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Overqualified, Still Satisfied? Revisiting Job Satisfaction Among Overqualified Migrants

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Eleonora Trappolini¹, Wooseong Kim², and Giammarco Alderotti³

Abstract

In the context of global population ageing, migrants are increasingly essential to sustaining labour forces across high-income countries. This study investigates the dynamics of overqualification (i.e., when workers have higher qualifications than their job requires) and job satisfaction among migrants, taking Italy – a country with one of the world's oldest populations and a highly segmented labour market – as a case study. We pursue three main goals: (1) to examine the risk of overqualification by migrant background, (2) to analyse how overqualification relates to job satisfaction by migrant status, and (3) to test whether the relationship between the two differs among older natives and migrants. We pay particular attention to migrants' age at arrival – a key factor that can profoundly shape labour market experiences through such mechanisms as educational pathways and integration trajectories. The results show that migrants, especially those who arrived in Italy as adults, face a significantly higher risk of overqualification than natives. However, the negative association between overqualification and job satisfaction is weaker among this group, and particularly among older adult migrants. These findings suggest the emergence of an 'overqualification/job satisfaction paradox', whereby those most exposed to job mismatch appear less affected by its negative consequences. This may be driven by psychological mechanisms – such as adaptation to lower expectations – as well as by selection processes, whereby migrants with more negative experiences may have already exited the host labour market.

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Introduction

Employment is typically considered a crucial outcome of migrants' lives in the country of destination. Indeed, work is the main reason behind migration decisions (OECD 2023) and, according to estimates of the International Labour Organisation, 70% of migrants worldwide are in employment (ILO 2023). Socio-demographic research has recently renewed its interest towards migrants' employment also in light of the rapid and unprecedented process of population ageing, which is inexorably affecting most high-income countries. In this context, international migration – generally characterised by a younger age structure – has been seen as a short- to medium-term strategy with which to mitigate the economic consequences of population ageing, such as the sustainability of pension systems and the ageing of workforces. Immigrants contribute to the destination countries' labour force, offsetting the decline in native working-age populations (Fihel, Janicka, and Kloc-Nowak 2018). However, a critical and often overlooked aspect is that immigrants themselves are ageing. This (inevitable) demographic shift complicates their role as a long-term solution to labour shortages (De Santis 2011) and calls for greater attention to their integration and well-being in the workforce. A deeper understanding of how the migrant population navigates the labour market is therefore essential to assess not only their current contributions to the economy, but also to anticipate future challenges related to their ageing in the destination country.

One key aspect of migrants' employment experience is overqualification – a condition in which individuals possess higher educational qualifications than required for their jobs (OECD 2007; Eurostat 2021). Research has consistently shown that migrants are at a higher risk of overqualification than natives across high-income countries (Aleksynska and Tritah 2013; Chiswick and Miller 2010; Jacobs et al. 2021). This disadvantage, often referred to as 'ethnic penalty' in migration and labour market studies (Heath and Cheung 2007), is associated with several negative labour market outcomes, including wage penalties, limited wage growth (Korpi and Tåhlin 2009; Brenzel and Reichelt 2018), restricted career mobility (Baert et al. 2013), and the underuse of skills (Mavromaras, Sloane, and

Wei 2015). Additionally, overqualification highlights structural inefficiencies in the successful integration into the host country's labour market. When large numbers of highly educated migrants are relegated to low-skilled or poorly matched positions, it reflects both an underuse of valuable human capital and the labour market's limited capacity to integrate migrant talent effectively (Fernández and Ortega 2008).

This issue takes on added urgency in an ageing society like Italy – a country with one of the world's oldest populations, and where migrants are increasingly central to sustaining the workforce. Italy is leading the global population ageing due to persistently low fertility rates and increasing longevity. The share of individuals aged 65 and over has steadily risen, from 9.3% in 1960 to 24.3% in 2024 (Istat 2025). Consequently, the demographic balance is shifting: the ratio of working-age individuals (15–64 years) to those outside this range (0–14 and 65 years and over) is expected to fall significantly, from approximately 3:2 in 2021 to approximately 1:1 by 2050 (Istat 2021). Migrants are also rapidly ageing. Indeed, the share of migrants aged 50 and over has more than doubled, rising from 10.5% in 2002 to 24.7% in 2024 (Istat 2025). These dynamics present growing challenges for the Italian economy, particularly in maintaining a sustainable and productive workforce.

If migrant workers face systematic overqualification and its associated negative impacts, the consequences could extend beyond economic indicators, thereby jeopardising both their long-term well-being and the broader effectiveness of migration as a demographic and economic strategy. In particular, overqualification may erode job satisfaction – a key dimension of employment quality linked to job performance (Judge et al. 2001), sickness-related absences (Ybema, Smulders, and Bongers 2010), and early retirement (Schnalzenberger et al. 2014). While among the overall population, overqualification is typically associated with lower job satisfaction due to skill mismatch (Fleming and Kler 2008; Voces and Caínzos 2021), an intriguing and well-documented phenomenon – the 'job satisfaction paradox' – suggests that migrants tend to report higher levels of job satisfaction than natives, even in poorer working conditions. This paradox has been attributed to lower work-

related expectations in these groups, as they often face more barriers in the job market and thus set their expectations lower (Hodson 1985; Piccitto and Avola 2023), as well as different work values among migrants, such as a stronger emphasis on stability or job security over income or prestige (Kashefi 2011).

Despite the relevance of these issues, limited research has explored the relationship between overqualification and job satisfaction among migrant populations. Indeed, to the best of our knowledge, no studies have addressed this topic in the Italian context.

This study contributes to the literature on migrants' labour market trajectories and integration by examining the link between overqualification and job satisfaction among migrants in Italy, with particular attention to the role of migrants' age at arrival, as it reflects key differences in integration trajectories, educational background, language acquisition, and adaptation to the host-country labour market (Ghio et al. 2023; Harmansen 2017). Using data from the Italian Labour Force Survey (IT-LFS 2014–2022), the study pursues three main aims: (1) to assess the likelihood of overqualification among migrants compared to natives; (2) to analyse the association between overqualification and job satisfaction, focusing on migrant background; and (3) to explore whether this association varies across age groups.

Literature Review, Theoretical Framework, and Research Hypotheses

Overqualification among Immigrants

Overqualification occurs when an individual's level of education exceeds the requirements of their current job (ILO 2018). While often used interchangeably with overeducation – especially when measured via formal rather than vocational credentials (Brynin 2002; Chevalier and Lindley 2009) – the concept differs from overskilling, which refers to the underuse of practical or cognitive abilities rather than educational attainment (Giuliano et al. 2024). Although education and skills are interrelated, mismatches frequently occur in only one dimension, thus highlighting the need to

distinguish between qualification and skill mismatches (Allen and Van der Velden 2001; Flisi et al. 2017; Kracke, Reichelt, and Vicari 2018).

Research has consistently shown that immigrants are significantly more likely to be overqualified than native-born workers (Chiswick and Miller 2013; Jacobs et al. 2021; Montanari 2025). This disadvantage reflects both labour supply factors – economic structures and labour market institutions (Ghignoni and Verashchagina 2014) – and labour demand factors related to individual heterogeneity in productivity, preference, job-searching behaviour, and employer hiring practices.

On the labour-supply side, key challenges include limited proficiency in the host-country language (Budría and Martínez-de-Ibarreta 2021; Chiswick and Miller 2013; Duvander 2001), limited transferability of labour market skills and qualifications prior to immigration (Chiswick and Miller 2009; Friedberg 2000; Lancee and Bol 2017), differing education quality between origin and host countries (Bratsberg and Terrell 2002), and weak social/job-search networks (Kalfa and Piracha 2018; Kracke and Klug 2021). On the labour-demand side, such factors as labour market regulations and welfare regimes (Pricila Birgier and Cantalini 2024), as well as employer discrimination against immigrants or ethnic/racial minority workers (Rafferty 2012, 2020), can limit opportunities for adequate employment. The existing literature suggests that employer discrimination can lead immigrants to widen their job search to maximise their chances of securing any available jobs so as to avoid unemployment (Goldsmith et al. 2004), often resulting in self-selection into roles beneath their qualifications (Pager and Pedulla 2015). This suggests a structural trade-off between unemployment and overqualification faced by immigrant workers from ethnic or racial minority backgrounds (Pricila Birgier and Cantalini 2024).

The relative importance of labour-demand and labour-supply side determinants can vary across migrant origin groups and host-country contexts. Importantly, immigrants can partially overcome labour-supply side barriers over time as they become incorporated into the host countries. For instance, education received in the destination country reduces the risk of overqualification

(Duvander 2001; Nielsen 2011), suggesting that migrants' age at arrival may play a chief moderating role. Likewise, time spent in the host country and the acquisition of citizenship (Jacobs et al. 2021) reduce the risk of overqualification among migrant workers. However, some labour-demand-side factors, such as labour market discrimination, can persist over time, leading to long-term barriers to integrating into the host country's labour market. Previous research has consistently shown that migrants from non-Western or non-European countries face particularly high risks of overqualification in Western European labour markets (Joona et al. 2014; Schultz-Nielsen 2024). Alarmingly, some studies show that even among the children of non-European migrants – born and raised in the host country – experience high risks of overqualification (Falcke et al. 2020; Kim 2024; Weber, Ferry, and Ichou 2024). This suggests that structural disadvantages linked to ethnic or racial minority status can persist across generations, independent of migration background.

Overqualification among migrants remains under-researched in the Italian context. Recently, a regional study by Maiorino and Terzera (2024) in Lombardy found that overqualification risks are particularly high among female migrants and those from non-EU Eastern Europe or the Philippines, while education received in Italy and longer residence durations mitigate these risks. Van Wolleghem and colleagues (2023) further showed that informal job-search networks, typically helpful for natives and the second generation (i.e., the children of immigrants born in the host country), can actually increase overqualification risks for first-generation migrants in Italy. A recent comparative study by Pricila Birgier and Cantalini (2025) highlighted a paradox: although migrant workers in Italy face relatively low unemployment rates, their risk of overqualification remains high, supporting the notion that overqualification often serves as a compromise to avoid unemployment (Pager and Pedulla 2015).

To explain this persistent mismatch – especially in advanced economies like Italy – this study draws on two major theoretical frameworks. According to *human capital* theory (Becker 1964), individuals invest in education to enhance productivity, expecting proportional returns in the labour market. From

this perspective, overqualification is seen as a temporary mismatch that can be resolved as workers' skills are more suitably matched over time. However, the human capital of immigrants is often undervalued in host-country labour markets due to non-recognition of foreign credentials, language barriers, and limited familiarity with local workplace norms (Chiswick and Miller 2009). This devaluation depends, among other factors, on the age at migration, as it tends to be especially pronounced for immigrants educated abroad. In the Italian context, for instance, immigrant workers face significant administrative and bureaucratic challenges when seeking recognition of their educational qualifications (Fullin and Reyneri 2011). This process is often cautious, fragmented, and highly individualised, often depending on the intended use of the credential and assessed on a case-by-case basis (Zanfrini et al. 2015).

The *labour market segmentation* theory (Piore 1979) offers a complementary explanation by emphasising structural barriers: migrants are frequently channelled into secondary segments of the labour market (characterised by low wages, precarious conditions, and limited upward mobility), regardless of their actual skills or qualifications. This structural positioning is not attributed to individual shortcomings, but reflects the systemic demand for a flexible and low-cost labour force to fill positions that are unattractive to native workers. In Italy, this framework helps account for the persistent presence of highly educated migrants in low-skilled occupations (Panichella, Avola, and Piccitto 2021). Building on this literature, we hypothesise that: *migrants are more likely than natives to be overqualified, with the extent of overqualification varying by age at arrival. Migrants who arrived during early childhood (pre-school age) are expected to show levels of overqualification similar to those of natives, due to host country education and early integration. In contrast, those who arrived during school-age or adulthood are expected to face a higher risk of overqualification, driven by weaker language proficiencies, lack of local credentials, and reduced social capital (Hypothesis 1 – H1).*

Overqualification and Job Satisfaction

Job satisfaction is widely recognised as a key component of both overall life satisfaction and individuals' well-being (Aleksynska 2018). Moreover, job satisfaction significantly influences workplace outcomes, including job performance, absenteeism, turnover, and overall organisational environment (Ostroff 1992). It is also closely linked to broader well-being indicators, such as mental and physical health (Faragher et al. 2005), life satisfaction (Judge and Watanabe 1993), and happiness (Weaver 1978). Given these wide-ranging effects, job satisfaction offers a useful lens through which to assess migrants' integration and employment quality.

In this context, overqualification affects both employment prospects and workers' well-being, often leading to reduced job satisfaction due to the underuse of skills and a mismatch between expectations and outcomes. Overqualified workers tend to experience wage penalties and slower earnings growth compared to adequately matched peers (Korpi and Tåhlin 2009). Theoretically, these patterns can be interpreted through the *effort-reward* imbalance and relative deprivation frameworks (Siegrist 1996), which suggest that dissatisfaction arises when individuals perceive a lack of fair returns for their efforts (Fleming and Kler 2008; Voces and Caínzos 2021). Status inconsistency theory similarly argues that misalignments between education, income, and occupational status can lead to frustration, dissatisfaction, and withdrawal (House and Harkins 1975; Lenski 1956). Accordingly, overqualification is expected to lower job satisfaction.

However, this relationship may vary across social groups. According to Clark's (2003) *less vulnerability* hypothesis, individuals from high-unemployment backgrounds (e.g., migrants) may be psychologically shielded from the negative effects of poor job matches by comparing their current employment to worse alternatives, such as unemployment. Some migrants may view overqualification as a strategic compromise, prioritising job stability over occupational status or wage expectations (García-Mainar and Montuenga-Gómez 2020). Moreover, migrant workers may evaluate their position relative to other migrant groups rather than to the native population (Bartram

2011), potentially mitigating the effects of relative deprivation (Frank and Hou 2018). The *social* comparison theory (Sheeran et al. 1995) also suggests that when an undesirable status is widespread within one's reference group, it may be perceived as 'normal', thereby reducing its negative impact (Chiswick and Miller 2009).

Based on the above, we hypothesise that: overqualification is negatively associated with job satisfaction, and that this relationship varies between native and migrant workers. Specifically, we expect the association between overqualification and job satisfaction to be stronger for natives and migrants who arrived at pre-school age, due to earlier educational and social integration. In contrast, we expect the overqualification/job satisfaction link to be weaker for migrants who arrived during school-age or adulthood, as they may perceive overqualification as an acceptable compromise (Hypothesis 2 – H2).

Building on this heterogeneity, it should also be considered that older migrants face distinct labour market constraints, such as limited time to invest in host-country human capital and reduced opportunities for career advancement (Flynn and Wong 2022; Manzoni et al. 2014). For this group, overqualification may represent a rational trade-off between ensuring financial security and reconceptualising a source of frustration. They may also assess their current employment not in terms of ideal job matches, but relative to more constrained alternatives.

This reasoning aligns with the *adaptation-level* theory (Helson 1964) and the *expectation-disconfirmation* theory (Oliver 1980), which suggest that satisfaction depends on individuals' expectations and the standards they use for comparisons. Older migrants may evaluate their job situation against past employment experiences in their origin country (or even the mere possibility of being employed) instead of the outcomes off native-born workers. As a consequence, the perceived gap between qualifications and job content may be less salient. Therefore, we hypothesise that: *the negative association between overqualification and job satisfaction is weaker among older migrants*

who arrived in Italy as adults, due to lower career expectations and a greater emphasis on employment stability over occupational status (Hypothesis 3-H3).

The Italian context

The Migration Phenomenon

Unlike most Central and Northern European countries, Italy experienced an increase in its migrant population without introducing long-term regulations on immigrant entry, residence, or integration (Castles 1986). The absence of coherent migration policies contributed to varied and constantly shifting migrant populations.

Italy transitioned from a country of emigration to one of immigration in 1973, when, for the first time, net migration became positive due to the oil crisis. Initially, most immigrants were returning Italians who had lost their jobs abroad, along with individuals predominantly from the high-income countries of Europe and North America. These early arrivals were therefore primarily from wealthier nations. By the early 1980s, the number of immigrants in Italy reached approximately 200,000 (0.4% of the total population). In 1984-1985, the first major influx of migrants from low-income countries, especially from Africa and Asia, occurred. The 1990s marked a significant turning point in the evolution of immigration to Italy. Following the fall of the Berlin Wall and the collapse of the Soviet Union and former Yugoslavia, migration became more diverse, with increasing numbers of arrivals from Eastern Europe (notably Poland and Romania) and the Balkans (especially Albania). Until this period, migration to Italy was mainly driven by external 'push' factors. From the 2000s onward, internal 'pull' factors began to play a more prominent role. One of the most significant was population ageing, which had intensified during the 1990s due to extremely low fertility rates. In this context, there was a notable rise in female migration from Central-Eastern Europe (particularly Romania) and Latin America to care for the aging population. This led to the emergence of the 'migrant caregiver' as a key figure in Italian society (Colucci 2019).

By 2001, the migrant population had grown to approximately 1.3 million (2.3% of the population), and continued rising, reaching 4.2 million in 2010 and over 5 million in 2020 (8.7%) (Istat 2025a). Today, Italy hosts migrants from around 190 nationalities. The top 10 – Romanians (20.4%), Albanians (7.9%), Moroccans (7.8%), Chinese (5.8%), Ukrainians (5.2%), Bangladeshis (3.6%), Indians (3.3%), Egyptians (3.1%), Pakistanis (3.0%), and Filipinos (2.9%) – account for 63.3% of the total migrant population (Istat 2025b).

Over the past decade, migration numbers have stabilised at approximately 5 million, signalling a mature phase of immigration. This is also reflected in the reasons for migration: while labour migration remains important, family reunification has increased significantly. Today, more migrants arrive to join family members already residing in Italy than to seek employment. Consequently, there has been a notable growth in immigrant families, families of immigrant origin, and children born in Italy to immigrant parents, marking a new chapter in Italy's migration and settlement processes (Buonomo, Strozza, and Vitiello 2018).

Migrants' Integration in the Labour Market

In the context of an ageing workforce, migrants have helped mitigate the effects of demographic shifts in Italy over the past decade. A recent analysis comparing employment trends between 2007 and 2019 across selected Italian and European regions – similar in size and economic development – highlights the distinct contributions of native and migrant workers. The results show that in some Northern and Central European regions (Belgium, Germany, France, Sweden, and the Netherlands⁴), employment grew for both groups. In contrast, in some Italian and Spanish regions, ⁵ employment growth was driven almost entirely by migrants, while native employment declined (Gallo and Gentili 2023).

⁴ Bayern, Västsverige, Baden-W, Alsace, Rhône-Alpes, Nordrhein-W, Vlaams Gewest, Noord-Brabant, and Rheinland-

⁵ Lombardy, Emilia-Romagna, Tuscany, Veneto, Piedmont, Cataluña, and País-Vasco.

These patterns are deeply embedded in Italy's socio-economic structure and are closely related to the need for an immigrant labour force.

In this respect, prior research has identified different models of migrant labour market integration (Reyneri and Fullin 2011; Piccitto, Avola, and Panichella 2025). In Northern Europe, highly regulated labour markets limit demand for low-skilled workers, resulting in lower migrant employment probabilities compared to natives, but fewer disadvantages in job quality once employed. Conversely, in Southern Europe, including Italy, demand for low-skilled labour is high, with less regulation at the lower end of the job market (Reyneri 2004). Here, migrants have relatively better access to employment than in Northern Europe and compared to natives, but face a greater risk of being trapped in low-quality, secondary labour market jobs, such as seasonal agricultural work and construction (Avola 2022; Cantalini, Guetto, and Panichella 2023; Corrado, de Castro, and Perrotta 2017; Fellini and Guetto 2019). This pattern applies to both men and women, albeit with some gendered differences: for example, well-educated migrant women are often confined to domestic care work for the elderly (Ballarino and Panichella 2018; Bonizzoni 2015).

In Italy, these dynamics translate into relatively high employment rates among migrants: migrant men have an employment rate of 71% (about 5 percentage points higher than native men), while migrant women's employment rate stands at 45% (5 percentage points lower than native women) (Istat 2023). However, this high employment coexists with a segmented labour market, marked by a substantial qualitative mismatch between the structure of the labour demand and the native supply. Indeed, Italy has a persistently high demand for low-skilled, flexible (often irregular), and low-paid jobs, as well as those with poor social recognition. At the same time, more educated and young native workers are raising their occupational expectations, looking forward to employment in qualified segments of the labour market. As a result, migrants have progressively replaced native workers in traditional economic activities, such as agriculture, construction, hospitality (e.g., hotels and restaurants), small

trade, and manufacturing, particularly among men, while migrant women are especially concentrated in caregiving roles (Italian Ministry of Labour and Social Policies 2024).

Beyond substitution, migrants have also created new labour demand, characterised by low cost and poor employment conditions, in care services and domestic work. This shift supports a society shaped by population ageing, rising female labour force participation, and transformation of family models and lifestyles, which are not matched by sufficient public support services or family policies (Avola and Piccitto 2020; Fellini and Fullin 2018).

A study by Avola and Piccito (2020) examined whether migrants' segregation in unskilled work is a permanent condition or whether upward mobility is possible during their stay in Italy. Their findings indicate that occupational mobility is very limited, especially for migrants coming from low-income countries, and career trajectories are largely shaped by the first job obtained upon arrival. The few opportunities for improving one's own socioeconomic position depend mainly on the worker's human capital.

This strong segregation in low-skilled jobs leads to another major issue: overqualification. Many migrants hold higher qualifications than their jobs require, but structural barriers prevent their skills from being fully used. The Italian case, therefore, is marked by a persistent trade-off between employment levels and job quality.

Data and Methods

Data

For this study, we used the IT-LFS from 2014 to 2022 conducted by the Italian National Statistics Institute (Istat). The IT-LFS surveys Italy's resident population annually, providing comprehensive information on individuals' demographic characteristics, household composition, employment status, job tenure, and job satisfaction. Despite being a cross-sectional survey, it offers the most valuable

microdata source for Italy, particularly for migrant-focused studies due to its large immigrant sample (Fullin and Reyneri 2011; Alderotti, Mussino, and Comolli 2023).

Our analysis focuses on employed individuals aged 25 and older with no missing information at key variables (n = 492,716 individuals; 12.8% migrants), and migrants identified by birthplace. Furthermore, we excluded workers employed in the International Standard Classification of Occupations (ISCO)-08 categories 1 and 2 (i.e., managers and professionals) due to the extreme unlikelihood of their being overqualified. Hence, our final sample consisted of 391,049 workers (14.9% migrants).

Before proceeding, we should mention that we selected individuals older than 25 years old to exclude ages in which individuals may still be in full-time education. Second, our sample included only resident migrants, meaning that our analysis refers only to regular migrant populations.

Measuring Overqualification

In this study, we used the objective approach to define overqualification (Capsada-Munsech 2019; Hartog 2000). Moreover, we especially used the Job Analysis methods, which are a normative approach based on an assumed correspondence between occupation and educational qualifications based on the assessment by job experts. In other words, a worker is considered overqualified when their level of educational attainment exceeds the qualifications typically required for their job. This method has been widely used in the overqualification literature (e.g., OECD 2007; Montanari 2024), including in the Italian context (Maiorino and Terzera 2024), mainly due to its parsimonious application – that is, in comparing an individual's occupation and education levels following the internationally standardised categories or their equivalents. Moreover, compared to the subjective measures of overqualification, such as workers' self-assessments, the job analysis approach does not suffer from recall bias or respondents' confounding overqualification with job characteristics

unrelated to misalignment between educational qualification and occupation levels (Capsada-Munsech 2019).

While the objective approach to measuring overeducation offers valuable insights, it is important to recognise its limitations. One major limitation is its inability to capture the diversity of educational requirements within specific occupations. Many jobs, even within the same occupation, may have different levels of educational demands. Additionally, the educational requirements for a given occupation can evolve over time, reflecting changes in the labour market, technological advances, or shifts in societal needs (Voces and Caínzos 2021). Moreover, the job analysis measure assumes that human capital is acquired mainly through formal education, and educational level is an accurate proxy for an individual's skills. However, over the past decades, the importance of informal education and on-the-job training in human capital investment has grown significantly (Grip and Andries 2024). Despite these limitations, we contend that the heterogeneity in educational requirements is unlikely to substantially bias our estimates of overqualification, given that the observations are drawn from a relatively short time span. Thus, credential inflation in the labour market was not likely to affect our overqualification measure substantially.

As mentioned above, overqualification status was determined based on two variables: education level (based on the International Standard Classification of Education (ISCED) level) and job type (based on ISCO-08 classification, 3-digit level). Education is composed of five options: no, primary, lower secondary, upper secondary, and tertiary education. We decided to group this variable into three categories: no/primary education, (upper and/or lower) secondary education, and tertiary education. To classify occupations as low-, medium-, or high-level professions, we used the ISCO-08 competence levels assigned to specific job types. We then matched education levels with job types to determine overqualification. We defined individuals as overqualified if i) they had tertiary education and were employed in medium- or low-skilled occupations (ISCO from 400 to 999), or ii) they had secondary education and were employed in low-skilled occupations (ISCO from 900 to 999).

Analytical Strategy, Dependent and Independent Variables

To examine the relationship between migrant background and overqualification and, subsequently, the relationship between overqualification and job satisfaction, we conducted three separate analyses. In the first, we applied linear probability models (LPMs). We chose LPMs over other commonly used nonlinear regression models, such as probit or logit models, as we sought to directly compare point estimates across models. While odds ratios estimated by logistic regression are inappropriate for direct comparisons due to their dependency on baseline probabilities (Mood 2010), LPMs allow for more straightforward interpretations of interaction terms and a generally clearer communication of the results. The dependent variable was overqualification, coded as 1 for individuals classified as overqualified and 0 otherwise. In this case, the main independent variable was the migrant background (where we differentiated between Italians and migrants). However, we also distinguished the latter group according to their age at arrival in Italy. Therefore, this variable was composed of four categories: Italians, and migrants arriving in Italy at ages 0-5, 6-8, and 18+. The control variables included three sets of factors. 1) Individual's socio-demographic characteristics: age group (25–34 – reference, 35–44, 35–44, 45–54, 55–64, 65+), macro area of residence in Italy (North – reference, Centre, South), marital status (single, married - reference, divorced/widowed); 2) household composition (single-person household – reference, couple without children, couple with children, single-parent family, composite household); and 3) job characteristics: type of contract (permanent – reference, temporary, self-employed, other), working time (full-time – reference, parttime), ATECO code⁶ (agriculture - reference, industry, construction, commerce). Descriptive statistics of the sample by migrant background and sex are reported in Table A1 in the Supplemental Appendix.

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⁶ The ATECO code is a classification system used in Italy to categorise economic activities for statistical, administrative, and fiscal purposes. It is based on the Statistical Classification of Economic Activities in the European Community system but adapted to the Italian context by Istat. Each ATECO code consists of a series of numbers that identify a specific sector or type of business activity. These codes are commonly used for tax registration, business licenses, and economic analysis.

In the second set of analysis, we used linear regression models to examine job satisfaction as the outcome variable, measured on an 11-point Likert scale ranging from 0 (not at all satisfied) to 10 (extremely satisfied). This measure reliably captures work-related satisfaction dimensions (Spector 1997), and has seen use in previous studies (Piccitto and Avola 2023; Spector 1997). Here, the main explanatory variables were overqualification and migrant background, while the control variables remained the same as in the previous models.

All analyses were stratified by sex to account for gender-based occupational differences (Istat 2023). The results from the first set of analyses are presented using predicted probabilities of overqualification with confidence intervals centred on the predictions and with lengths equal to 2 × 1.39 × standard errors (Goldstein and Healy 1995). For the second set of analyses, we show OLS marginal effects capturing the association between overqualification and job satisfaction by migrant background.

Additionally, the Supplemental Appendix reports the adjusted predicted job satisfaction scores by overqualification status and migrant background (Figures A1) and by overqualification status, migrant background, and age group (Figure A2).

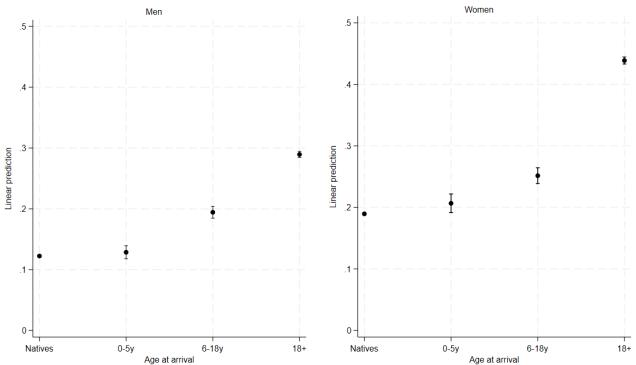
Results

Overqualification by Migrant Background

Figure 1 shows the predicted probabilities of being overqualified by migrant background, separately by sex. Such probabilities were the lowest among Italian men and among migrant men who arrived when they were 0 to 5 years old (12.8%). Migrant men who arrived in Italy between 6–18 or older showed significantly higher probabilities of overqualification compared to the first two groups (19.4% and 28.9%, respectively). Among women, the probability of being overqualified was remarkably higher. As in the case of men, native women and women who migrated to Italy when they were 0–5 showed the lowest probability of overqualification (20.7%, the difference was not

statistically significant). However, this rose to 25.3% for women who migrated between 6–18, and to 43.8% for women who migrated after age 18.

Fig. 1 Adjusted predicted probabilities of being overqualified by migrant background for men and women



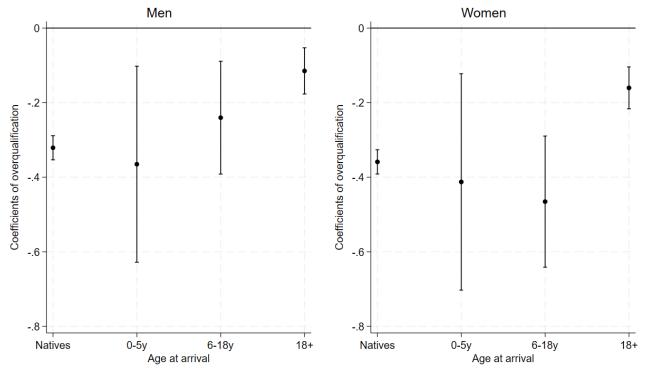
Note: The models control for age group, marital status, residence area, household type, type of contract, working time, and ATECO code. 83.5% CI.

Source: Authors' elaboration on IT-LFS data.

Is the Association between Overqualification and Job Satisfaction Different by Migrant Background? We then proceeded to investigate whether being overqualified is related to job satisfaction in different ways depending on the migrant background. Figure 2 reports the coefficients from OLS models estimating the association between overqualification and job satisfaction, separately for men and women, by migrant background. All coefficients were negative, indicating a consistent negative association across all groups. Among natives, being overqualified was associated with a reduction in job satisfaction of approximately 0.32 points for men and 0.36 points for women. The magnitude of this association changed slightly among migrants who arrived in Italy at younger ages (0–5 and 6–18), with somewhat stronger negative effects observed for women. However, the large confidence intervals do not allow for these differences to be interpreted. Among those who migrated after the

age of 18, the negative association between overqualification and job satisfaction was markedly weaker in both sexes – though still statistically significant (–0.12 for men and –0.16 for women), especially if compared to that of native men and women.

Fig. 2 Marginal effects of overqualification on job satisfaction by migrant background for men and women



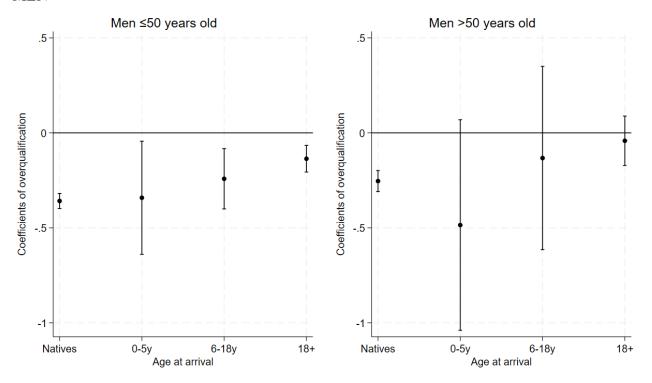
Note: The models control for age group, marital status, residence area, household type, type of contract, working time, and ATECO code.

Source: Authors' elaboration on IT-LFS data.

Is the Association between Overqualification and Job Satisfaction Different across Age Groups? Finally, we examined the relationship between overqualification and job satisfaction by further stratifying the analysis by age group. The results for men are presented in Figure 3. The pattern observed among younger men was broadly consistent with that shown in Figure 2, suggesting a stronger negative association between overqualification and job satisfaction among natives and migrants who arrived in Italy between ages 0–5. This association seemed to weaken as age at arrival increased. Among men aged over 50, caution is warranted when interpreting results for those who arrived in Italy at ages 0–5 and 6–18, due to the wide confidence intervals observed in these categories. This was not entirely unexpected, as these groups include individuals who migrated to

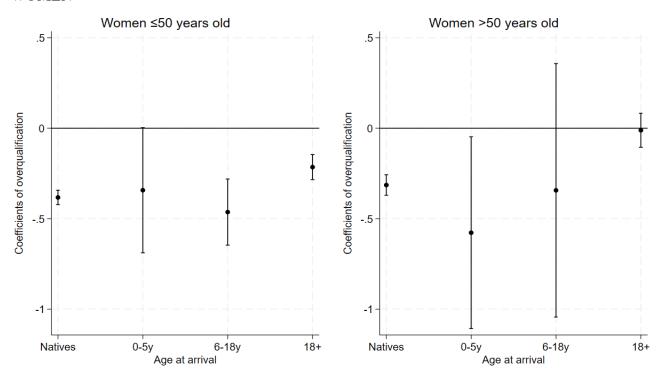
Italy mostly before the 1980s, a period characterised by relatively low levels of immigration. However, it should be noted that the association between overqualification and job satisfaction became especially weak and statistically insignificant among older men who migrated at age 18 or above. A similar pattern was observed among women. As shown in Figure 4, the association among women aged 50 or younger mirrored that found in the pooled sample. Among women older than 50, however, no statistically significant relationship was observed between overqualification and job satisfaction for those who migrated at age 18 or later. As with men, the small sample sizes for women who migrated between ages 0–18 limited the reliability of estimates in these categories, leading us to refrain from drawing substantive conclusions.

Fig. 3 Marginal effects of overqualification on job satisfaction by migrant background and age group. MEN



Note: The models control for age group, marital status, residence area, household type, type of contract, working time, and ATECO code.

Fig. 4 Marginal effects of overqualification on job satisfaction by migrant background and age group WOMEN



Note: The models control for age group, marital status, residence area, household type, type of contract, working time, and ATECO code.

Source: Authors' elaboration on IT-LFS data.

Discussion and Conclusions

This study contributes to the literature on migrant integration and labour market inequality, offering evidence that is especially relevant in ageing societies, where demographic change and growing reliance on migrant labour is making it increasingly important to understand the conditions shaping migrants' labour market outcomes. In so doing, it provides the first national-level analysis of overqualification among migrants in Italy and investigates its association with job satisfaction. Specifically, we tested three hypotheses: (1) that migrants are more likely than native-born individuals to be overqualified, (2) that overqualification is associated with lower job satisfaction and this association differs between natives and migrants, and (3) that this association differs across age groups. In all analyses, we accounted for age at arrival, which reflects migrants' exposure to the host country's educational, institutional, and cultural context.

The findings confirm that migrant workers are significantly more likely than their native counterparts to be overqualified for their jobs, as documented in previous studies (Budría and Martínez-de-Ibarreta 2021; Maiorino and Terzera 2024; Pricila Birgier and Cantalini 2025). However, our study advances the literature by acknowledging the heterogeneity within the migrant population and by focusing specifically on the role of age at arrival. The results further show that the risk of overqualification is particularly pronounced among those who arrived in Italy as adults (aged 18 and over), supporting H1 and highlighting the challenges faced by individuals who enter the host country after completing their education or beginning their career abroad. These findings are consistent with broader evidence showing that migrants' human capital is often undervalued in destination countries due to difficulties in the recognition of foreign qualifications (Fullin and Reyneri 2011), limited proficiency in the host country's language, weaker social networks, and, in some cases, discriminatory practices in hiring or job placement (Chiswick and Miller 2009). Additionally, we noted the important role of gender: migrant women exhibited the highest risks of overqualification, suggesting that multiple

disadvantages can compound to limit labour market outcomes (Baran 2024). This aligns with previous studies referring to the well-known migrant women 'double-disadvantage' (e.g., Pricila Birgier and Cantalini 2025).

Despite the fact that previous studies conducted on the general population (Voces and Caínzos 2021) or on migrant populations as a homogeneous group (Frank and Hou 2018) have revealed that overqualification leads to lower job satisfaction, our results suggest that this relationship is nuanced by migrants' age at arrival. While overqualification is negatively associated with job satisfaction, our results show that the negative association between overqualification and job satisfaction is stronger for natives and migrants who arrived at an early stage, but weaker for migrants who arrived as adults (18+), supporting H2. The fact that the negative relationship between overqualification and job satisfaction is stronger for some specific groups than for others can be read through the *effort-reward imbalance* lens. In this context, natives and migrants who arrived at an early stage might have higher standards in their returns according to their efforts. Conversely, migrants who arrived after having completed their education (18+) may perceive overqualification as an acceptable trade-off to avoid unemployment (Clark 2003), or they may compare their labour market outcomes to those of other migrants rather than to native workers, or possible perceive as the 'norm' something that is widespread in their group (Sheeran, Abrams, and Orbell 1995).

Finally, our age-stratified analysis provides empirical support for H3: the negative association between overqualification and job satisfaction appears significantly weaker among migrant workers aged 50 and older who arrived in Italy as adults (aged 18 or above). This pattern is consistent with the idea that, for older migrants, overqualification may be perceived less as a failure of integration or skill recognition and more as an acceptable – or even strategic – compromise aimed at securing income stability and employment continuity.

These findings point to the existence of a further paradox within the literature on migrants' employment outcomes. Previous studies have documented that migrants often report higher job

satisfaction than native workers, despite facing worse labour market conditions – the so-called job satisfaction paradox. Our results suggest a second layer of complexity: overqualification, which is especially common among migrants, appears to have a less negative impact on job satisfaction among the most disadvantaged migrant groups – namely, those who arrived in Italy as adults, and particularly those aged 50 and above. This 'overqualification/job satisfaction paradox' aligns with both adaptation-level theory (Helson 1964) and expectation-disconfirmation theory (Oliver 1980), which emphasise that satisfaction is shaped not by absolute outcomes, but by how those outcomes compare to personal expectations or previous experiences. Older migrants may not evaluate their job satisfaction against ideal employment scenarios or those of native-born workers. Instead, they may assess their current roles relative to past jobs in their country of origin, earlier periods of unemployment, or the broader difficulties of entering a new labour market later in life. In support of this, prior research has shown that late-life migrants often prioritise job stability and financial security over occupational status or skill alignment, especially amid limited career opportunities (Flynn and Wong 2022; Manzoni, Härkönen, and Mayer 2014). The reduced salience of status-related frustration in this group may reflect a broader shift in goals over the life course, where the urgency to build a long-term career gives way to more pragmatic concerns, such as planning for retirement or supporting family members. In this context, overqualification may be seen not as a misalignment, but as a reasonable and acceptable trade-off. Further to these life-course explanations, we can also speculate that a selection effect may also be at play. Those who remain in the host country into older age – particularly migrants who arrived as adults – are likely to be individuals for whom the migration experience has been relatively positive or fulfilling. Migrants who experienced persistent mismatches or unmet expectations may have returned to their country of origin or exited the formal labour force, and are thus underrepresented in our sample. This positive selection could partly explain the disappearance of the negative relationship between overqualification and job satisfaction among older migrants. Previous studies have indeed found evidence that satisfactory employment is related to

lower re-migration intentions (for Germany, see Waldorf 1995; for Australia, see Sapeha 2017). Accordingly, more research is needed to shed light on this pattern, especially in ageing contexts (e.g., Southern Europe), where migrants' contribution to the labour market is crucial. However, some Italian studies that have explored the role of employment status on return intentions observed that job stability is among the most important factors that reduce these intentions (e.g., Barbiano di Belgiojoso and Ortensi 2013; Paparusso and Ambrosetti 2017).

As for older migrants who arrived before the age of 18, caution is warranted when interpreting the results, as the estimates lack statistical precision. Migration to Italy is a relatively recent phenomenon compared to other European countries with longer immigration histories, and the number of individuals in this specific subgroup remains small. While these findings support our hypotheses, they also underscore the importance of considering life-course, expectation-related, and compositional factors when interpreting job satisfaction among older migrants. Future research would benefit from longitudinal designs capable of capturing selection mechanisms and evolving employment expectations across migrant cohorts.

This study has some, mainly data-driven, limitations. First, our reliance on cross-sectional data meant that we were unable to assess how overqualification and job satisfaction evolve over time. Second, the IT-LFS did not consistently record migrants' reasons for moving during the years under analysis. Since prior labour-market experience, human capital, and motivation to work in the host country can vary considerably by migration motive, the absence of this information restricted our ability to explore heterogeneity within the migrant population. Similarly, limited sample sizes prevented us from examining differences among migrants from distinct countries of origin, or testing whether the identified overqualification/job satisfaction paradox was robust across cultural backgrounds. Additionally, by design, the IT-LFS captures only regular migrants, excluding both undocumented workers and those not formally settled at the time of interview. Accordingly, our sample likely represents a relatively well-integrated subset of Italy's migrant labour force. Finally, as noted in the

'Measuring overqualification' section, our objective operationalisation of overqualification – based on international classifications of education and occupation rather than task-based or expert assessments – carries inherent limitations. In particular, occupations requiring different levels of qualification may be grouped under the same category, which can affect the accuracy of mismatch estimates. Although this issue should not compromise the internal validity of our findings, it does warrant caution in generalising results to all migrant groups in Italy.

Despite these limitations, this study offers novel insights on migrants' employment outcomes by focusing on the Italian context – one of the most rapidly ageing societies with a highly segmented labour market, where migrants play an increasingly vital role. We encourage future research to build on these findings, particularly through longitudinal data, to further explore how early and late integration trajectories shape migrants' employment outcomes and well-being over time in different institutional contexts, bearing in mind the salient role played by age at arrival as a moderator. In the paradigm of fast versus slow demography (Billari 2022), migration is the only short-term (and as such, provisional) solution to the challenges proposed by population ageing, and understanding migrants' labour market dynamics in depth is now, more than ever, crucial for capturing the sustainability, quality, and long-term viability of demographic responses to ageing.

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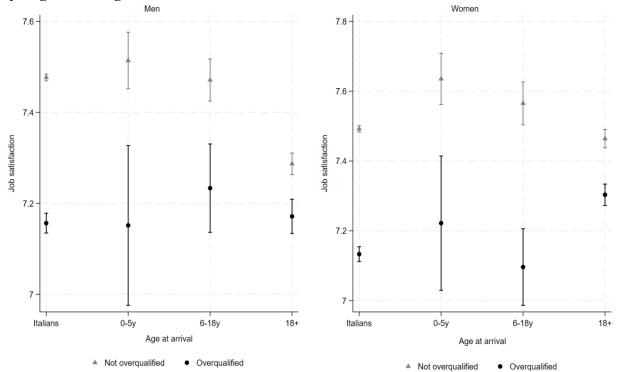
SUPPLEMENTAL APPENDIX

Table A1. Descriptive statistics of the sample by migrant background and sex

		ives	Migrants	
	W	M	W	M
Age group				
25-34	16.5	15.9	18.1	23.0
35-44	25.7	24.7	30.7	35.9
45-54	34.3	33.0	31.7	29.1
55-64	21.2	22.4	17.0	10.9
65+	2.3	4.0	2.5	1.1
Migrant background				
Italians	100	100	-	-
0-5 years	-	-	7.3	9.0
6-17 years	-	-	12.0	16.0
18+	-	-	80.6	75.0
Marital status				
Single	28.47	31.65	23.3	22.5
Married	56.56	60.1	45.1	65.9
Divorced/Widowed	14.97	8.25	31.6	11.6
Household composition				
Single-person	11.84	12.97	27.2	18.1
Couple without children	17.46	15.99	14.6	12.3
Couple with children	54.91	62.25	40.2	59.4
Single-parent family	7.46	5.69	7.0	2.7
Composite household	8.32	3.1	11.0	7.6
Education				
No/Primary	3.0	4.4	5.3	9.9
Lowe-/Upper-secondary	79.5	87.0	79.6	83.3
Tertiary	17.5	8.6	15.1	6.8
Isco08 category				
Technicians and associates professionals	22.8	24.4	7.5	7.0
Clerical support workers	26.8	10.3	6.4	3.3
Service and sales workers	28.7	14.8	43.6	11.8
Skilled agricultural, forestry and fishery workers	2.4	5.0	1.0	3.6
Craft and related trades workers	3.9	23.9	4.2	32.8
Plant and machine operators, and assemblers	3.6	11.8	4.0	14.1
Elementary occupation	11.8	9.9	33.5	27.4
Гуре of contract				
Permanent	72.3	64.0	77.0	67.5
Temporary	10.6	8.0	14.4	16.7
Self-employed	13.1	25.9	6.2	14.2
Other	4.1	2.1	2.5	1.6
Working time				
Full-time	66.2	92.6	59.1	88.8
Part-time	33.8	7.4	40.9	11.2
Ateco				
Agriculture	4.0	6.4	3.0	9.0
Industry	14.5	27.9	10.2	28.9
Construction	1.3	10.9	0.5	17.6
Services and Commerce	80.3	54.9	86.4	44.5
Outcome				
Overqualification				
Not-overqualified	81.7	88.1	60.8	73.7
Overqualified	18.3	11.9	39.2	26.3
Job satisfaction				
Mean (SD)	7.5	7.5	7.5	7.4
Total obs	139,095	193,734	27,905	30,31

Note: Percentage should be read in column.

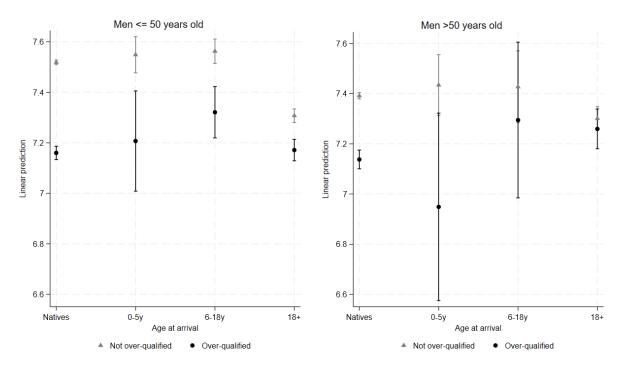
Figure A1. Adjusted predicted job satisfaction scores for overqualified vs. not overqualified by migrant background for men and women



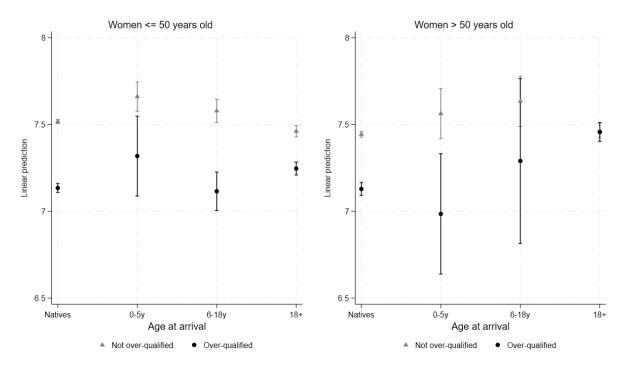
Notes: The models control for age group, marital status, residence area, household type, type of contract, working time, ATECO code. 83.5% CI.

Figure A2. Adjusted predicted job satisfaction scores for overqualified vs. not overqualified by migration background and age group

Men



Women



Notes: The models control for marital status, residence area, household type, type of contract, working time, ATECO code. 83.5% CI.