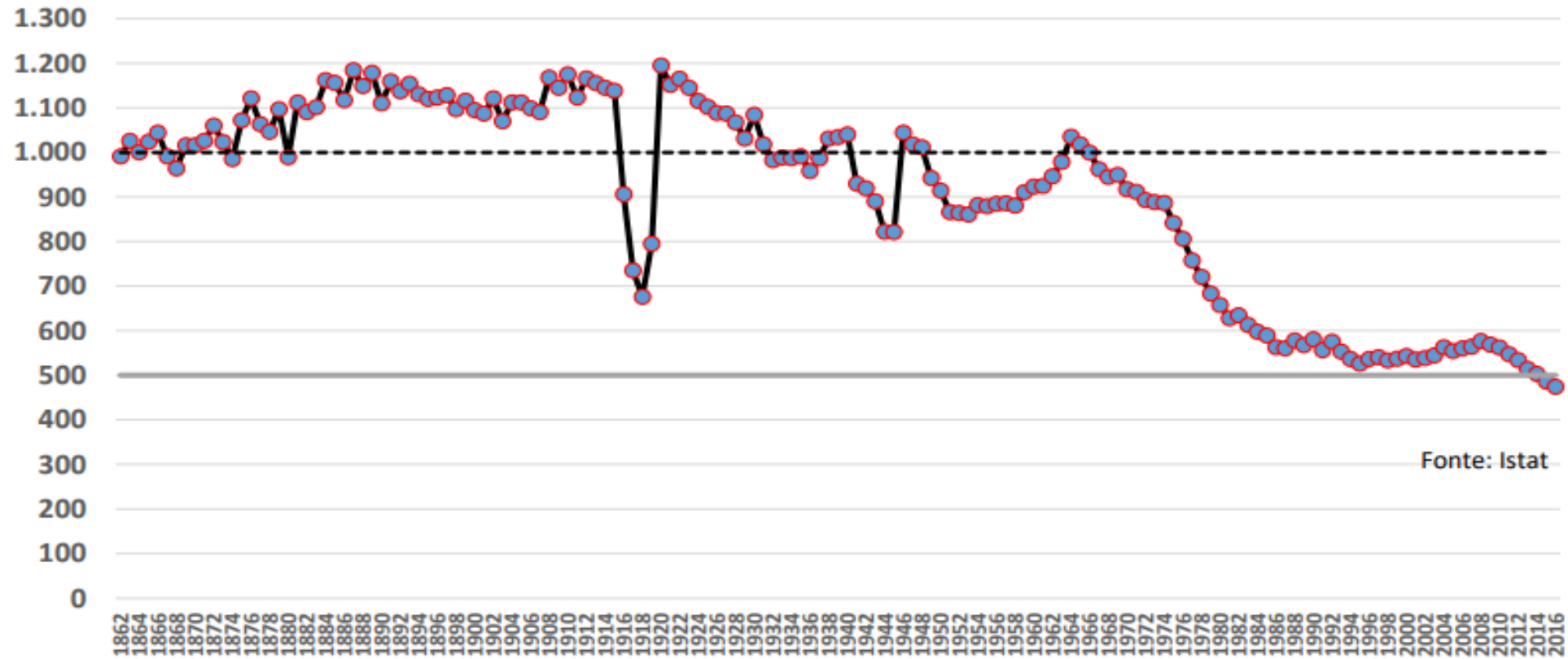
[«The primary task of a decent teacher is to teach his students to recognize *inconvenient* facts – I mean facts that are inconvenient for their party opinions; and for every party opinion – for my own opinion no less than for others – there are facts that are extremely inconvenient.»]

Outline

- Some data on demography & immigration
- Italy's anomalies and peculiarities
- Impact of immigration on the Italian economy
- Costs and benefits of immigration
- Two scenarios for the future

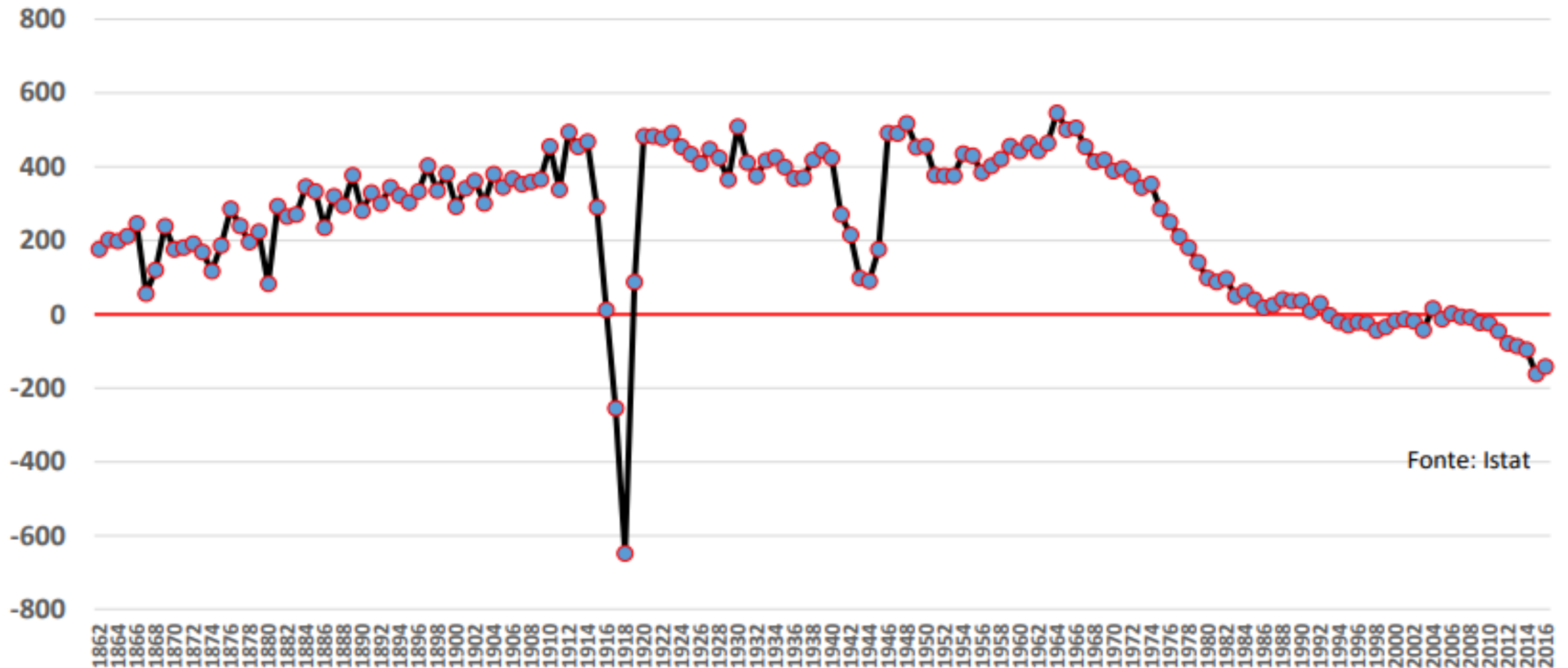
Born in Italy

1862-2016, thousand



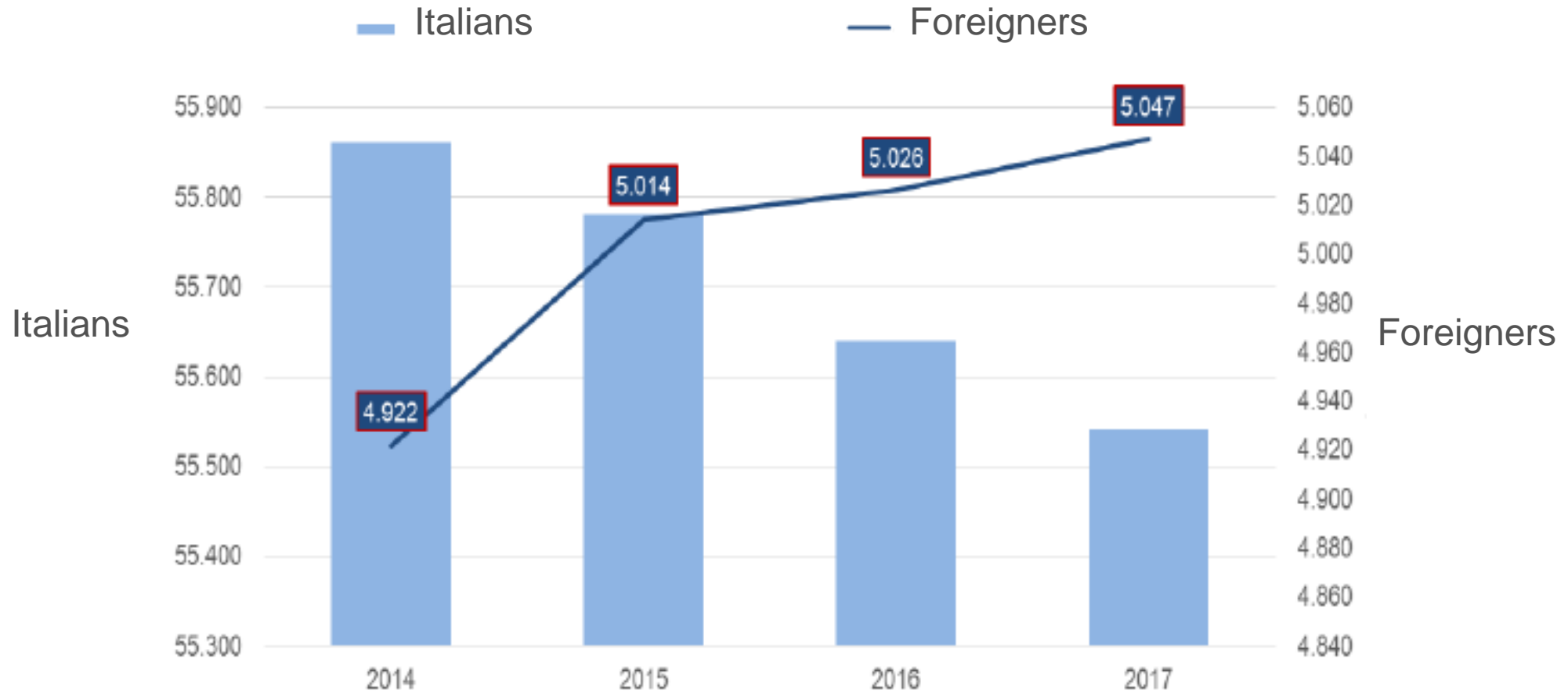
Fonte: Istat

ITALY: natural change of population (births - deaths) 1862-2016, thousand



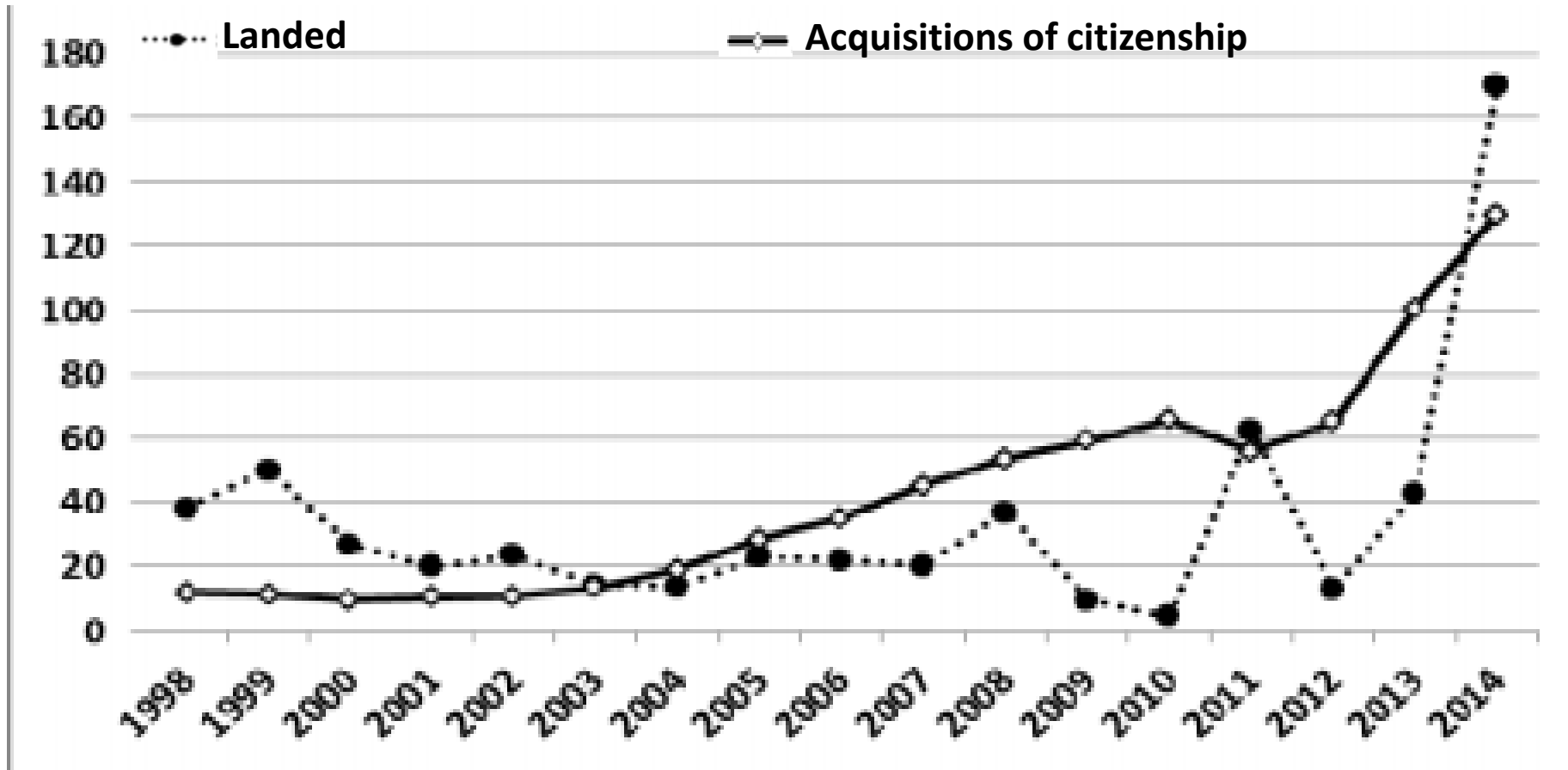
Fonte: Istat

Foreigners regularly residents in Italy 2014-2017, thousand



Extra-EU citizens regularly residents in Italy on Jan. 1st 2018 are 3,714,934
In 2017 foreigners irregularly in Italy are estimated to be 491,000

Foreigners landed in Italy & acquisitions of Italian citizenship 1989-2014, thousand



Source: ISTAT

Foreigners landed in Italy & acquisitions of Italian citizenship (recent years)

	«Landed»	Acquisitions of citizenship
2014	170,100	129,887
2015	153,842	178,035
2016	181,436	201,591
Total 2002-2016	792,287	1,068,654
2017	119,310	224,000*

* Estimates ISTAT

Departure point: the Italian anomaly

The departure point of the analysis is the recognition that Italy—together with other southern European countries—represents an anomaly in the history of modern migration episodes, being a country that in the last decades has attracted a substantial number of migrants, although it is characterized by structurally high unemployment (in particular youth unemployment) and low participation to the labor market on the part of the native population.

Four peculiarities that Italy shares with Greece & Spain

- **Low employment rates and very large fractions of youth population out of employment** (as a result of high structural unemployment and low rates of participation to the labor market): In 2017 (1st quarter), Greece, Italy and Spain were—together with Croatia—the countries of the EU with the lowest employment rate (persons employed as a percent of population aged 15-64 years): 52.0% in Greece , 57.2% in Italy and 59.9% in Spain, whereas the average employment rate in the EU was 66.7%. In the same period, Greece, Italy and Spain had the lowest employment rate of the EU among the persons aged 15-39 years (46.3% in Greece, 47.6 in Italy and 54.2% in Spain, whereas the average EU rate was 61.8%).
- **Large informal economies:** Among 21 OECD countries considered by Schneider and Williams (2013), in 2012 Greece was estimated to have the largest shadow economy (24% of its official GDP), Italy the second (21.6%), Portugal the third (19.4%) and Spain the fourth (19.2%).
- **Very low fertility rates:** In 2015, total fertility rates of Greece (1.33), Italy (1.35) and Spain (1.33) were—together with those of Cyprus, Poland and Portugal)—the lowest of the EU, whose average fertility rate was 1.58.
- **Serious problems of fiscal sustainability:** In 2015 public debt as a % of GDP was 177 in Greece, 132 in Italy, and 99 in Spain (average Eurozone rate: 90%)

... and two stylized facts that are unique to Italy

- **Sharp territorial dualism (along the North-South axis):** in 2016, GDP per capita in South Italy was 56% of that of the rest of the country (approximately the same level as that at the beginning of the 1970s)
- **In the last two decades productivity has been stagnant and economic growth anaemic (see below)**

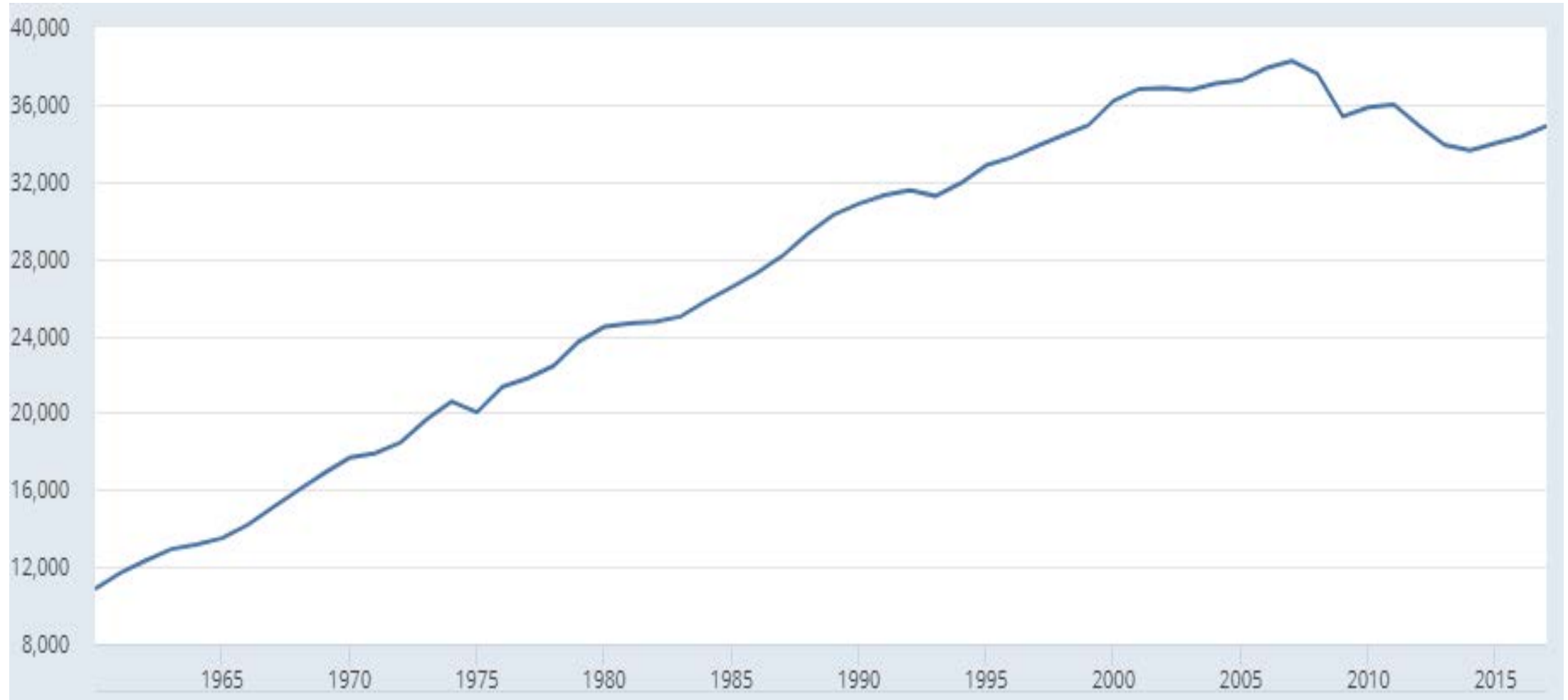
Productivity stagnation

The net increase in employment that has occurred in Italy in the last quarter of century has been mainly due to immigrants occupied in low & very low value-added activities, thus contributing to that stagnation of aggregate productivity which has been one of the characterizing feature of the Italian economy in the recent two decades.

“Over the period 1995-2016 the performance of the Italian economy was poor not only in historical terms but also and more importantly as compared with its main euro-area partners. Italy’s GDP growth – equal to 0.5 per cent on an average yearly basis against 1.3 in Germany, 1.5 in France and 2.1 in Spain – was supported by population dynamics, **entirely due to immigration**, and the increase in the employment rate, while labor productivity and in particular TFP gave a zero (even slightly negative) contribution..... In the private non-financial services, hourly productivity has declined by 0.4 per cent on average over the last fifteen years”

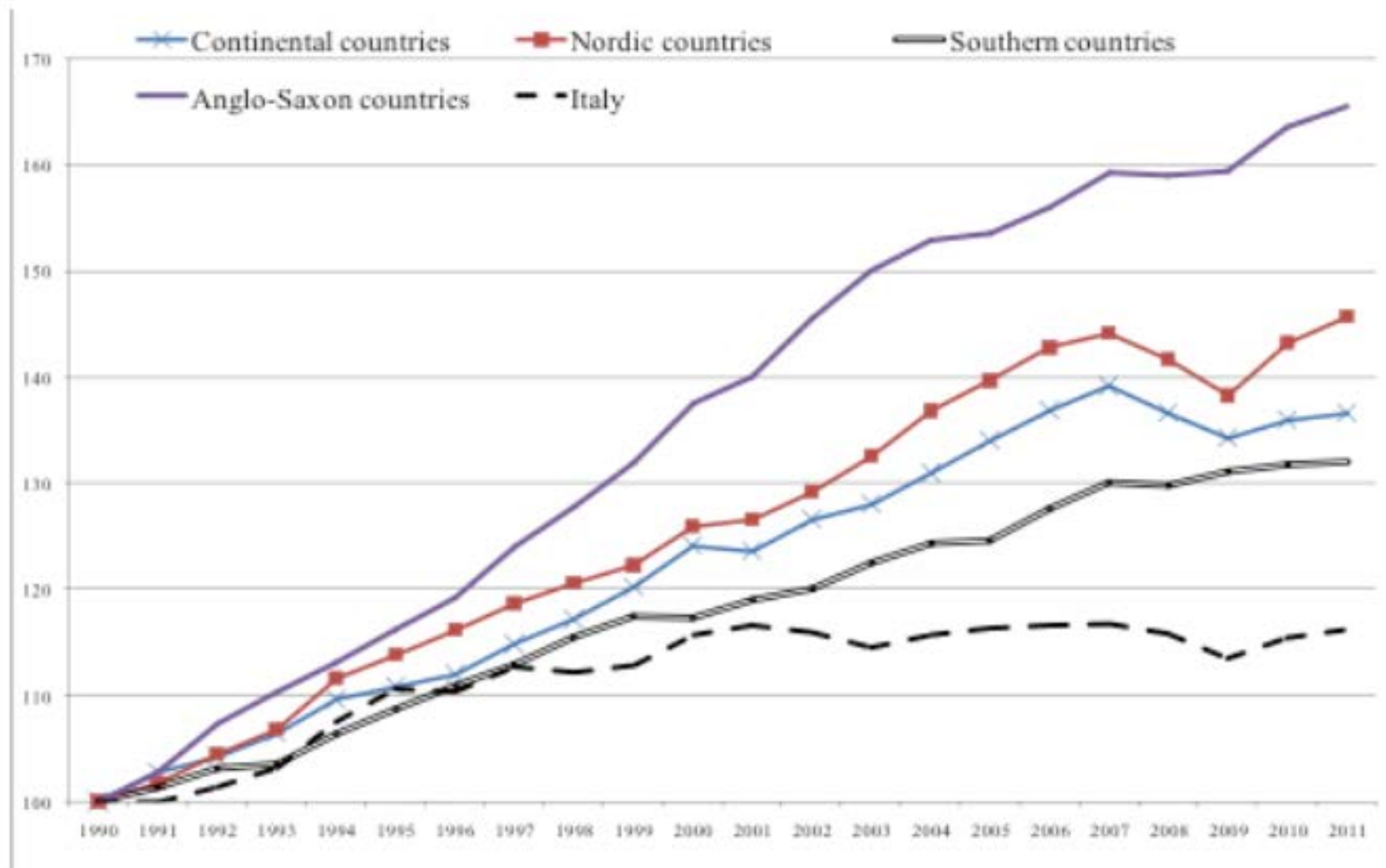
[M. Bugamelli and F. Lotti (eds.), 2018, “Productivity growth in Italy: A tale of a slow-motion change”, Banca d’Italia, Occasional Papers, N. 422]

Italy: GDP per capita (2010 U.S. dollars)



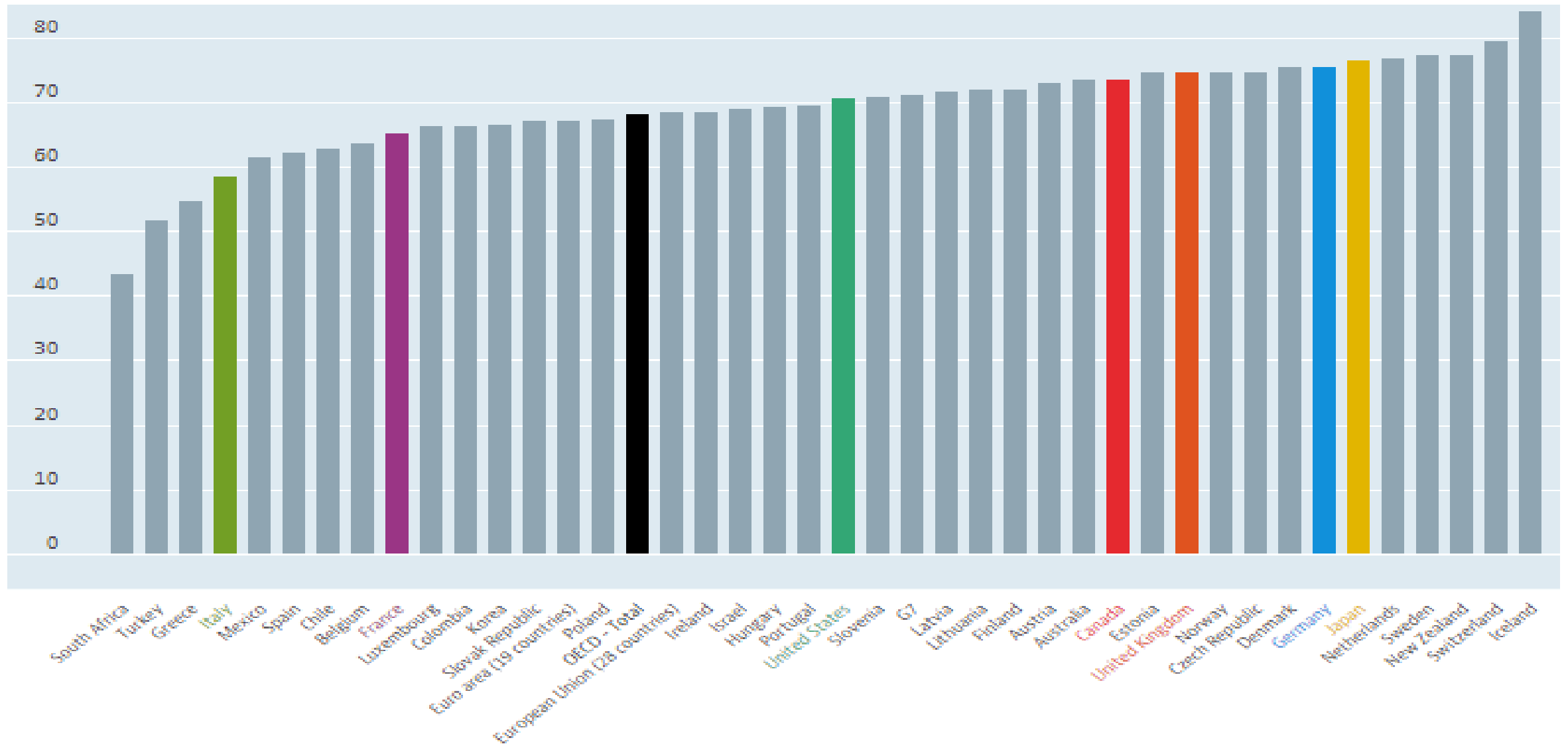
Source: World Bank

Figure 2.1 – Labour productivity (GDP per hour worked, 1990=100).
Source: The Conference Board and OECD.



The Italian employment rate is one of the lowest in the world

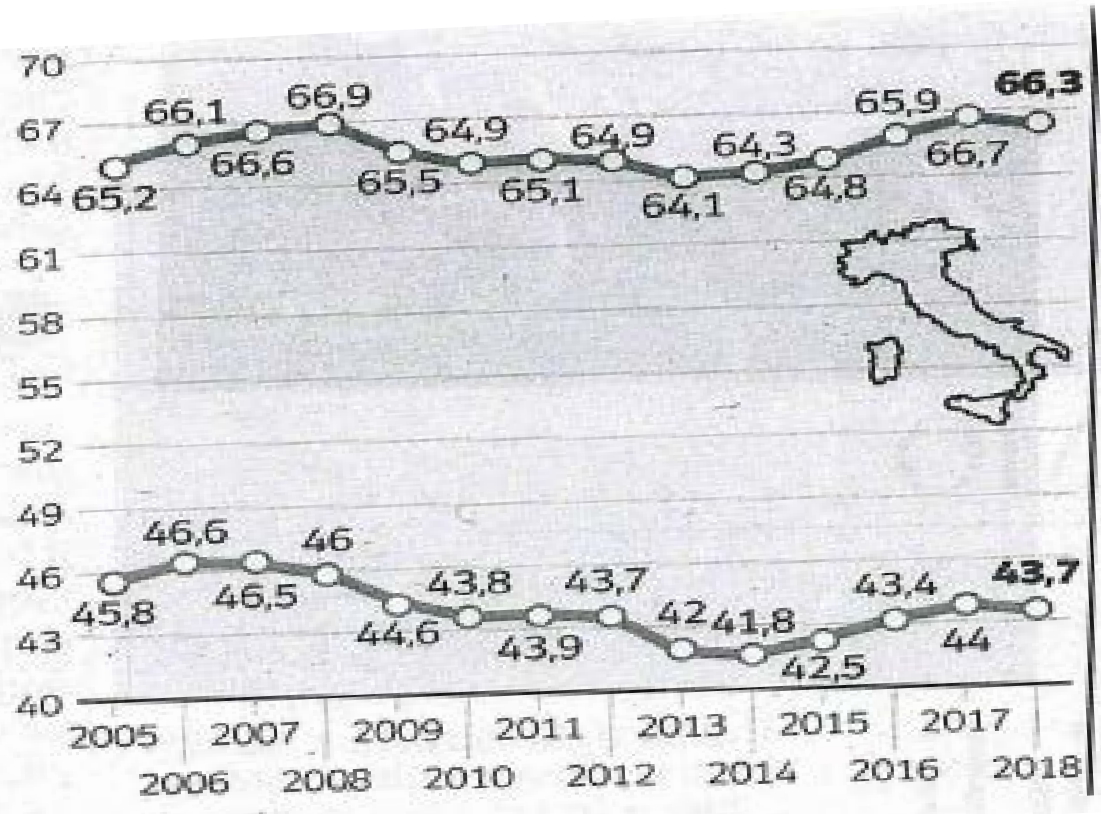
(% of the working-age population that is employed)



Employment rate in Italy (population aged 15-64)

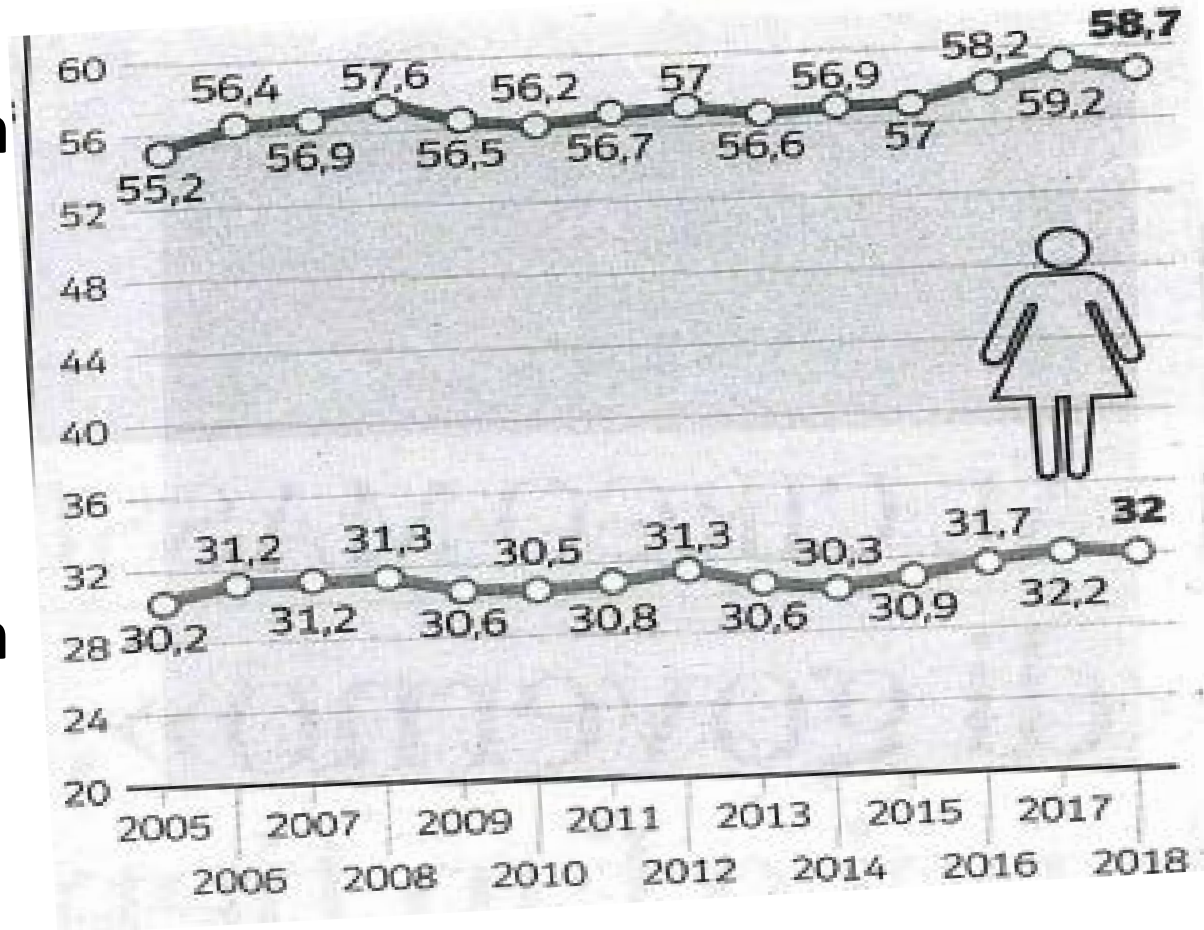
Men and women

Women



North

South

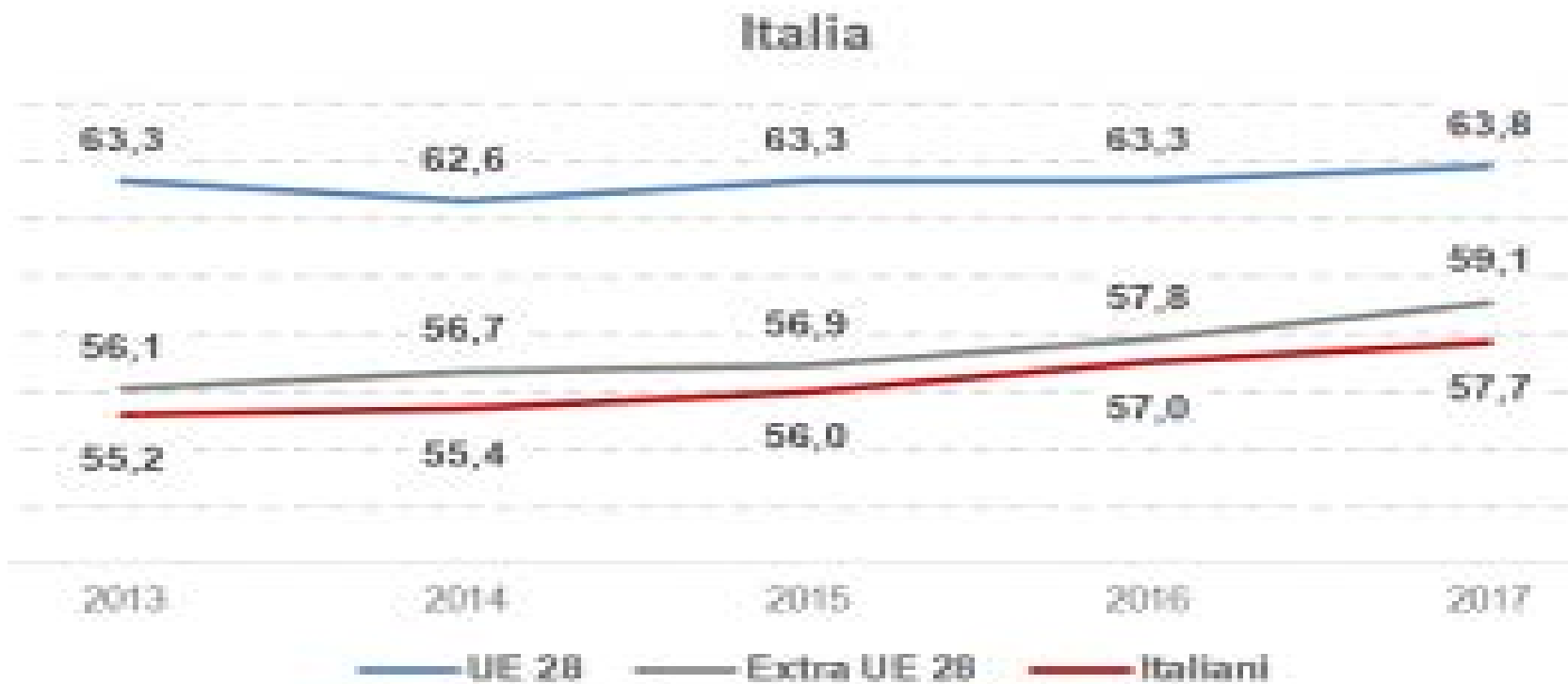


North/South divide in per capita GDP: to a large extent, it is due to the lower employment rate characterizing the South

In 2016, per capita GDP in the South was approximately 56% of that of the rest of the country. This huge differential can be imputed almost equally to the the lower fraction of the working-age population that is employed in the South and to the lower productivity level of the South (more than 20% lower than in the rest of the country)

[see Banca d'Italia (2017), «L'economia delle regioni italiane. Dinamiche recenti e aspetti strutturali», Economie regionali, No. 23].

Another Italian anomaly: the employment rate of the immigrants is persistently higher than that of the natives



Such anomaly reaches its peak in the South, where the employment rate of the extra-EU migrants is much higher than that of the natives (the European record belongs to Campania, with a differential of almost 16 percentage points).

Immigrants and labor market in Italy (2017, 1st semester)

Working-age (aged 15-64) immigrants: 4,100,826

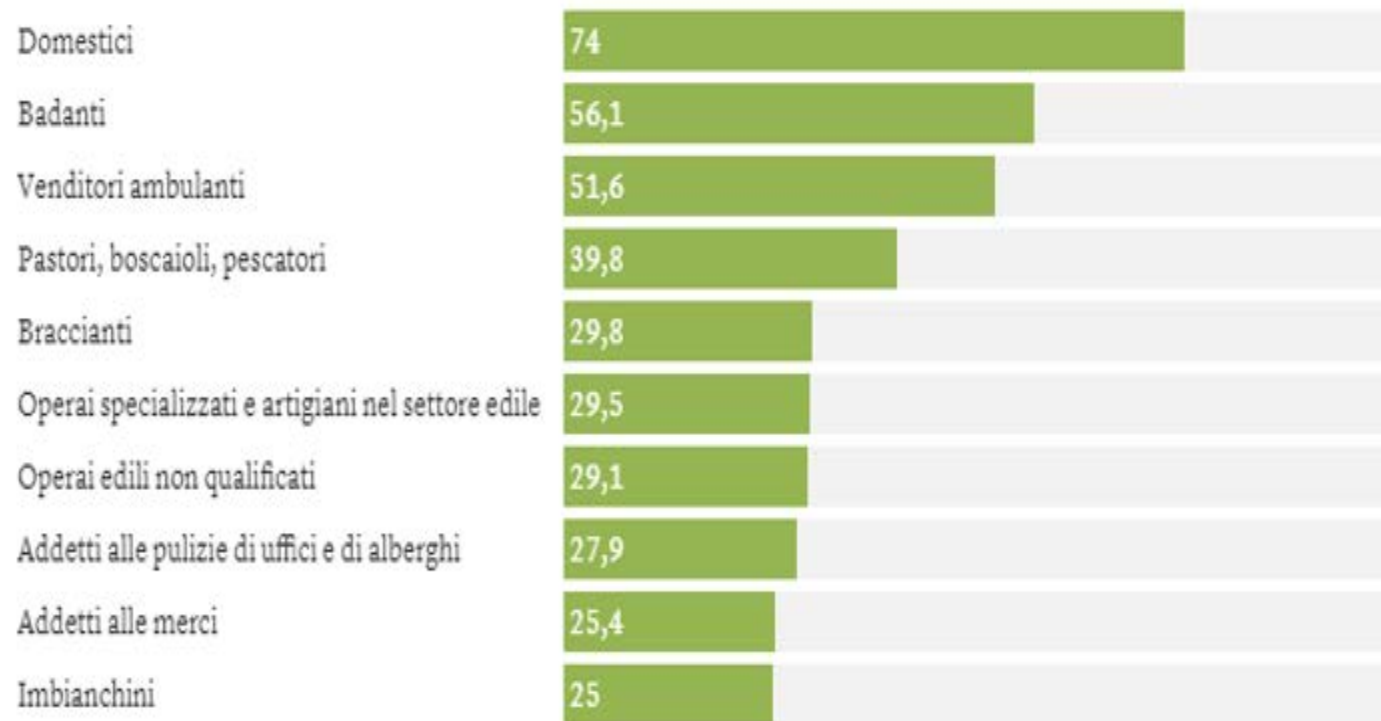
Employed immigrants*: 2,430,409 (59.3% of the working-age immigrants)
1,635,300 are extra-EU (67.3%), and 795,100 are EU (32.7%)

Unemployed immigrants: 415,229 (10.1% of the working-age immigrants)
283,837 are extra-EU (66.9%), and 131,392 are EU (33.1%)

Inactive immigrants: 1,255,187 (30.6% of the working-age immigrants)
897,411 are extra-EU (71.5%), and 333,093 are EU (28.5%).

*Only 14.5% of the employed extra-EU and 16% of the employed EU work in the South

Percentage of foreign workers in various occupations



Source: Fondazione Moressa

- Notice that 47.5% of the extra-EU workers with technical and scientific degrees are employed as a low-skilled worker, as opposed to 1.8% of the natives and 21.9% of the EU workers.
- Main sectors of activity for the individual enterprises of extra-EU persons are Retail (45.4 %) and Construction (21%).

Wages

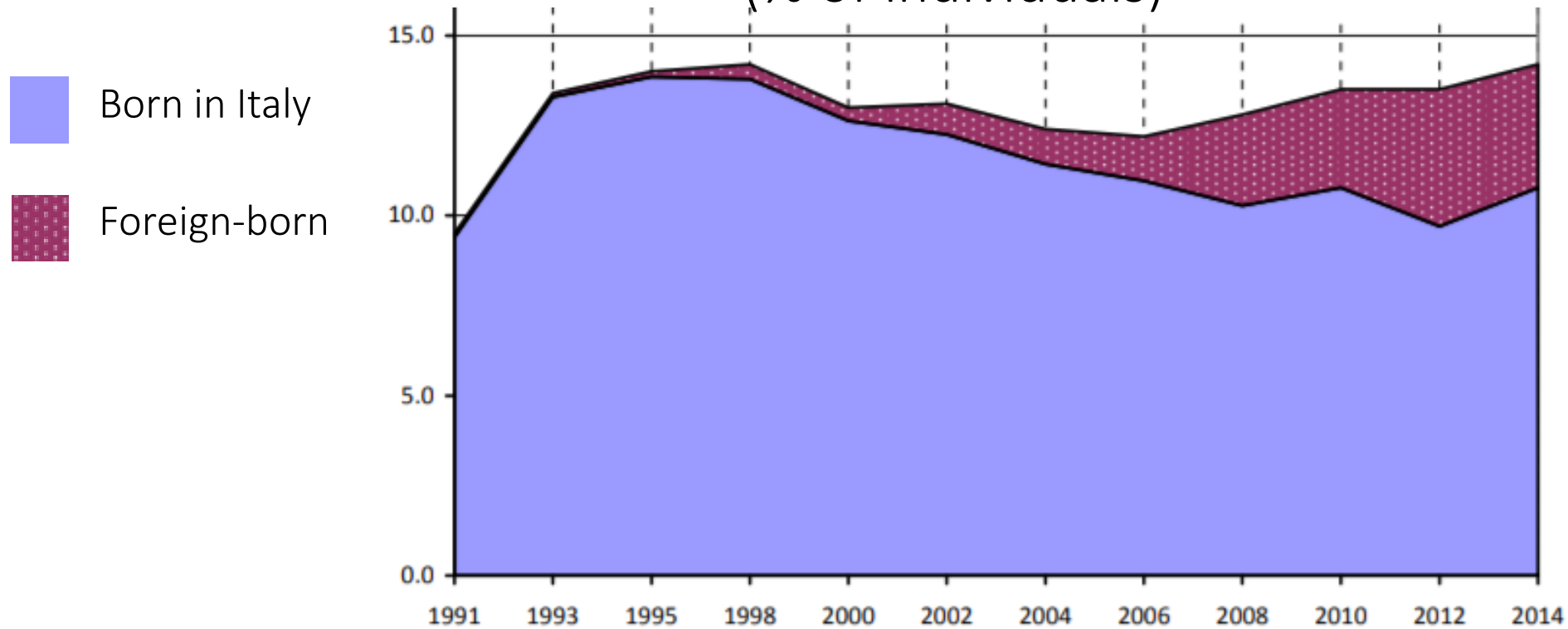
According to data provided by INPS, the annual average wage of an extra-EU worker is 35% lower than that of the average worker (13,927 euro rather than 21,509 euro): lower reservation wages and professional segregation in low-qualified occupations explain this difference.

The fraction of unskilled labor among the employed migrants is 35.4%, rather than 8.2% among the employed natives.

In particular, 46.9% of the extra-EU workers earn less than 800 euro per month, 35.7% between 800 and 1200 euro per month. Hence, a significant fraction of these workers are in the *no tax area*

Relative poverty* in Italy by birth place, 1991-2014

(% of individuals)



Source: Cannari and D'Alessio (2018)

*In Italy, the relative poverty threshold for a two-person family is equal to the average per-capita expenditure in the country, which was 1,085.22 in 2017. For families of different size, the threshold is computed by applying an equivalence scale that accounts for the economies of scale obtainable with a larger number of family members.

Quanto pesa la povertà quando ci sono stranieri								
PRESENZA DI STRANIERI IN FAMIGLIA	Nord		Centro		Mezzogiorno		Italia	
	2016	2017	2016	2017	2016	2017	2016	2017
Famiglie di soli italiani	2,6	3,1	3,5	3,3	7,5	9,1	4,4	5,1
Famiglie miste	22,9	20,3	*	*	*	*	27,4	16,4
Famiglie di soli stranieri	27,9	27,7	20,0	23,8	29,7	42,6	25,7	29,2

«Absolute poor» are for ISTAT those who cannot afford to buy a basic basket of goods and services that are deemed essential for subsistence (thus, the income threshold below which somebody is classified as absolute poor varies with the number of household's components and the location where they live). For instance, for an adulto (aged 18-59 years) living alone, the poverty threshold is 826.73 euro per month if s/he lives in an urban area in the North, 742.18 euro if s/he lives in a small city in the North, and 560.82 euro if s/he lives in a small city in the South.

On poverty and immigration in Italy, see: Gambacorta R. (2017), Immigration and Poverty: The Case of Italy, *Research on Economic Inequality*, Vol. 25, pp. 229-257; Cannari L. & D'Alessio G. (2018), La disuguaglianza della ricchezza in Italia: ricostruzione dei dati 1968-75 e confronto con quelli recenti, Banca d'Italia, Occasional Papers, No. 428.

Impact on public finance of the host country

- In general, the existing literature emphasizes that the most significant determinant of migrants' net fiscal contribution is the extent to which they are integrated into the **formal** labor market (for a survey, see OECD, 2013, *International Migration Outlook 2013*; Preston I., 2014, "The effects of immigration on public finance," *The Economic Journal*, 124, F569–F592).
- This is particularly true in countries that—guaranteeing universal access to publicly-provided basic goods such as health and school services—make the estimated **present value of future net fiscal contributions** of newly arriving households crucially dependent on the expected stream of taxes and social contributions that these households are going to pay over their lifetimes.
- Hence, estimating the impact of new migrants on public finances requires a realistic assessment of their chances to enjoy prolonged employment spells in the formal economy and be paid decent wages, rather than being occupied in marginal and precarious activities in the underground economy or as self-employed in some low-productive micro-enterprise.

Impact on public finance: Are migrants paying the pensions of the ageing native population?

In a long-term perspective, an assessment of the fraction of migrants occupied in low value-added activities is important because—together with some informed guess about the fraction of these new migrants that will remain in the host country when they will get old—it **allows to estimate the public subsidies that will be needed to integrate the poor pensions that will be received by those migrants who have paid little or zero contributions during their working life.**

Hence, it is of little significance—for assessing the effects of immigration on fiscal sustainability—that in country where immigration is a recent phenomenon the social security contributions paid by foreign born individuals are currently larger than the pensions that they receive.

- The long-term impact on public finance of migrants is also affected by the portability rules that regulate the possibility for the migrants to have their pensions paid in their native country in the case in which they return home (Italian legislation, for instance, prescribes that non-EU retirees can have their Italian public pension paid in their native country over the age of 65, or earlier in the presence of bilateral agreements between Italy and their native country).

Size of the underground economy in 11 Eurozone's countries (in % of GDP)

	2008	2009	2010	2011	2012	2013*
Austria	8.1	8.47	8.2	7.9	7.6	7.5
Belgium	17.5	17.8	17.4	17.1	16.8	16.4
Finland	13.8	14.2	14	13.7	13.3	13
France	11.1	11.6	11.3	11	10.8	9.9
Germany	14.2	14.6	13.9	13.7	13.3	13
Greece	24.3	25	25.4	24.3	24	23.6
Ireland	12.2	13.1	13	12.8	12.7	12.2
Italy	21.4	22	21.8	21.2	21.6	21.1
Netherlands	9.6	10.2	10	9.8	9.5	9.1
Portugal	18.7	19.5	19.2	19.4	19.4	19
Spain	18.4	19.5	19.4	19.2	19.2	18.6

* Estimated values

Source: Schneider (2013 & 2014)

According to the estimates of the Fondazione studi dei consulenti del lavoro, the irregular workers in the Italian enterprises active in 2017 are 1,538,000.

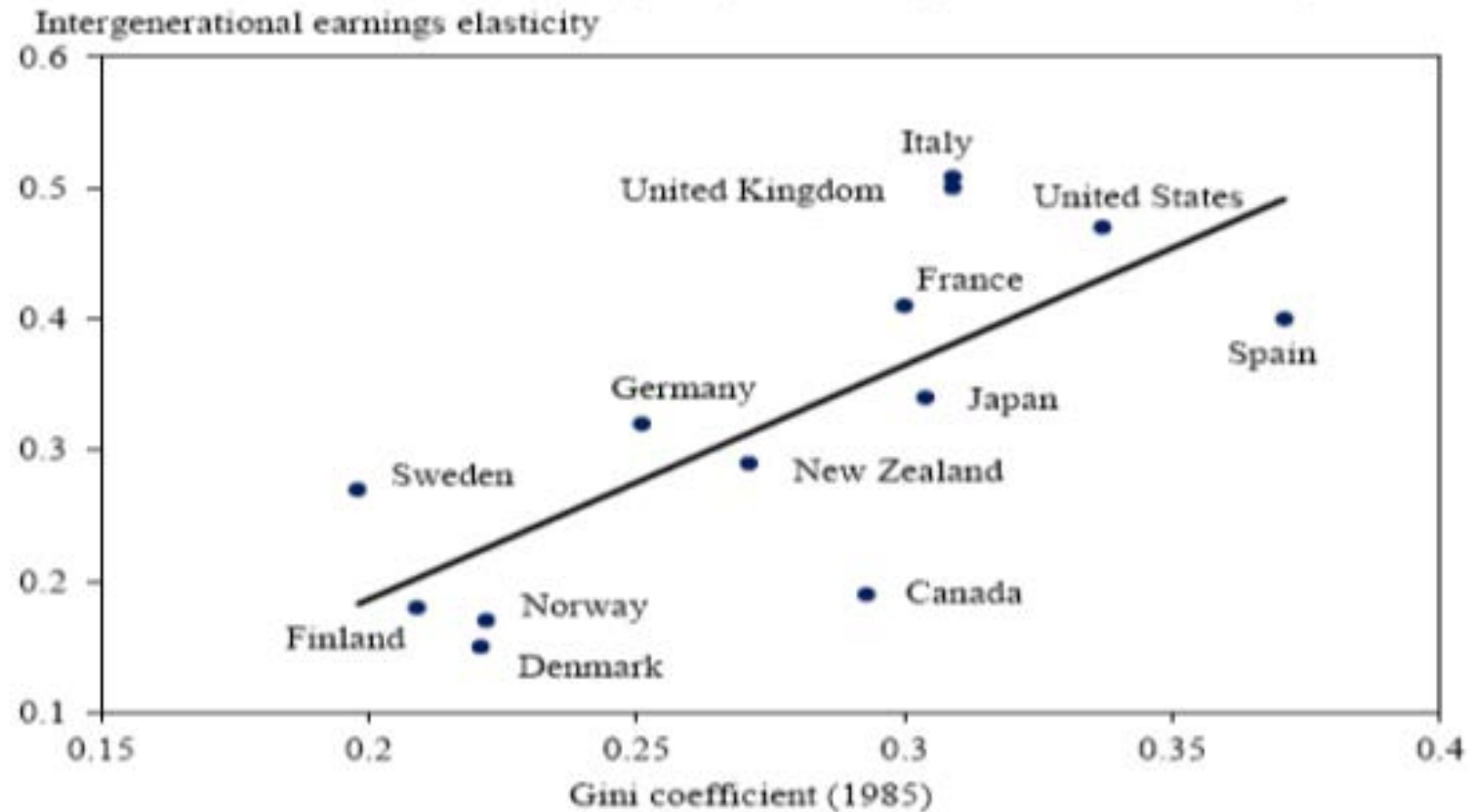
Migrants and the «informality trap»

- To what extent informality tends to stuck the migrants in a stagnant productivity trap, thus reproducing in Europe certain features of that African phenomenon known as “urbanization without growth”? There are signs, indeed, that a sort of “lumpenproletariat”, mainly consisting of migrants (among them those irregular – 700/800 thousand?), is growing in Italy: should it be considered a temporary phenomenon or is it going to become a permanent feature of the urban and rural landscape of this part of Europe?
- The risk that also a large share of second-generation immigrants can remain entrapped in these marginal segments of the labor should not be underestimated, in countries (like Italy!) where **economic mobility across generations tends to be low even for the native population**. This prospect is not reassuring, considering that second-generation immigrants usually have aspirations very similar to those of the native population and that their frustration may feed among them feelings of discrimination and antagonism toward the host countries' institutions and culture.

INTERGENERATIONAL MOBILITY

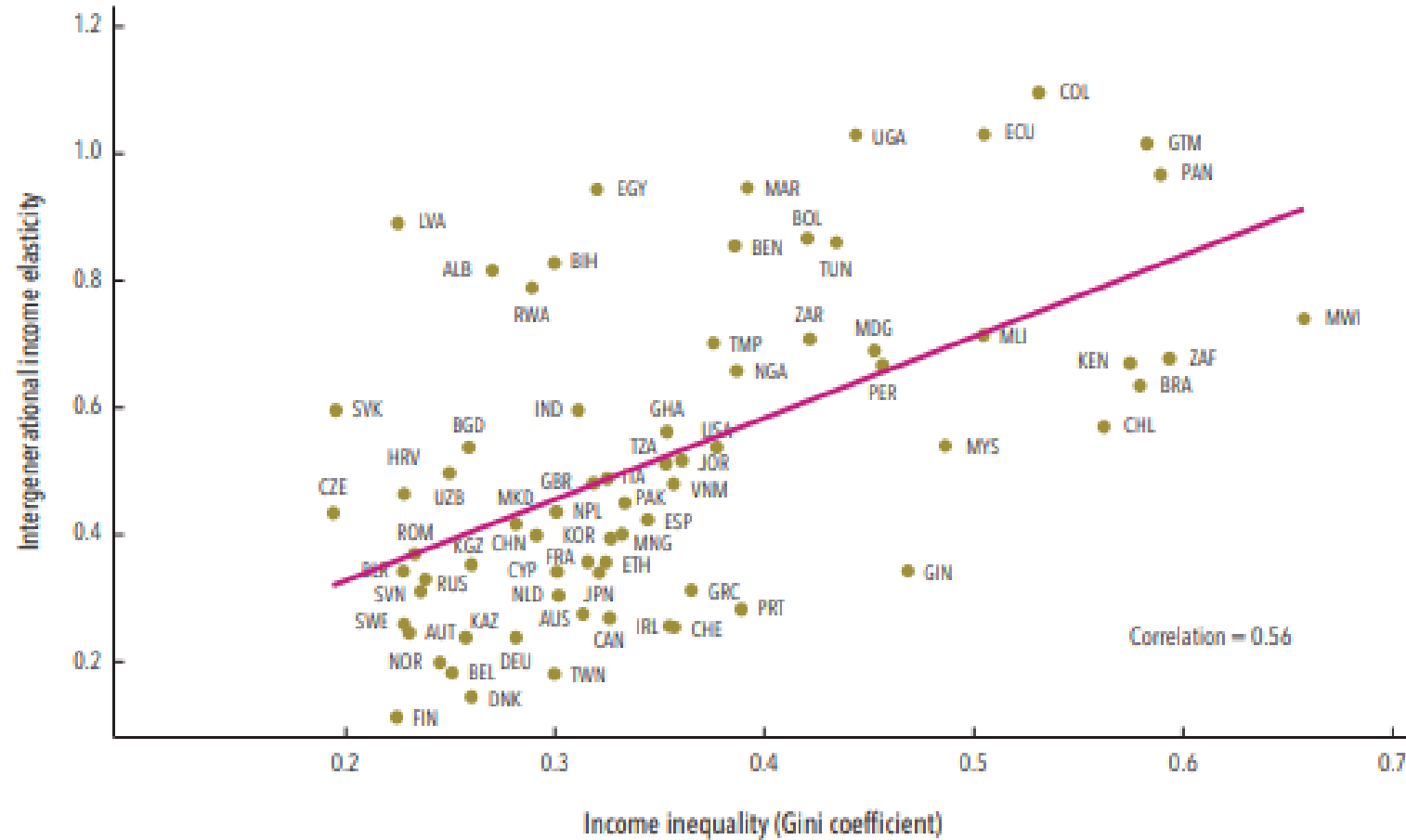
Family (or individual) incomes in one generation are also highly correlated with family (or individual) incomes in the next generation. In other words, the children of parents who are poor are more likely than the children of well-off parents to be poor when they grow up. A common measure of mobility across generations is the intergenerational elasticity (IGE) of earnings or income, which is defined as the percentage difference in a child's income associated with a 1 percent difference in the parent's income.³ These IGE estimates are sensitive to several measurement issues, particularly fluctuations in incomes from year to year. Studies based on U.S. data that deal appropriately with these measurement issues suggest that plausible estimates of the average IGE between fathers and sons are between 0.4 and 0.6. An IGE of 0.4 means that if one father earned 20 percent more than another over their lifetime, the first father's son on average would earn 8 percent more than the second father's son; an IGE of 0.6 means that the first father's son would earn 12 percent more on average than the second father's son. That is, the higher the IGE is, the lower economic mobility is between the generations.

«Great Gatsby» curve: Inequality and intergenerational mobility



Source: Corak (2011) and OECD.

«Great Gatsby» curve: Higher relative intergenerational mobility (IGM) in income is associated with lower income inequality



What benefits from low-skilled immigration?

- Various international studies show that the positive effect of low-skilled immigration on productivity and per capita GDP of the host country depends mainly on the possibility that—thanks to cheap foreign low-skilled labor—the native workforce can move towards higher value-added activities (see Jaumotte et al., 2016, for a recent survey; see also Farré et al., 2011, and Fogel & Peri, 2016). For instance, foreign labor supply for home services (care, cleaning and similar) has contributed in recent years to raise the number of Italian women participating in the labor market (Barone & Mocetti, 2011). In this case, there is complementarity between native and foreign low-skilled labor (see Visco 2008; Cingano & Rosolia 2010).
- **However, such benefit is more than offset if in the host country there are ample reserves of low-skilled natives who are not employed and are in need of subsidies and transfers. This is the case of Italy, where the low-skilled natives who are inactive or unemployed represent a substantial fraction of the working-age labor force.**

IMMIGRATION AND STRUCTURAL CHANGE

Given—as it is in Italy—a productive specialization characterized by a relatively scarce number of technologically advanced firms and a highly dualistic labor market, the availability of a large supply of foreign manpower with a low reservation wage **will favor also in the future the emergence of productions intense in unskilled labor and a product mix disproportionately consisting of low-technology goods and services: immigration will tend to favor the «lock-in» of the Italian economy along a low-value added trajectory.**

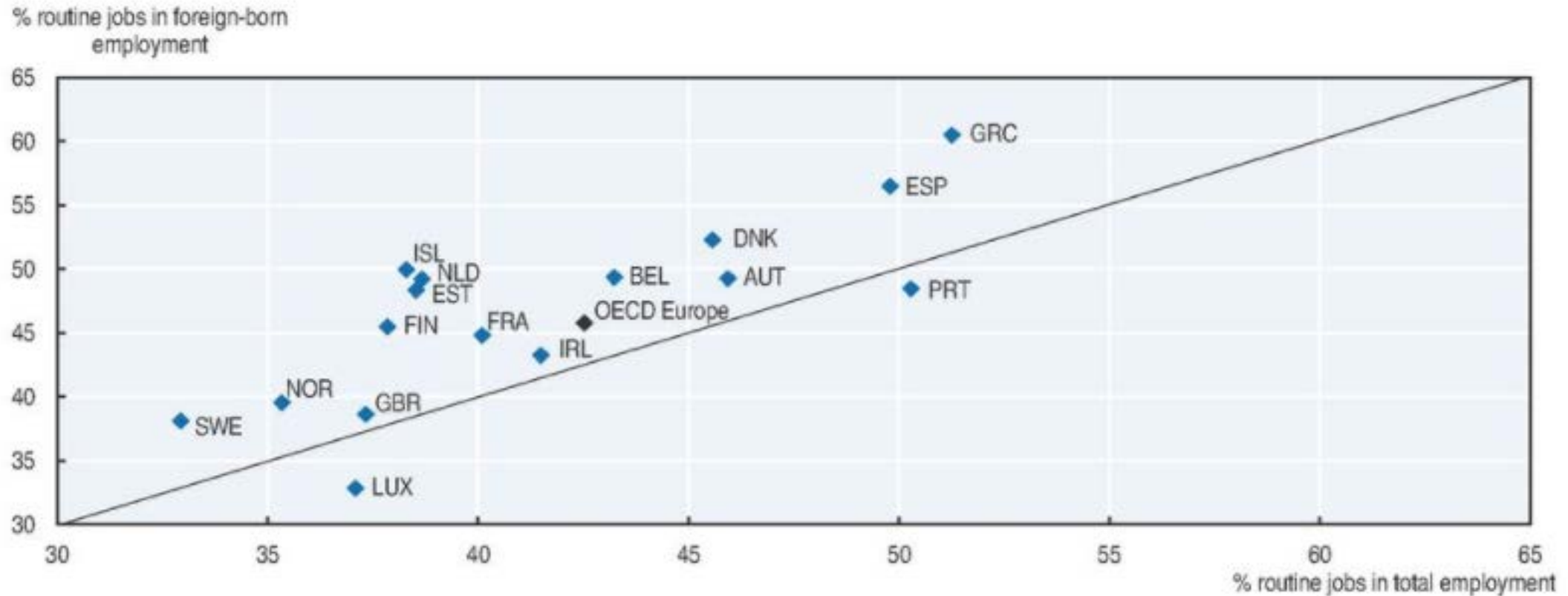
The international literature confirms this effect due to the availability of a large supply of low-skilled immigrants:

“Firms choose technology, often associated with a specific type of capital equipment, also responding to the skill supply in the labor force (as illustrated in Acemoglu 2002). For instance, facing a larger supply of manual skills, firms will choose more manual intensive techniques (possibly reducing mechanization of some processes, as shown in Lewis 2011), or in some locations in which immigration is non-college-intensive, firms can use technology that makes more intensive use of such workers (as shown in Peri 2012).” [G. Peri (2016) “Immigrants, Productivity, and Labor Markets”, *Journal of Economic Perspectives*, Vol. 30, No. 4]

Migrants and the job-polarization hypothesis

- Routine-biased technological change is going to rapidly reduce the number of jobs that largely involve routine tasks, as technology is increasingly able to perform these tasks. At the same time, technology is going to complement humans in complex tasks, increasing the productivity of those relatively few highly skilled workers performing these tasks. As a result, middle-income jobs will disappear in favor of low-income service occupations
- In the majority of OECD countries, migrants are more concentrated than natives in jobs involving routine tasks. This renders them more at risk for job loss as automation progresses. In European OECD countries, 47% of foreign-born workers are working in occupations that primarily involve routine tasks. Moreover, this appears to be increasing over time (see International Migration Outlook 2017, OECD)

Total employment share, and share of foreign-born employment in routine occupations in selected European OECD countries, 2015



Note: Routine jobs defined as those with a routine task intensity greater than zero (see Box 2.1). Occupations in which employment occurs in only a small number of country year cells were dropped (ISCO 11, 92 and 61) – see Goos et al. (2014) online appendix for further details.
Source: Labour Force Surveys (Eurostat); Routine task intensity (RTI) from Goos et al. (2014).

Does Italy need migrants to outweigh the decline of its native workforce? (a simple back-of-the-envelope calculation)

- According to the UN's projections, **in the absence of any migration**, Italy's current population of **60,665** thousand people will shrink to **51,014** in 2050 (to **50,617** according to the ISTAT median scenario).
- At the end of 2017, Germany has approximately **44,500** thousand employed persons, while its total population is approximately **82,500** thousand. Hence, its employment-to-population ratio is about **0.54**.
- If Italy had in 2050 the same employment-to-population ratio that Germany has now, Italy's total employment would be—**in the absence of any migration**—approximately **27,300** thousand, **4 million more** than its current number of employed persons (**23,300**).

Thus, it is at least questionable that Italy needs migrants to outweigh the decline of its native workforce (obviously, appropriate structural policies should be necessary in order to bring Italy's employment rate to the same level of that of the Eurozone's core countries).

Two scenarios for the future

To provide an unified analysis of phenomena (immigration, demographic decline, anaemic growth, poverty, low employment...) that usually are treated separately, we may outline qualitatively two **alternative scenarios** for the future evolution of the Italian economy:

The first one supposes that the response to the demographic decline of the native population will be the persistent inflow of extra-EU migrants, with consequent implementation of policies of inclusion and poverty alleviation.

The second one supposes that such a decline will be faced with policies aimed at gradually increasing the employment rate (currently one of the lowest in the industrialized world), betting also on the fact that, among the side-effects of a rise of the employment rate, there will be—if it will be accompanied by better services for young families—a recovery of the fertility rate.

To integrate the immigrants and/or to integrate the natives?

In order to be integrated, immigrants must have regular occupations and a decent income level. This should occur in a country that is **unable** to generate a sufficient number of jobs attractive enough to employ those persons (about 2 and half million) that are currently out of employment (most of them located in the South), whereby Italy could align its employment rate to the EU average and—above all—raise substantially its per capita income level (particularly in the South)

To provide decent jobs for those 2 and half million of Italians, a mix of policies would be necessary: On one side, they should aim at creating the conditions for attracting/stimulating the development of competitive firms, thus favoring the technological up-grading of the productive structure (especially in depressed areas), **but on the other side they should make attractive for the natives those low value-added activities (mostly in services) without which it would be totally unrealistic to raise significantly the employed rate** (for ex., policy instruments such as subsidies to low-skilled workers should be seriously considered)

Is it possible to integrate the natives and at the same time to absorb and integrate new migration inflows?

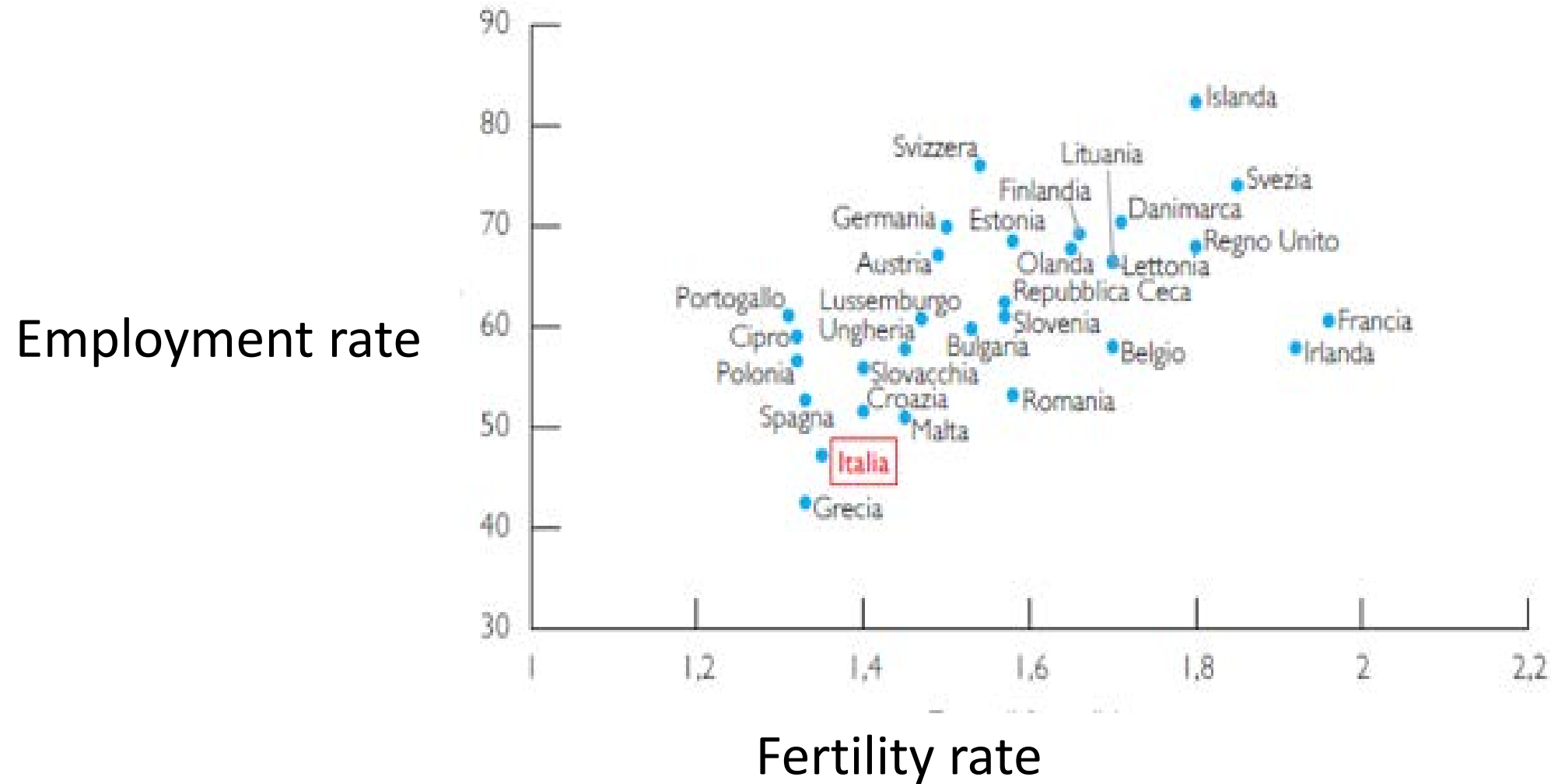
1. To substantially and permanently raise the Italian employment rate aligning it to that of central-northern Europe requires costly public policies
 2. Furthermore, it implies that Italians will be willing again—**with the help of adequate incentives**—to accept occupations that in the last quarter of century have been increasingly carried out by immigrants
- **In the light of a realistic assessment of the long-term growth potential of the Italian economy, 1. and 2. appear to be hardly consistent with the absorption and integration of large migration inflows such as those of the last quarter of century (or such as the 191 thousand per year that on average will enter Italy from now to 2070 according to the projections of ISTAT).**

Employment rate and fertility

A gradual but substantial increase of the employment rate would allow not only to raise per-capita income (especially in the areas where nowadays it is lower), but also to manage the demographic transition currently under way without necessarily resort to immigrants, and at the same time creating the conditions for a progressive recovery of fertility.

In fact, the difficulty to find occupations that provide a sufficiently stable and acceptable income represents the major disincentive for the young adults to have children and induce them to postpone or even to renounce to have a baby.

Fertility rate & female employment rate, 2015



Impact on congestion and natives' fertility rate:

Can restrictive migration policies help Southern Europe to get out of the low fertility trap in which it is currently stuck?

- There is little economic literature on the relation linking migration inflows and fertility of the native populations in the host countries. The notion of **impure or congested public goods** “for which consumption is non-rival at low population size but becomes increasingly rivalrous as population grows” can be of some help for shedding light on this relation. We are referring to the congestion diseconomies that large inflows of migrants may generate by reducing the utility obtainable from childcare facilities, schools, parks, hospitals, transport infrastructures etc., thus making more costly and less pleasant for the native population to rear children. Obviously, governments can invest resources for expanding the supply of these congested public facilities.
- By contrast, they can do very little to increase the availability of land. Hence, the long-term trend of residential land prices, which is the main determinant of house prices and rents, can be pushed up by migration inflows. In its turn, this tends to raise the house-price to income ratio, thus making harder for young natives to gain access to affordable housing arrangements that are suitable for rearing children. Especially in densely populated countries such as Italy, whose population has been increasingly concentrated in its congested and highly trafficked flatlands, that have been intensely built-up in the last decades and constitute only a relatively small fraction of a fragile and predominately mountainous territory.

Given its orography, Italy is a congested country!

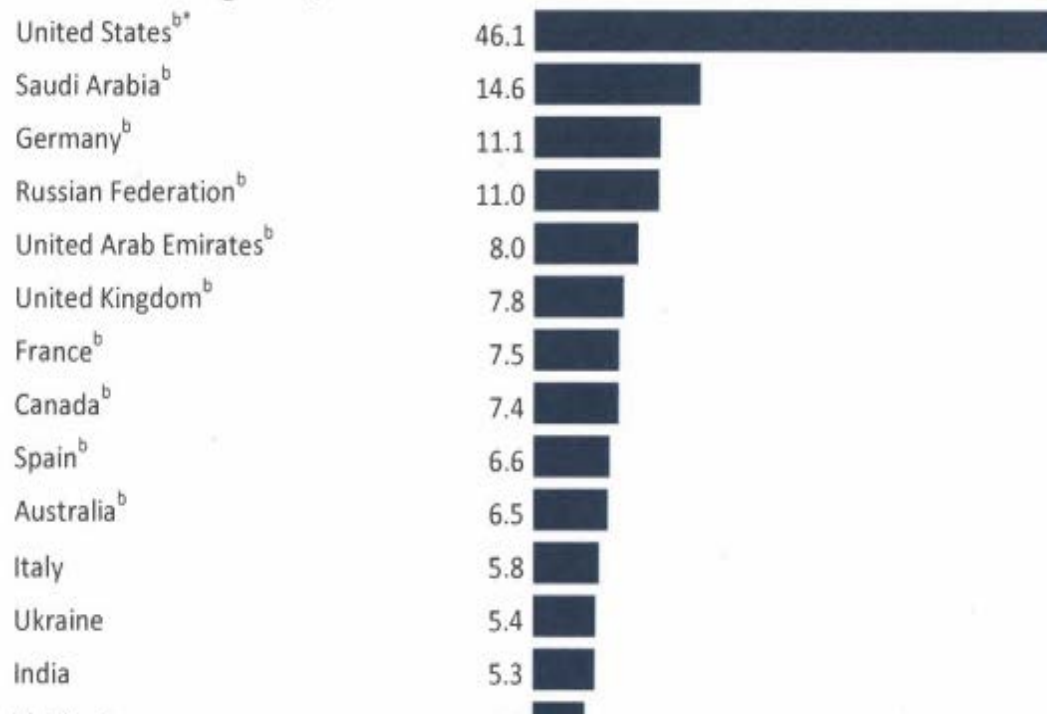
- Italy's population density is about 201 inhabitants per square kilometer (above the EU average). Its total surface amounts to 302,073 square kilometers and, because of its orography, the country is characterized by a territory that is prevailing hilly (41.6% of the total surface), with large mountainous areas (35.2%), and it consists only to a limited extent of plains (23.2%).
- Population is concentrated in the plains (48.7%), with some areas (such as the coast of Campania) that are among the most populated in the world; 38.9% of the Italian population live in the 3,369 municipalities located in hilly areas (41.6% of all Italian municipalities), and only 12.4% are resident in the municipalities located in mountainous areas.

REMITTANCES: Are a burden for countries that have had more than one episode of balance-of-payments crisis?

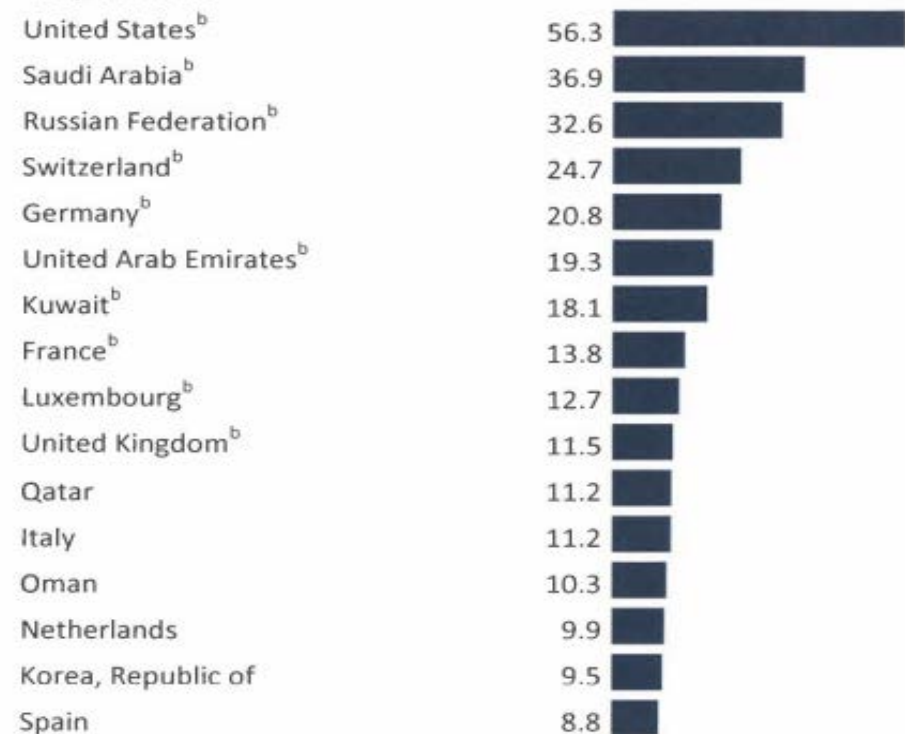
Over the years 2005-2015, foreigners residing in Italy have sent home €64 billion (On average, remittances from Italy amounts approximately to 0.5% of Italy's GDP)

Migration and Remittances: Top Countries

Top Immigration Countries^a, 2013
stock of immigrants, millions

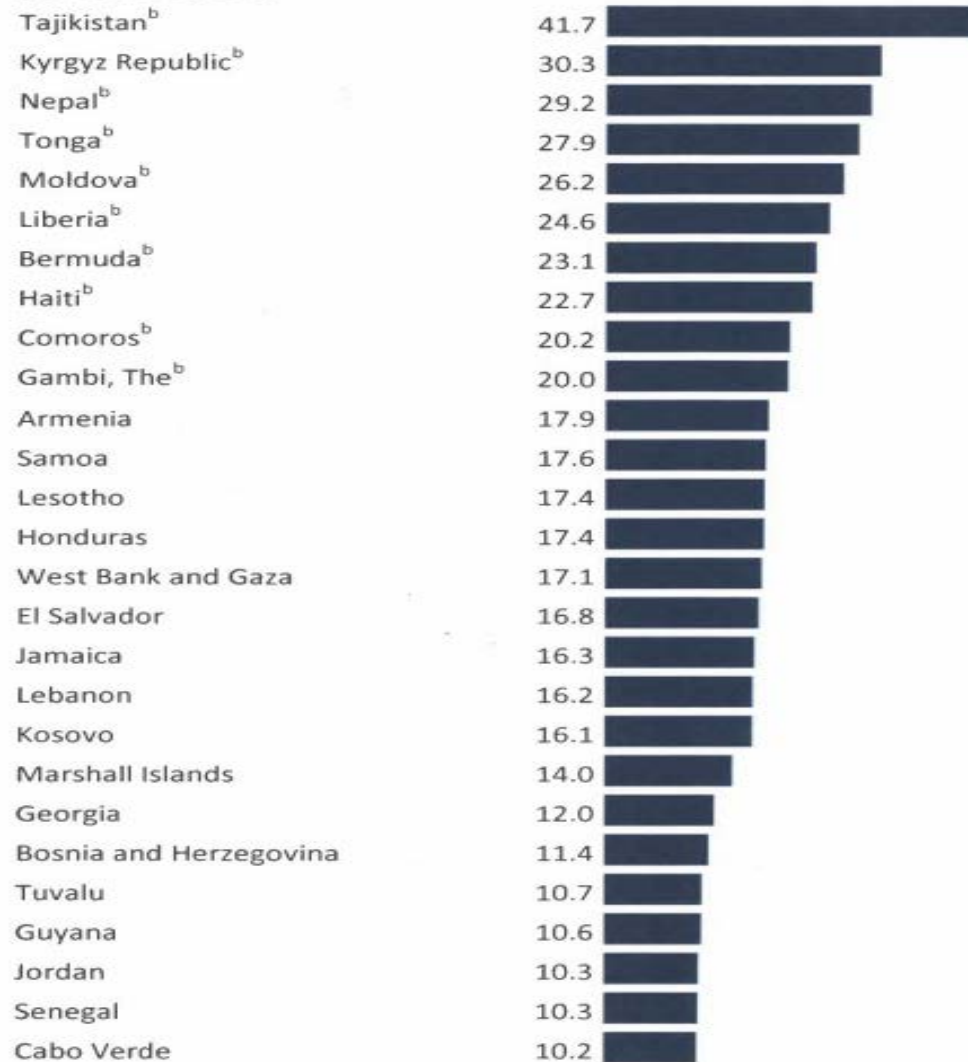


Top Remittance-Sending Countries, 2014
US\$ billions



REMITTANCES (receiving countries)

Top Remittance-Receiving Countries, 2014
percent of GDP



Political implications of the Italian current growth model

The Italian populism is a two-headed animal with two mouths:

- One mouth has been fed by the lacked inclusion in the formal economy of a large number of Italians (particularly in the South)
- The other mouth has been mainly fed by the large number of—badly integrated—migrants who has entered Italy in recent years causing distress amongst many Italians

CONCLUSION: It is not desirable for Italy a growth model that faces the demographic decline of the native population with a persistent inflow of migrants

Such a model presupposes the consolidation of the tendency towards the formation—which is already under way—of large pockets of poverty amongst non natives occupied in low and very low value-added activities, in precarious jobs or in the underground economy, which will require remarkable increases of social expenses for avoiding endemic social tensions and growing inequalities.

Moreover, this model will perpetuate the pathological coexistence of a large number of non-native workers with the low employment rate of the native population in ample areas of the country (in particular in the South, where it is extremely low amongst women and young people).