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ENTREPRENEURSHIP AS A MECHANISM FOR SOCIOECONOMIC MOBILITY: EVIDENCE FROM THE EUROPEAN SOCIAL SURVEY

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Abstract

Entrepreneurship is often recognized as a mechanism of socioeconomic mobility, as the autonomy and flexibility associated with entrepreneurial activity may enable individuals to overcome inherited social barriers and achieve more favourable social positions. However, the literature also emphasizes that entrepreneurship is a heterogeneous phenomenon, driven both by subsistence needs and by the pursuit of economic opportunities, leading to distinct outcomes in terms of economic development and individual mobility trajectories.

Despite the growing relevance of this topic, empirical evidence remains limited, particularly in cross-national contexts, with most studies focusing on single-country analyses or relying on subjective measures of entrepreneurial success.

Within this framework, this study examines for whom and under which social and institutional conditions entrepreneurship functions as a mechanism of intergenerational mobility. Using data from the European Social Survey Round 11, the analysis investigates mobility dynamics across 30 European countries through a comparative quantitative approach.

The results indicate that entrepreneurship is positively associated with upward intergenerational mobility. However, this relationship is highly heterogeneous, as mobility advantages are strongly concentrated among higher-autonomy forms of entrepreneurship. Resource endowments, social networks, and cognitive dispositions emerge as important predictors of mobility outcomes, although they explain only part of the differences across entrepreneurial groups. Social origin exerts a significant moderating effect, suggesting that the relative mobility advantages of high-autonomy entrepreneurship are stronger among individuals from less advantaged backgrounds. By contrast, institutional context shows limited moderating influence, with welfare-regime differences exerting only a weak and inconsistent impact on entrepreneurial mobility outcomes.

From a policy perspective, the findings highlight that promoting entrepreneurship in itself is insufficient to enhance social mobility. Instead, policies should prioritize the development of high-quality, higher-autonomy entrepreneurial activities, as well as investments in individual capabilities and opportunities that enable individuals, particularly those from disadvantaged backgrounds, to engage in forms of entrepreneurship with greater potential for upward mobility.

Keywords: Entrepreneurship; Intergenerational mobility; Entrepreneurial heterogeneity; Social origin; Welfare regimes

Resumo

O empreendedorismo é frequentemente reconhecido como um mecanismo de mobilidade socioeconômica, uma vez que a autonomia e flexibilidade associadas à atividade empreendedora podem permitir que os indivíduos superem barreiras sociais herdadas e alcancem posições sociais mais favoráveis. No entanto, a literatura também salienta o empreendedorismo como um fenômeno heterogêneo, impulsionado tanto por necessidades de subsistência, como pela procura de oportunidades econômicas, o que conduz a resultados distintos em termos de desenvolvimento econômico e trajetórias de mobilidade individual.

Apesar da crescente relevância deste tema, a evidência empírica permanece limitada, particularmente em contextos transnacionais, com a maioria dos estudos a centrar-se em análises de um único país ou a basear-se em medidas subjetivas do sucesso empreendedor.

Neste contexto, o presente estudo examina para quem e em que condições sociais e institucionais o empreendedorismo funciona como mecanismo de mobilidade intergeracional. Utilizando dados da Ronda 11 do European Social Survey, a análise investiga as dinâmicas de mobilidade de 30 países europeus, através de uma abordagem quantitativa comparativa.

Os resultados obtidos indicam que o empreendedorismo está positivamente associado à mobilidade intergeracional ascendente. Contudo, esta relação é substancialmente heterógena, uma vez que as vantagens em termos de mobilidade se concentram nas formas de empreendedorismo de maior autonomia.

A dotação de recursos, as redes sociais e as disposições cognitivas emergem como importantes preditores dos resultados de mobilidade, embora expliquem apenas parte das diferenças entre os grupos empreendedores. A classe social de origem exerce um efeito moderador significativo, sugerindo que as vantagens relativas de mobilidade do empreendedorismo de elevada autonomia são mais fortes entre indivíduos provenientes de contextos menos favorecidos. Em contrapartida, o contexto institucional revela uma influência moderadora limitada, com as diferenças entre regimes sociais a exercerem um impacto reduzido e inconsistente nos resultados de mobilidade do empreendedorismo.

Do ponto de vista das políticas públicas, os resultados destacam que a promoção do empreendedorismo, por si só, é insuficiente para aumentar a mobilidade social. Em vez disso, as políticas devem dar prioridade ao desenvolvimento de atividades empreendedoras de maior qualidade e maior autonomia, bem como a investimentos em capacidades individuais e oportunidades que permitam aos indivíduos, particularmente aqueles provenientes de

contextos desfavorecidos, envolverem-se em formas de empreendedorismo com maior potencial de mobilidade de ascendente.

Palavras-chave: Empreendedorismo; Mobilidade Intergeracional; Heterogeneidade Empreendedora; Origem Social; Regimes de Bem-estar

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1. Introduction

Entrepreneurship arises from the intersection of opportunities and individuals capable of identifying and exploiting them (Venkataraman, 1997). This foundational perspective emphasizes the inherently interactional and processual nature of entrepreneurship, which depends not only on economic disequilibria that generate opportunities but also on individuals' beliefs, cognitive frameworks, and heterogeneous perceptions (Shane & Venkataraman, 2000). As a result, entrepreneurship is increasingly conceptualized as a socially embedded and context-dependent process, rather than a purely individual or market-driven phenomenon. Building on this conceptual foundation, a growing body of research has sought to explain both the conditions under which opportunities emerge and why only some individuals are able and willing to recognize and act upon them (Arenius & De Clercq, 2005; Filser et al., 2023; Schlichte & Junge, 2024).

Within this framework, scholars distinguish two primary drivers of entrepreneurial entry: opportunity and necessity. Opportunity entrepreneurship reflects voluntary engagement in entrepreneurial activity based on favourable assessments of market prospects. In contrast, necessity entrepreneurship arises when individuals engage in entrepreneurship due to the lack of alternative employment options (Acs, 2006; Block et al., 2015). This distinction is analytically crucial, as it captures heterogeneity in both motivations and expected returns to entrepreneurial activity, particularly in terms of income generation, job quality, and long-term career trajectories. While these forms of entrepreneurship are often associated with transitions into self-employment, the overlap between entrepreneurship and self-employment is neither automatic nor universal, as the nature and quality of self-employment arrangements vary across contexts (Bögenhold, 2004, 2019; Levine & Rubinstein, 2017). Accordingly, conceptual clarity between these terms is essential for empirical analysis.

Recent research emphasizes that entrepreneurship is embedded within social structures that influence both opportunity recognition and venture performance, as well as prospects for socioeconomic mobility (Arenius & De Clercq, 2005; Eesley & Wang, 2017). Social origins—including parental occupation, education, early-life socioeconomic conditions, and inherited networks—play a central role in shaping entrepreneurial entry and subsequent outcomes (e.g., Aldrich and Cliff (2003); Bourdieu (1986); Hout and Rosen (2000)). These factors can be interpreted as forms of economic, human, and social capital that condition individuals' access to entrepreneurial opportunities. Individuals from advantaged backgrounds tend to have greater access to startup capital, business-relevant skills, and social support, which increases their likelihood of engaging in opportunity-driven entrepreneurship and achieving

upward mobility (Brändle et al., 2025; van Stel et al., 2023). In contrast, individuals from disadvantaged backgrounds are more likely to pursue necessity-based or low-quality entrepreneurship, characterized by low earnings and income volatility, which may lead to horizontal or downward mobility trajectories (Lindquist & Vladasel, 2025). This stratification suggests that entrepreneurship may reproduce, rather than mitigate, existing social inequalities.

Further, recent studies underscore the importance of distinguishing between high-quality and low-quality forms of self-employment. High-quality, opportunity-driven ventures tend to generate economic returns and occupational upgrading, whereas low-quality, necessity-driven ventures are associated with higher precarity and limited or even negative mobility outcomes (Rider et al., 2023; van Stel et al., 2023). This qualitative differentiation reinforces the need to move beyond binary measures of entrepreneurial entry and instead consider the heterogeneity of entrepreneurial experiences and outcomes.

Entrepreneurship's capacity to foster mobility is also institutionally contingent. Welfare regimes, labour market regulations, and entrepreneurial ecosystems influence both the likelihood of entrepreneurial entry and the returns associated with entrepreneurial activity (Sendra-Pons et al., 2022; Stam & Van de Ven, 2021; Urbano et al., 2020). Comparative research shows that mobility outcomes vary across European welfare systems, including liberal, social-democratic, corporatist, and Southern/Mediterranean welfare regimes (Causa et al., 2026; Dilli, 2021; Esping-Andersen, 1990). In more generous and coordinated welfare states, income risks associated with entrepreneurship may be partially buffered, reducing exposure to downside risks and potentially affecting the relative balance between necessity- and opportunity-driven entrepreneurship (Kilström & Roth, 2024).

Taken together, existing evidence suggests that entrepreneurship is not inherently an engine of upward mobility (e.g., Hamilton (2000); Levine and Rubinstein (2017); van Stel et al. (2023)). Rather, its effects are conditional and heterogeneous, depending on social origin, the type of entrepreneurial activity pursued, and the institutional environment in which it unfolds. Upward mobility is more likely among individuals engaged in opportunity-oriented and higher-autonomy entrepreneurial activities, whereas necessity-driven entrepreneurs and individuals from disadvantaged backgrounds may experience limited gains, status-preserving mobility, or even downward mobility (Brändle et al., 2025; Rider et al., 2023). These findings underscore the importance of jointly considering entrepreneurial heterogeneity and structural conditions when assessing the relationship between entrepreneurship and socioeconomic mobility.

Despite growing interest in the topic, empirical research on entrepreneurship and social mobility in Europe remains limited. Much of the existing evidence relies on single-country studies, such as those conducted in China (e.g., Li et al. (2021)) or the United States (e.g., Levine and Rubinstein (2017); Quadrini (1999)), limiting cross-national generalizability. Moreover, several studies rely on subjective indicators of entrepreneurial success, rather than objective measures of socioeconomic positioning, which obscures the extent to which entrepreneurship shapes individuals' long-term mobility trajectories (e.g., Benz and Frey (2004); Binder and Coad (2013); Binder (2024)). This creates an important empirical gap regarding the use of harmonized, cross-national, and objective measures of intergenerational mobility.

To address this gap, the present study integrates conceptual insights on entrepreneurial heterogeneity, social origin, and institutional context with objective measures of intergenerational mobility, developing a comprehensive and analytically coherent framework for understanding the conditions under which entrepreneurship functions as a mechanism of socioeconomic advancement in contemporary Europe.

Grounded in this framework, the study investigates the following research questions:

RQ1. To what extent do entrepreneurs experience different intergenerational mobility outcomes compared with non-entrepreneurs in Europe?

RQ2. To what extent does entrepreneurial heterogeneity (distinguishing opportunity-oriented and necessity-oriented forms) shape intergenerational mobility trajectories?

RQ3. How do individual-level mechanisms, including resource endowments, network embeddedness, and cognitive dispositions, contribute to explaining the relationship between entrepreneurial motivations and mobility outcomes?

RQ4. How do social origin and institutional context (welfare regimes) condition the relationship between entrepreneurship and intergenerational mobility?

For addressing these questions, the study uses data from the European Social Survey (ESS), which provides harmonized cross-national information on respondents' occupation, employment status, income, and education, as well as parental backgrounds, enabling the construction of objective measures of intergenerational mobility across European countries. The ESS's comparative design allows for systematic examination of institutional variation across welfare regimes, strengthening the study's external validity and relevance.

This study contributes to entrepreneurship and social stratification research by conceptualizing entrepreneurship as a differentiated and institutionally embedded channel of intergenerational mobility, rather than as a uniformly enabling career path. By integrating entrepreneurial motivations, class-based resource endowments, and institutional contexts into a unified analytical framework, it explains when entrepreneurship facilitates mobility and when it instead reproduces or amplifies inherited inequalities. In doing so, it bridges micro-level entrepreneurial agency with macro-level structures, advancing a stratified understanding of entrepreneurial outcomes in contemporary European societies.

The remainder of the study is structured as follows. Section 2 reviews the literature on entrepreneurship, social mobility, and social origin, and develops the hypotheses. Section 3 presents the data and empirical strategy. Section 4 reports the descriptive and econometric results. Section 5 concludes by summarizing the main findings and discussing their implications.

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2. Literature Review

2.1. Conceptual foundations: Entrepreneurship and social mobility

2.1.1. Entrepreneurship

Entrepreneurship is widely acknowledged as a vital field of study. Nonetheless, scholars frequently emphasize the absence of clearly defined boundaries and the lack of a consensual conceptual definition (Venkataraman, 1997). This conceptual ambiguity reflects the interdisciplinary nature of entrepreneurship research, which spans economics, sociology, and management studies. In his seminal contribution, *“The Distinctive Domain of Entrepreneurship”*, Venkataraman (1997) reframed the field around several core premises shared across the literature: first, that market inefficiencies give rise to entrepreneurial opportunities; and second, that the inherently heterogeneous nature of human action can disrupt existing equilibria while generating new ones. Within this conceptualization, two central domains emerge: understanding the conditions under which opportunities arise and examining the nexus between such opportunities and the individuals capable of identifying and exploiting them (Venkataraman, 1997). Building on this foundation, Shane and Venkataraman (2000) proposed an influential integrative framework aimed at systematizing the field and addressing previously unexplained entrepreneurial phenomena.

A key insight from this framework is that the mere existence of entrepreneurial opportunities is not sufficient to generate entrepreneurial activity (Shane & Venkataraman, 2000; Venkataraman, 1997). Individuals must first recognize such opportunities and then choose to exploit them (processes that are jointly shaped by cognitive capabilities, prior knowledge, and social context). While some authors underline the role of prior knowledge and cognitive properties in shaping opportunity recognition (Shane & Venkataraman, 2000), others highlight the importance of networks in providing access to novel information and resources (Arenius & De Clercq, 2005). Together, these perspectives emphasize that entrepreneurship is a dynamic and multifaceted process, shaped by the interaction between individual agency and broader structural conditions. Furthermore, recent research shows that the opportunity recognition process is determined by a diverse set of factors, being shaped by three main dimensions (Filser et al., 2023; Schlichte & Junge, 2024), personal, organizational, and environmental, each of which is crucial for understanding the socioeconomic determinants of entrepreneurial behaviour.

Despite significant conceptual advances, the notion of entrepreneurship remains subject to dual interpretations, depending on the analytical lens adopted (Bögenhold, 2004; Sternberg

& Wennekers, 2005). This duality reflects a broader epistemological distinction between “who entrepreneurs are” and “what entrepreneurs do”. Sternberg and Wennekers (2005) distinguish between an occupational perspective, where entrepreneurship refers to individuals managing a business on their own account and at their own risk, and a behavioural perspective, which regards entrepreneurship as the active pursuit and exploitation of economic opportunities. Importantly, the latter perspective does not require the creation of new organizations (Shane & Venkataraman, 2000). This distinction is particularly relevant for empirical research relying on large survey datasets, such as the European Social Survey (ESS), where employment status captures occupational entrepreneurship, while attitudinal and behavioural variables allow researchers to approximate, though not fully observe, the behavioural dimension.

When approached from an occupational perspective, entrepreneurship is commonly proxied by self-employment (Bögenhold, 2004), and self-employment data are frequently used to investigate entrepreneurial dynamics (Acs, 2006). However, the concept of self-employment is itself highly heterogeneous (Bögenhold, 2004, 2019). Self-employed individuals span a wide spectrum, from low-income subsistence workers to innovative, high-growth entrepreneurs (Bögenhold, 2019), and only a minority can be considered “entrepreneurs in the standard sense” (Margolis, 2014, p. 14), exhibiting risk-taking, innovative, and profit-seeking behaviour. This heterogeneity introduces important measurement challenges when using self-employment as a proxy for entrepreneurship. It is especially pronounced in European labour markets, where cross-country differences in industry composition, legal frameworks, and levels of employment protection emerge as major determinants of self-employment patterns (Giménez-Nadal et al., 2022; Saridakis et al., 2019), thereby influencing both the quality of entrepreneurial activity and its socioeconomic returns.

Such heterogeneity reflects the diverse motivations that lead individuals to enter self-employment, whether voluntarily or involuntarily (Bögenhold, 2004; Gindling & Newhouse, 2014; Margolis, 2014). Bögenhold (2004) highlights this duality by contrasting individuals who choose self-employment as a form of self-realization with those who are pushed into it due to limited alternatives in the wage labour market. Empirical evidence shows that individuals facing precarious employment conditions, such as low wages or unstable contracts, are more likely to transition into self-employment (Evans & Leighton, 1989). Institutional factors, including labour market regulations, business environment conditions, and the robustness of social protection systems, also shape movements from salaried employment to self-employment (Margolis, 2014). In the European context, where welfare

states differ significantly, from social-democratic to liberal regimes, recent studies show that institutional heterogeneity critically conditions not only entry into self-employment but also its sustainability and quality, influencing the type and aspirations of entrepreneurial engagement (Dilli, 2021).

These distinctions underpin the differentiation between opportunity and necessity entrepreneurship. Opportunity entrepreneurship reflects voluntary engagement in entrepreneurial activity driven by positive perceptions of market opportunities, whereas necessity entrepreneurship arises when individuals pursue self-employment due to the absence of better employment alternatives (Acs, 2006). This typology gained prominence as research increasingly examined the relationship between entrepreneurship and economic growth, revealing that different types of entrepreneurship have distinct impacts on development outcomes (Acs, 2006; Ho et al., 2005). Consequently, the ratio of opportunity to necessity entrepreneurship is now regarded as a meaningful indicator of a country's level of economic development (Acs, 2006; Urbano et al., 2020). Moreover, this distinction has significant implications for individuals' long-term economic trajectories, as opportunity-driven entrepreneurial activities tend to be associated with higher earnings potential (Levine & Rubinstein, 2017; van Stel et al., 2023) and upward mobility (Lindquist & Vladasel, 2025), whereas necessity entrepreneurship is often linked to lower returns (van Stel et al., 2023) and economic vulnerability (Williams & Round, 2009). Recent research further indicates that heterogeneity also exists within these categories, as business performance may vary even among opportunity and necessity entrepreneurs (Giacomin et al., 2023; Naiki & Ogane, 2024).

Examined jointly, these conceptual advances highlight the importance of distinguishing not only between entrepreneurship and self-employment, but also between different types of entrepreneurial engagement, particularly when assessing their socioeconomic implications in diverse European contexts. This distinction is central for avoiding aggregation bias in empirical analyses of entrepreneurship and mobility.

Understanding these conceptual and occupational dimensions of entrepreneurship is essential for examining its potential role as a mechanism of socioeconomic mobility (Rider et al., 2023). Different forms of entrepreneurship offer distinct opportunities for income generation, asset accumulation, and skill development, and therefore have unequal implications for individuals seeking upward mobility (Lindquist & Vladasel, 2025; Naiki & Ogane, 2024). In the European context, characterized by heterogeneous welfare regimes, labour market rigidities, and institutional constraints, the capacity of entrepreneurial activity

to foster socioeconomic advancement varies considerably across countries and social groups (Causa et al., 2026; Dilli, 2021; Urbano et al., 2020). Accordingly, any analysis of entrepreneurship as a mobility channel must explicitly account for both motivational heterogeneity and structural conditioning factors.

2.1.2. Social mobility

Social class refers to the resources a person possesses within society, considering not only objective attributes an individual holds, but also their perception of their relative position in comparison to others (Côté, 2011). This dual conceptualization reflects both material conditions and subjective status evaluations. It is identified as a multidimensional construct (Côté, 2024) that can be measured using both objective and subjective indicators. The former includes quantifiable characteristics such as income, educational attainment, and occupational prestige, while the latter captures individuals' perceptions of their relative social class, drawing on, but not limited to, objective socioeconomic conditions (Côté, 2011; Côté, 2024; Zhou, 2021).

In addition to current social position, research also considers social class origin as a relevant concept, referring to individuals' social class background (Martin & Côté, 2019). This distinction is fundamental for intergenerational analyses, as it allows researchers to disentangle the effects of inherited advantage from those of individual achievement, a central concern in research on inequality and social stratification.

The consideration of both objective and subjective dimensions is crucial for developing more precise and comprehensive theories of social class and social class origin, as well as the dynamics between them (Côté, 2024). Recent work highlights that these dimensions may interact in complex ways, shaping individuals' cultural practices, behaviours, and economic trajectories (Kraus et al., 2011; Zhou, 2021).

Expanding on these foundations, the notion of social class inherently requires the adoption of a dynamic perspective (Martin & Côté, 2019), since individuals may shift in their social class position over time (Phillips et al., 2020) through processes of social mobility, which can be analysed within an individual's lifetime or across generations. This dynamic approach underscores that social class is not fixed, but instead evolves as individuals navigate changing structural, institutional, and labour market conditions.

Martin and Côté (2019, p. 4) describe class transitioners as “those who have moved upward or downward across the social class spectrum.” These experiences, in both directions, shape the acquisition of class-context knowledge (Côté, 2024) and influence the accumulation of specific cultural tools (Martin & Côté, 2019). Such tools include communication styles, behavioural norms, and forms of cultural capital that facilitate or hinder access to higher-status environments (Bourdieu, 1986). This perspective emphasizes that mobility is not only economic but also cultural and symbolic.

At the intragenerational level, mobility concerns movements between labour market positions (Jarvis & Song, 2017). It is usually associated with job changes, which depend not only on individuals’ characteristics but also on structural influences (Kalleberg & Mouw, 2018). However, this type of mobility is not inherently positive, as frequent transitions may reflect labour market environments characterized by instability or precarious employment conditions (Kalleberg & Mouw, 2018). In this sense, intragenerational mobility can signal either career advancement or intensified labour market insecurity (Barbieri, 2009; Kalleberg, 2018).

Broadening the scope of analysis, intergenerational mobility measures the extent to which individuals’ socioeconomic outcomes depend on their parents’ social status (Chetty et al., 2014). This area is of central interest in research on inequality (Erikson & Goldthorpe, 2002), as its measures reveal the extent to which social systems are fair, open, and meritocratic (Breen & Jonsson, 2005; Jarvis & Song, 2017). Higher intergenerational mobility is typically interpreted as evidence of meritocratic processes, whereas lower mobility suggests the persistence of structural barriers (Mazumder & Acosta, 2015; OCDE, 2018).

Moreover, while intragenerational mobility concerns movements concentrated within an individual’s lifetime, intergenerational mobility expands the scope of analysis by allowing the assessment of the degree to which socioeconomic advantages and disadvantages are transmitted across generations (Chetty et al., 2014; Erikson & Goldthorpe, 2002). In this context, occupational mobility across generations is widely used as a reliable operationalization of intergenerational mobility (Bukodi et al., 2020; Jarvis & Song, 2017; Mazumder & Acosta, 2015). This operational choice is particularly suitable for survey-based datasets such as the ESS, which provide harmonized occupational information across countries.

2.2. Entrepreneurship and baseline mobility outcomes

Entrepreneurship is often portrayed as a potential pathway for social mobility (Brändle et al., 2025; Lindquist & Vladasel, 2025), partly because individuals confront different opportunities to alter their social status through entrepreneurial activity compared with traditional organizational employment (Rider et al., 2023; Sorensen & Sharkey, 2014). Unlike salaried employment, entrepreneurship is frequently assumed to allow individuals to bypass formal career ladders, credential requirements, and organizational hierarchies, thereby offering a more flexible and less institutionally constrained avenue for status improvement (Hamilton, 2000). This perceived flexibility positions entrepreneurship as a potentially disruptive mechanism within stratified labour markets.

However, despite the popularity of this narrative, scholars argue that empirical evidence remains limited and inconsistent (Brändle & Kuckertz, 2023; Lindquist & Vladasel, 2025). Recent reviews of the literature highlight mixed findings, suggesting that entrepreneurship does not uniformly function as a mechanism for upward mobility or inequality reduction. Instead, social class origin appears to play a central role in shaping the structural advantages and disadvantages entrepreneurs face throughout the entrepreneurial process (Brändle et al., 2025; Zhang, 2024), with individuals from lower social classes tending to face greater constraints (Ge et al., 2022). These inconsistencies point to the need for a conditional and stratified understanding of entrepreneurship.

Considered jointly, these contributions suggest that entrepreneurship constitutes a distinct labour market position with implications for intergenerational mobility that differ from those associated with salaried employment. While entrepreneurship may enable accelerated status attainment through wealth accumulation (Quadrini, 1999, 2000) and occupational autonomy (Benz & Frey, 2004), it also exposes individuals to heightened income volatility and status risks (Binder, 2024), particularly in institutional contexts with limited protection and less public risk-sharing (Kilström & Roth, 2024). As a result, entrepreneurial careers are expected to display greater dispersion in mobility outcomes compared to standard employment trajectories (Levine & Rubinstein, 2017). This duality implies that entrepreneurship can simultaneously generate both upward and downward mobility outcomes.

Accordingly, rather than assuming a unidirectional effect, this study conceptualizes entrepreneurship as increasing the variance of mobility trajectories.

This motivates the following baseline hypotheses:

H1: Entrepreneurs exhibit different intergenerational mobility outcomes than non-entrepreneurs.

H1a: Entrepreneurs are more likely than non-entrepreneurs to experience upward intergenerational mobility.

H1b: Entrepreneurs are also more exposed to downward mobility risks than non-entrepreneurs.

2.3. Entrepreneurial motivations and mobility outcomes

Just as different drivers of entrepreneurial activity produce distinct effects on economic growth (Acs, 2006) and on entrepreneurs' earnings (van Stel et al., 2023), there are also inherently different pathways through which entrepreneurial activity may influence an individual's social status (Brändle et al., 2025; Rider et al., 2023), leading to heterogeneous mobility outcomes. This heterogeneity underscores the importance of differentiating entrepreneurial entry motivations as a key analytical dimension.

Entrepreneurial activity is therefore not a uniform experience but encompasses a variety of trajectories whose social consequences depend critically on the motivations underlying entrepreneurial entry. It is thus important to consider both the possible trajectories of entrepreneurial activity and their links with entrepreneurial motivations.

Building on this perspective, Rider et al. (2023) conceptualize three possible mobility outcomes associated with entrepreneurship: upward, downward, and horizontal mobility, each represented respectively by the metaphors of status production, consumption, and preservation. This typology provides a structured framework for mapping entrepreneurial activity onto class mobility dynamics.

Upward status mobility occurs when founding a new venture enables an individual to attain a higher social standing than that associated with their prior occupational position or class origin (Rider et al., 2023). This form of mobility is most consistent with the classical Schumpeterian view of entrepreneurship as a driver of economic advancement. In contrast, entrepreneurship may also lead to downward mobility or serve primarily as a status-preservation mechanism, particularly under constrained entry conditions.

Downward and horizontal trajectories are commonly associated with push factors, conditions that compel individuals to enter entrepreneurship due to constrained alternatives in the wage labour market, and are therefore closely linked to necessity-driven motivations

(Dencker et al., 2021). These outcomes highlight that entrepreneurial entry may reflect labour market exclusion rather than opportunity exploitation.

A key analytical distinction in this literature is between opportunity-driven and necessity-driven entrepreneurship (Reynolds et al., 2002). Opportunity-driven entrepreneurs typically enter self-employment to exploit perceived market opportunities, whereas necessity-driven entrepreneurs do so due to the absence of better employment options (Acs, 2006; Block et al., 2015). Empirical evidence consistently shows that opportunity-driven entrepreneurs tend to exhibit higher performance, greater income growth, and more favourable mobility outcomes than necessity-driven entrepreneurs (Levine & Rubinstein, 2017; Lindquist & Vladasel, 2025; Naiki & Ogane, 2024; van Stel et al., 2023). This suggests that entrepreneurial motivation acts as a key sorting mechanism into heterogeneous mobility trajectories.

At the same time, entrepreneurial motivations do not operate in isolation. Psychological and institutional factors moderate the relationship between motivation and outcomes. For instance, individual well-being, autonomy, and work-life balance considerations influence both entry motivations and post-entry trajectories (Benz & Frey, 2004; Gorgievski & Stephan, 2016), while national institutional contexts, such as welfare regimes, labour market regulations, and access to social insurance, shape the risks and returns associated with different entrepreneurial pathways (Dilli, 2021; Kilström & Roth, 2024; Sendra-Pons et al., 2022). Thus, similar motivations may yield divergent outcomes depending on individual resources and contextual constraints.

Summing up, the literature indicates that entrepreneurial motivations capture meaningful differences in entry conditions, resource endowments, and strategic orientations, which translate into distinct intergenerational mobility trajectories.

This motivates the following hypotheses:

H2: Entrepreneurial motivations are systematically associated with intergenerational mobility outcomes.

H2a: Opportunity-driven entrepreneurs are more likely to experience upward intergenerational mobility than necessity-driven entrepreneurs.

H2b: Necessity-driven entrepreneurs are more likely to experience horizontal or downward mobility than opportunity-driven entrepreneurs.

2.4. Mechanisms linking entrepreneurship and mobility

Existing research on the mechanisms linking entrepreneurship and mobility suggests that mobility outcomes emerge not only from entrepreneurial activity itself but also from the human, social, cultural, and financial capital entrepreneurs possess, which are unequally distributed and largely shaped by social class origin and early-life conditions (Brändle & Kuckertz, 2023; Brändle et al., 2025; Ge et al., 2022; Lindquist & Vladasel, 2025; Rider et al., 2023). This perspective shifts the focus from entrepreneurship as an isolated activity to a structurally embedded process, in which pre-existing inequalities condition both entry into entrepreneurship and its outcomes. Within this broad set of influences, three interrelated mechanisms are frequently identified as central to explaining mobility dynamics within entrepreneurship: (1) access to resources and capital endowment; (2) embeddedness in entrepreneurial and labour market networks; and (3) habitus formation and cognitive dispositions. Although analytically distinct, these mechanisms interact in shaping how entrepreneurial activity translates into intergenerational mobility trajectories.

2.4.1. Access to resources and capital endowment

Resource mobilization constitutes a critical dimension of entrepreneurial activity (Clough et al., 2019). However, since resources accumulate unevenly across the social class structure, entrepreneurs enter the market from markedly different starting points (Brändle et al., 2025). These asymmetries in initial conditions generate unequal opportunity structures and risk exposure across individuals. Individuals from lower social classes, typically possessing less human, social, and financial capital, face initial resource constraints that negatively affect venture performance (Clough et al., 2019; Ge et al., 2022) and limit their potential for upward socioeconomic mobility (Quadrini, 2000). In particular, limited access to startup capital and financial buffers increases exposure to risk and constrains strategic decision-making during early stages of venture development (Praag et al., 2005).

Constraints in financial capital may also shape the type of entrepreneurial activity pursued (Brändle et al., 2025), steering individuals toward low-entry-barrier, low-growth sectors with limited earnings potential. As a result, resource scarcity not only affects the probability of success but also channels individuals into structurally constrained forms of entrepreneurship. In this sense, unequal access to resources operates as a mechanism that may reinforce processes of social reproduction rather than enable social mobility. Conversely, strong capital endowments can accelerate opportunity recognition, enhance investment capacity, and

facilitate favourable market positioning, thereby increasing the likelihood of business growth and upward mobility (Evans & Jovanovic, 1989). Thus, capital endowments operate as a key transmission mechanism through which social origin influences entrepreneurial outcomes.

The literature thus converges on the idea that access to financial, human, and social capital plays a central role in translating entrepreneurial engagement into mobility outcomes. Entrepreneurial motivations are closely intertwined with these capital endowments, as opportunity-driven entrepreneurship is more likely to be pursued by individuals with greater initial resources, whereas necessity-driven entrepreneurship often reflects constrained access to capital. (Naiki & Ogane, 2024; van der Zwan et al., 2016). Accordingly, resource endowments can be understood as a mediating mechanism linking motivations, social origin, and observed mobility trajectories.

This motivates the following hypothesis:

H3: The relationship between entrepreneurial motivations and mobility outcomes is mediated by access to resources and capital endowment.

H3a: Opportunity-driven entrepreneurs have greater access to financial and human capital, which increases their likelihood of upward mobility.

2.4.2. Embeddedness in entrepreneurial networks

Entrepreneurs from lower-class origins typically possess smaller, less diverse, and less influential networks, reducing their access to strategic information, mentoring, and market opportunities (Ge et al., 2022). These structural network disadvantages limit both opportunity recognition and resource mobilization. However, Ge et al. (2022) demonstrate that strategic investments in networking and learning activities can partially compensate for these disadvantages, particularly when entrepreneurs actively seek connections beyond their immediate social environment. Brändle et al. (2025) similarly emphasize that individuals' social networks shape access to resources and opportunities, influencing how ventures are conceived, launched, and scaled. This suggests that networks are not static endowments but can, to some extent, be strategically developed.

The networks in which individuals are embedded through prior labour market experiences may also influence their transition into entrepreneurship and subsequent mobility outcomes (Rider et al., 2023). Labor market frictions, mismatches between individual capabilities and employer recognition, and contexts of blocked upward mobility may prompt individuals to

consider self-employment as an alternative route to advancement (Brändle et al., 2025; Rider et al., 2023). In this sense, entrepreneurial entry may function both as a response to exclusion from traditional mobility channels and as a potential, though uncertain, strategy for overcoming such exclusion. Thus, networks act simultaneously as constraints and enablers, depending on their structure, reach, and strategic relevance, particularly in terms of access to information and opportunities (Bourdieu, 1986; Granovetter, 1973).

Beyond individual resource endowments, embeddedness in entrepreneurial and labour market networks shapes individuals' access to information, influencing their ability to perceive entrepreneurial opportunities (Arenius & De Clercq, 2005) and, through social influence and exposure to entrepreneurial role models, the likelihood of pursuing entrepreneurial careers (Eesley & Wang, 2017). Networks therefore operate as a key relational mechanism linking individual position within the social structure to entrepreneurial behaviour and performance.

The literature suggests that entrepreneurial motivations are also systematically linked to network structures, as opportunity-driven entrepreneurs tend to be embedded in stronger, broader, and more resource-rich networks than necessity-driven entrepreneurs (Urban, 2011; Zou & Storz, 2023). These systematic differences imply that network embeddedness mediates not only performance but also the distribution of mobility outcomes across types of entrepreneurs.

This leads to the following hypothesis:

H4: The relationship between entrepreneurial motivations and mobility outcomes is mediated by embeddedness in entrepreneurial networks.

H4a: Entrepreneurs with broader and more resource-rich networks experience more favourable mobility outcomes.

2.4.3. Habitus formation and cognitive disposition

Social class reflects not only individuals' resource endowments but also their patterns of thinking, perception, and action (Côté, 2011). Entrepreneurs' initial class position influences decision-making behaviour, time orientation, and risk perceptions (Ge et al., 2022). These class-conditioned cognitive patterns shape how individuals evaluate opportunities, assess risks, and allocate effort over time. Lower-class entrepreneurs often face cognitive constraints that promote present-oriented decision-making, reducing the likelihood of

investing in long-term strategic activities such as skill accumulation or network expansion, behaviours that are crucial for overcoming early disadvantages (Ge et al., 2022).

Brändle et al. (2025) emphasize that early-life contexts shape values, aspirations, and norms, contributing to the development of an entrepreneurial habitus. Entrepreneurs' risk tolerance, self-efficacy, and expectations of success are therefore deeply influenced by social class origin, affecting both the probability of entrepreneurial entry and subsequent venture performance (Brändle & Kuckertz, 2023; Brändle et al., 2025; Li et al., 2021). These embodied cognitive and behavioural dispositions shape entrepreneurs' preferences and skills, which may either foster the confidence and persistence required for upward mobility or constrain strategic adaptability in demanding environments, thereby shaping the performance outcomes of their entrepreneurial activities (Gorgievski & Stephan, 2016; Lindquist & Vladasel, 2025).

Thus, entrepreneurial outcomes are shaped not only by external resources and networks but also by class-conditioned cognitive dispositions and orientations toward risk and uncertainty (Hout & Rosen, 2000; Levine & Rubinstein, 2017). Entrepreneurial motivations reflect these underlying dispositions, with opportunity-driven entrepreneurship more closely aligned with future-oriented, risk-tolerant habitus and creativity traits (Block et al., 2015; Ge et al., 2022). These dispositions influence not only entry decisions but also the ability to sustain and scale entrepreneurial activity over time.

Accordingly, this study proposes:

H5: The relationship between entrepreneurial motivations and mobility outcomes is mediated by habitus-related cognitive dispositions.

H5a: Future-oriented and risk-tolerant dispositions increase the likelihood of upward mobility among entrepreneurs.

Together, these mechanisms highlight the central role of family background and social origin in shaping mobility trajectories within entrepreneurship (Lindquist & Vladasel, 2025). They collectively illustrate how structural inequalities are transmitted through multiple, mutually reinforcing channels, linking initial conditions to eventual outcomes. This underscores the importance of adopting an intergenerational mobility perspective, comparing entrepreneurs' class positions with those of their parents (Brändle et al., 2025), to assess whether entrepreneurship functions as a vehicle for status attainment, status maintenance, or social

reproduction. By explicitly linking entrepreneurial mechanisms to intergenerational outcomes, research can more accurately identify the conditions under which entrepreneurship facilitates mobility and the contexts in which it perpetuates existing inequalities.

2.5. Social origin and class reproduction

The mechanisms linking entrepreneurship and social mobility implicitly illustrate that entrepreneurship is not socially neutral. Rather, it is embedded within stratified social structures that condition both access to opportunities and the distribution of outcomes. Entrepreneurial activity is shaped not only by the individual characteristics of entrepreneurs but also by the social contexts in which they are embedded (Kwon & Arenius, 2010). While much of the entrepreneurship literature has traditionally emphasized individual traits, risk preferences, and opportunity recognition, a growing body of research underscores the importance of social embeddedness in shaping entrepreneurial processes and outcomes. This shift reflects a broader move from individualistic to structurally informed explanations of entrepreneurial behaviour. Although this literature increasingly acknowledges the relevance of embeddedness, particularly with respect to social networks and institutional conditions, the role of the family, as “the one social institution in which all entrepreneurs are embedded,” has received comparatively limited attention (Aldrich & Cliff, 2003, p. 577).

Addressing this limitation, Aldrich and Cliff (2003) emphasize the central role of the family in the entrepreneurial process, influencing individuals’ ability to identify opportunities, decide whether to exploit them, initiate entrepreneurial activity, and mobilize resources. In this sense, the family acts as a primary site for the transmission of both material and non-material resources relevant to entrepreneurship. Family characteristics such as norms, values, and expectations, as well as family structure and prior experience in business ownership, are shown to shape not only entry decisions but also the strategies pursued throughout the entrepreneurial process and, ultimately, the outcomes achieved (Aldrich & Cliff, 2003; Saeed et al., 2014; Zhang, 2024). These family-level influences contribute to shaping entrepreneurial aspirations, risk tolerance, and perceptions of desirability and feasibility, thereby affecting both the quality and sustainability of entrepreneurial engagement (Dunn & Holtz-Eakin, 2000; Hout & Rosen, 2000; Saeed et al., 2014).

Since these family influences are rooted in early life stages, and entrepreneurs do not all begin from the same starting point, consideration of individuals’ social background becomes

essential for understanding differential outcomes across the various stages of the entrepreneurial process (Gorgievski & Stephan, 2016). Adopting a generational perspective enables this broader analytical approach, making it possible to incorporate past conditions and their influence on present entrepreneurial behaviour and outcomes (Dunn & Holtz-Eakin, 2000; Lippmann & Aldrich, 2016). However, as family generations are reproduced over time, individuals are inevitably shaped by the imprint of their family inheritance, particularly through processes of intergenerational occupational transmissions, which influence individuals in distinct ways throughout their life course and precondition future opportunities (Aldrich & Kim, 2007; Lippmann & Aldrich, 2016). These processes create path dependencies that systematically advantage some individuals while constraining others. As a result, social positions tend to be reproduced across generations, even though individuals may, under certain conditions, exercise agency that allows them to challenge inherited constraints (Battilana, 2006; Lippmann & Aldrich, 2016).

This tension between social reproduction and individual agency is articulated in the seminal work of Bourdieu (1986), *“The Forms of Capital,”* where the author identifies the intergenerational transmission of cultural capital as one of the most consequential mechanisms of social reproduction. Bourdieu’s framework provides a comprehensive lens for understanding how different forms of capital interact to shape life chances. The distribution of economic, social, and cultural capital establishes structural constraints that shape individuals’ life chances, with hereditary transmission playing a particularly decisive role, as it affects both the volume of capital accumulated and the timing at which individuals begin their own accumulation in adult life. Social capital, as conceptualized by Bourdieu (1986), depends on the size of the network and on its members’ ability to mobilize resources, and is also shown to entail specific challenges for reproduction, given that it requires sustained efforts of sociability and continuous reaffirmation of recognition within the network. Within entrepreneurial contexts, these forms of capital condition access to information, finance, and legitimacy, thereby influencing both entry into entrepreneurship and subsequent mobility outcomes.

Despite these theoretical advances, empirical research examining how social class origin shapes entrepreneurial mobility remains uneven, particularly in comparative European contexts. Much of the existing evidence relies on single-country studies (e.g., Li et al. (2021); Levine and Rubinstein (2017); Quadrini (1999)) which limits generalizability. Moreover, several studies rely on subjective evaluations of entrepreneurial success rather than objective socioeconomic indicators, obscuring the extent to which entrepreneurship affects

individuals' social trajectories (e.g., Benz and Frey (2004); Binder and Coad (2013); Binder (2024)). This limits the ability to draw robust conclusions about whether entrepreneurship mitigates or reinforces intergenerational inequalities.

Cross-national analyses that systematically examine whether entrepreneurship reproduces or disrupts class-based inequalities across different European welfare regimes remain scarce. This gap is particularly salient given the substantial variation in institutional contexts, labour market structures, and social protection systems across Europe (Dilli, 2021), which are likely to moderate the relationship between social origin, entrepreneurship, and mobility. Addressing this gap requires integrating intergenerational, cross-national, and institutional perspectives within a unified empirical framework.

By adopting an intergenerational perspective and leveraging harmonized cross-national data, the present study addresses this gap by examining how class origin conditions the mobility outcomes of entrepreneurs across European countries. In doing so, it contributes to a more nuanced understanding of whether entrepreneurship functions as a mechanism of social reproduction or as a pathway for socioeconomic advancement under varying institutional conditions. This approach allows for assessing both the extent and the conditionality of entrepreneurial mobility.

The reviewed literature consistently demonstrates that family background structures access to resources, networks, and dispositions long before individuals enter entrepreneurial activity. As a result, social origin is expected not only to influence entry into entrepreneurship but also to condition the returns to different entrepreneurial motivations. Entrepreneurship may thus function as a mechanism of social reproduction rather than disruption, particularly for individuals from disadvantaged origins. In this sense, entrepreneurial activity may amplify pre-existing inequalities unless counteracted by favourable institutional conditions or exceptional individual trajectories.

This leads to the following hypotheses:

H6: Social origin moderates the relationship between entrepreneurship and mobility outcomes.

H6a: Entrepreneurs from advantaged social origins are more likely to experience upward mobility than entrepreneurs from disadvantaged origins.

H6b: Necessity-driven entrepreneurship is more strongly associated with downward or horizontal mobility among individuals from disadvantaged backgrounds.

2.6. Institutional moderation

Welfare regimes and institutional contexts shape the risks and returns associated with entrepreneurial activity (Dilli, 2021; Sendra-Pons et al., 2022), thereby influencing both the likelihood and direction of mobility trajectories (Boudreaux, 2014). This implies that entrepreneurship cannot be analysed in isolation from its institutional environment, as macro-level structures condition both entry into entrepreneurship and its socioeconomic outcomes.

Welfare regime theory posits that countries cluster into distinct types (liberal, conservative/corporatist, and social-democratic), which differ in the degree of decommodification and social protection that individuals face, reflecting different institutional arrangements between the state, market, and family (Esping-Andersen, 1990). These institutional configurations define the extent to which individuals can rely on public support versus market-based solutions when facing economic risks. These differences structure labour market risks, access to social safety nets, and employment opportunities, thus affecting how entrepreneurship relates to socioeconomic mobility across contexts (Dilli, 2021). Additionally, institutional analyses by Eurofound (e.g., Eurofound (2023); (Eurofound, 2024) have documented how variations in social protection, labour market regulation, and related policies contribute to differential outcomes in employment quality and labour market insertion across Europe. Such variations highlight the importance of cross-national institutional heterogeneity for understanding mobility outcomes.

This institutional framework, by shaping incentives to enter self-employment and broader country-level socioeconomic and demographic conditions, plays a central role not only in determining the overall levels of entrepreneurial activity across countries, but also in influencing the types of entrepreneurial activity pursued (Dilli, 2021). In particular, institutional contexts affect the relative prevalence of opportunity-driven versus necessity-driven entrepreneurship, thereby indirectly shaping the distribution of mobility outcomes.

While generous social protection buffers necessity-driven entrepreneurs against downward mobility by reducing the downside risk of entrepreneurial entry and survival through higher levels of public risk-sharing (Kilström & Roth, 2024), strong entrepreneurial ecosystems, characterized by dense networks, supportive institutions, access to finance, and coherent policy frameworks, amplify upward mobility for opportunity-driven ventures by facilitating resource access, growth, and innovation (Stam & Van de Ven, 2021; Urbano et al., 2020).

Thus, different forms of entrepreneurial activity benefit from distinct institutional frameworks, whose effects are conditioned by the specific socioeconomic characteristics of each country (Sendra-Pons et al., 2022). Accordingly, the impact of institutional factors on both the level of entrepreneurship and its associated mobility outcomes varies across contexts, making it evident to policymakers that “one-size-fits-all approaches that target changing single labour market institutions are not suitable” (Dilli, 2021, p. 21; Dilli et al., 2018). This reinforces the need for context-sensitive policy approaches that account for institutional complementarities and trade-offs.

Within this discussion, the quality of institutions, beyond their typological classification into welfare regime, is also highly relevant for entrepreneurial outcomes and income mobility trajectories (Gaies et al., 2025). Institutional quality encompasses factors such as governance effectiveness, regulatory transparency, and the rule of law, which shape the broader economic environment in which entrepreneurship takes place. Contexts characterized by lower levels of corruption are associated with weaker persistence of intergenerational earnings, thereby creating greater opportunities for upward mobility (Boudreaux, 2014). In such environments, fairer access to opportunities enhances the potential for entrepreneurship to function as a mechanism of socioeconomic advancement rather than reproduction.

Taken together, these insights indicate that institutional contexts do not merely influence average entrepreneurial outcomes but also condition the extent to which entrepreneurship reinforces or mitigates social inequalities. In other words, institutional settings act as a higher-level moderator that shapes how individual-level characteristics and entrepreneurial motivations translate into mobility trajectories.

This leads to the final hypothesis:

H7: Welfare regimes moderate the relationship between entrepreneurship and mobility outcomes.

H7a: In more generous and coordinated welfare regimes, necessity-driven entrepreneurs face lower risks of downward mobility.

H7b: Opportunity-driven entrepreneurship yields higher mobility returns in institutional contexts characterized by strong entrepreneurial ecosystems and social protection.

2.7. Synthesis: Conceptual framework linking entrepreneurial motivations, mechanisms, and mobility outcomes

The literature collectively indicates that entrepreneurial motivations initiate distinct mobility trajectories, mediated by resources, networks, and cognitive dispositions, and moderated by social origin and institutional context. Rather than operating as isolated determinants, these elements form an integrated, multi-level framework that links individual agency with structural constraints. Figure 1 summarizes this framework, showing:

- Motivations (opportunity vs. necessity) → mechanisms (capital endowment, network embeddedness, habitus) → mobility outcomes (upward, horizontal, downward)
- Social origin and welfare regimes act as higher-order moderators, shaping both access to mechanisms and the extent to which entrepreneurial activity translates into mobility outcomes

This framework conceptualizes entrepreneurship as a conditional mobility process, in which similar entrepreneurial actions may yield divergent outcomes depending on individuals' initial endowments and contextual environments. In particular, entrepreneurial motivations determine entry pathways, while mediating mechanisms explain how these pathways are transformed into socioeconomic outcomes. At the same time, social origin structures the initial distribution of resources and dispositions, and institutional contexts influence the risks and returns associated with entrepreneurial activity.

By explicitly distinguishing between antecedents (motivations), mediators (mechanisms), and moderators (social origin and institutions), the framework enhances analytical clarity and enables a more precise empirical identification of causal pathways. This approach also reduces the risk of conceptual overlap between explanatory factors and outcomes, which is particularly important in multi-level analyses.

This conceptual model provides the analytical foundation for testing H1–H7 in the empirical analysis. Specifically, it allows for examining (i) baseline differences between entrepreneurs and non-entrepreneurs, (ii) heterogeneity across entrepreneurial motivations, (iii) the mediating role of resources, networks, and cognitive dispositions, and (iv) the moderating influence of social origin and institutional context.

By integrating entrepreneurship research with intergenerational mobility theory, this study conceptualizes entrepreneurship as a stratified and institutionally embedded mobility channel rather than a universally enabling economic activity. In contrast to approaches that treat

entrepreneurship as homogeneous, this framework explicitly incorporates heterogeneity in motivations, resources, and contexts. Thus, unlike most existing ESS-based studies, this research simultaneously examines entrepreneurial motivations, intergenerational mobility outcomes, mediating mechanisms, and institutional contexts within a unified analytical framework. This integrative approach strengthens both the theoretical contribution and the empirical relevance of the study, enabling a more comprehensive assessment of when and for whom entrepreneurship functions as a pathway to socioeconomic advancement.

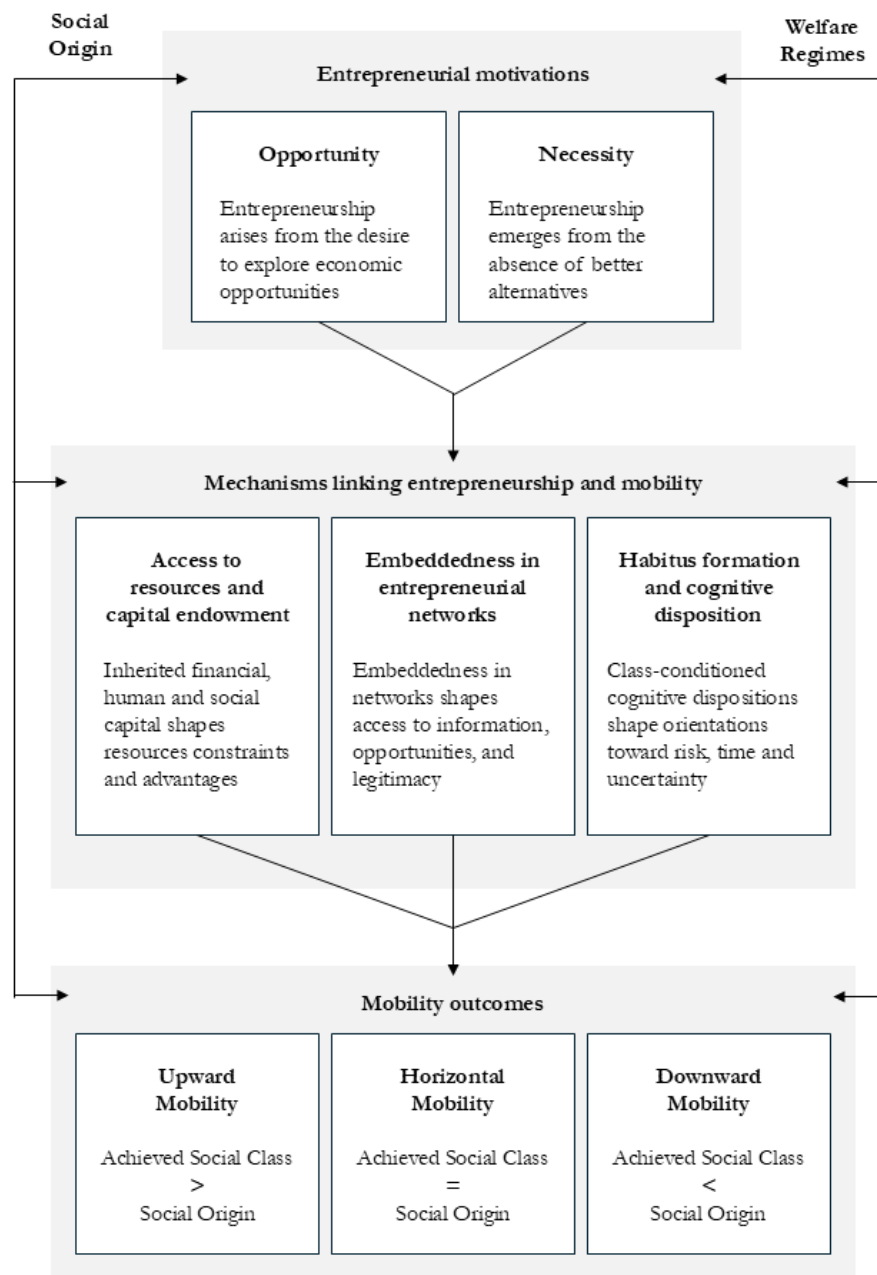


Figure 1: Conceptual framework

Source: Own elaboration.

3. Data and Methodology

3.1. Empirical strategy and hypotheses operationalization

This study adopts a comparative quantitative design to examine systematic associations between entrepreneurship and intergenerational socioeconomic mobility in Europe, and to assess the conditions under which these associations vary. Consistent with the conceptual framework developed in Section 2, the empirical strategy integrates individual-level characteristics, mediating mechanisms, and contextual moderators within a unified analytical model. Specifically, it links entrepreneurial status and motivations to intergenerational mobility outcomes while accounting for observable individual characteristics, theoretically informed mediating mechanisms, social origin, and institutional context. The analysis is hypothesis-driven and explicitly associational, enabling systematic testing of H1–H7 using harmonized cross-national data from the European Social Survey (ESS).

Intergenerational mobility constitutes the primary outcome variable. Mobility is measured by comparing respondents' socioeconomic positions with those of their parents using internationally comparable indicators of occupational status and educational attainment. Respondents are classified into upward, downward, or horizontal mobility trajectories, yielding a categorical dependent variable used consistently across models. This operationalization captures the directional nature of mobility processes while ensuring comparability across national contexts. Furthermore, the use of categorical mobility outcomes reduces sensitivity to cross-country differences in measurement scales and institutional structures, thereby improving the robustness and interpretability of the results.

To assess the baseline association between entrepreneurship and mobility (H1–H1b), the analysis contrasts entrepreneurs and non-entrepreneurs, operationalized via respondents' current employment status and their occupational category. Entrepreneurial status is thus captured through an occupational proxy, reflecting the constraints of survey-based measurement. Although selection into self-employment is non-random, the models include a comprehensive set of individual-level controls, reducing confounding from observable heterogeneity. These controls include key demographic and socioeconomic variables that account for differences in individual characteristics associated with both entrepreneurial entry and mobility outcomes. Multinomial logistic regression models estimate the relative likelihood of upward, downward, and horizontal mobility, allowing simultaneous comparison across career paths within a unified modelling framework. This modelling

approach is particularly suitable given the nominal nature of the dependent variable and the interest in comparing multiple mobility outcomes.

Entrepreneurial heterogeneity is incorporated to test H2–H2b. Because the ESS does not directly measure entrepreneurial motivations, the analysis relies on occupational-autonomy typologies as indirect proxies for differences in entrepreneurial orientation. Respondents are classified into high-autonomy entrepreneurs and low-autonomy self-employed individuals based on the combination of employment status and occupational characteristics. This proxy-based approach reflects a pragmatic compromise between theoretical relevance and data availability. Although these categories cannot be interpreted as direct measures of opportunity- and necessity-driven entrepreneurship, they provide a theoretically informed distinction between more autonomous, skill-intensive entrepreneurial activities and more constrained forms of self-employment. The analysis, therefore, examines whether these entrepreneurial profiles are systematically associated with different mobility outcomes, net of controls. This strategy allows for capturing meaningful heterogeneity in entrepreneurial engagement despite data limitations.

To examine mechanisms linking motivations to mobility (H3–H5), the empirical strategy introduces sequential blocks of mediating variables, enabling transparent assessment of coefficient attenuation across specifications. This stepwise modelling strategy provides indirect evidence on the role of mediating mechanisms by evaluating how the inclusion of additional variables alters the estimated relationships. Resource and capability endowments (H3–H3a) are captured through a composite index combining educational attainment, household income, and generalized and institutional trust, representing complementary forms of human, economic, and institutional capital; network embeddedness (H4–H4a) by indicators of social capital; and cognitive dispositions (H5–H5a) by attitudinal measures of risk tolerance, future orientation, and self-efficacy. These operationalizations are closely aligned with the theoretical mechanisms identified in Section 2, ensuring consistency between conceptual and empirical components. Mediation is assessed descriptively rather than through causal decomposition, acknowledging potential joint determination and the interdependence of entrepreneurial motivations and mediating characteristics. Thus, the analysis focuses on identifying patterns consistent with mediation rather than establishing causal pathways.

The moderating role of social origin (H6–H6b) is examined using parental education and occupation, which are exogenous to respondents' adult labour market behaviour. These variables provide a robust proxy for class background and inherited socioeconomic position.

Interaction terms test whether the association between entrepreneurship and mobility varies across class backgrounds, thereby addressing heterogeneous selection and differential capacity to convert entrepreneurial activity into mobility outcomes. This approach directly operationalizes the theoretical expectation that social origin conditions both opportunities and returns to entrepreneurship.

Finally, institutional moderation (H7–H7b) is assessed by grouping countries into welfare-regime types using established typologies. This classification captures stable cross-national institutional differences that structure economic behaviour and social mobility. Interactions between entrepreneurial motivations and welfare regimes capture cross-national heterogeneity in mobility outcomes, reflecting stable institutional configurations rather than short-term policy effects or cyclical macroeconomic conditions. This allows for testing how macro-level institutional environments shape micro-level mobility processes.

This study builds on prior ESS-based research on intergenerational mobility, which typically operationalizes mobility through intergenerational comparisons of education (Campos-Matos & Kawachi, 2015; Hatos et al., 2012; Schuck & Steiber, 2018) or occupation (Banyte et al., 2025; Bukodi et al., 2020). Entrepreneurship, though less frequently examined, is consistently measured via occupational status, including self-employment or work in a family business (Hatos et al., 2012). By extending these approaches to incorporate entrepreneurial heterogeneity and institutional moderation, this study advances the empirical literature on mobility.

Accordingly, this study does not claim causal effects, but identifies robust, theoretically grounded associations between entrepreneurship and intergenerational mobility. This distinction is essential given the observational nature of the data and potential endogeneity concerns. By combining harmonized microdata with explicit modelling of mediating and moderating processes, it provides credible evidence on how motivational, social, and institutional factors shape mobility trajectories among entrepreneurs across Europe. This integrative approach enhances both the internal coherence and external relevance of the findings.

The empirical analysis, structured around this stepwise modelling strategy, ensures a direct and transparent correspondence between the theoretical arguments advanced in Section 2 and the statistical tests conducted in Section 4. Such alignment strengthens the overall analytical consistency of the study and facilitates interpretation of the results in light of the proposed conceptual framework.

3.2. Data sources

The empirical analysis relies on data from the 11th Round of the European Social Survey (ESS), published in November 2025 by Sikt – Norwegian Agency for Shared Services in Education and Research (European Social Survey European Research Infrastructure (ESS ERIC), 2025). The ESS constitutes one of the most comprehensive and methodologically rigorous cross-national survey programmes available for social science research in Europe.

The ESS is a cross-national survey that was launched in 2001 and has been conducted across European countries every two years since then. The survey is based on face-to-face interviews and aims to measure individuals' living conditions and social background, as well as their beliefs, attitudes, and behavioural patterns. Its harmonized design, strict sampling procedures, and standardized questionnaires ensure a high degree of cross-country comparability and internal consistency. Accordingly, it provides a valuable opportunity for cross-national comparative research in the social sciences field, particularly for analyses that require consistent measurement of socioeconomic characteristics across institutional contexts.

Nonetheless, concerning the study of entrepreneurship, the survey presents some limitations, since entrepreneurial motivations are not directly assessed in the questionnaire. This limitation constrains the direct operationalization of key theoretical constructs discussed in Section 2, particularly the distinction between opportunity-driven and necessity-driven entrepreneurship. However, relevant data concerning employment relationships and occupational categories provide alternative indicators that can be used to construct entrepreneurship proxies. Although indirect, these proxies are widely used in the literature and allow for capturing meaningful variation in entrepreneurial engagement within the constraints of survey data.

The present study focuses specifically on the most recent survey conducted, corresponding to the 3.0 Edition of the ESS Round 11. The data collection took place between March 2023 and December 2024, and includes information from individual respondents across 30 European countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Montenegro, Netherlands, Norway, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, and the United Kingdom. The inclusion of a large and diverse set of

countries enhances the external validity of the analysis and allows for examining substantial cross-national variation in institutional contexts.

Furthermore, the ESS provides rich information on respondents' demographic characteristics, educational attainment, labour market status, and family background, including parental education and occupation, which are essential for constructing intergenerational mobility measures. This breadth of information makes the dataset particularly well-suited to the present study's objectives, as it enables the simultaneous analysis of individual-level characteristics, social origin, and contextual variation within a harmonized framework.

In sum, despite limitations related to the measurement of entrepreneurial motivations, the ESS offers a uniquely valuable data source for examining the relationship between entrepreneurship and intergenerational mobility across European countries, balancing breadth of coverage, data quality, and comparability.

3.3. Variables proxies

3.3.1. Measurement of intergenerational mobility

Intergenerational occupational mobility constitutes the baseline dependent variable employed throughout the main empirical analysis, as it is more directly aligned with labour-market trajectories and entrepreneurial activity than alternative measures. Educational mobility is introduced exclusively as a robustness specification to evaluate the stability of the findings across alternative operationalizations of intergenerational mobility. The detailed operationalization of both variables (occupational and educational mobility) is presented in Appendix A1 and A2, respectively.

Intergenerational occupational mobility

The ESS measures respondents' and their parents' occupations (reported retrospectively for when the respondent was age 14) using the ISCO-08 classification. The harmonization of the corresponding variables – *isco08*, *occf14b*, *occm14b* – enables occupations to be aggregated into hierarchical status groups: high-status, medium-status, and low-status. This aggregation reduces cross-country heterogeneity in occupational classifications while preserving meaningful status variation.

This procedure yields a respondent occupational distribution of 42.2% in high-status occupations, 27.0% in medium-status occupations, and 30.8% in low-status occupations.

Regarding parental occupation, this study follows a common practice in intergenerational mobility research and adopts the dominance approach, assigning household status according to the highest-status parent. This is consistent with the assumption that the most advantaged parental resource better reflects access to economic, social, and cultural capital within the household. The resulting distribution shows that 50.1% of respondents originate from low-status households, 31.5% from medium-status households, and 18.4% from high-status households. This distribution indicates a relatively concentrated parental base at lower status levels, which is relevant for interpreting upward mobility patterns.

Absolute intergenerational mobility is defined as the difference between respondent and parental occupational status, with the differences categorized into three possible outcomes (upward, downward, and horizontal mobility), capturing distinct mobility trajectories. The empirical distribution shows that 44.28% of individuals experience upward mobility, 43.18% remain in the same status category as their parents, and 12.54% experience downward mobility. The relatively high incidence of upward mobility should be interpreted cautiously, as it reflects broad status transitions rather than fine-grained occupational changes, given the use of a three-category classification.

The resulting intergenerational transition matrix (Table 1) reveals substantial persistence along the occupational distribution, alongside meaningful upward mobility from lower parental status groups and limited downward mobility from advantaged origins. This pattern is consistent with moderate intergenerational persistence combined with asymmetric mobility dynamics.

Table 1: Intergenerational mobility matrix

		occ_status_parent			Total
		Low	Medium	High	
occ_status_resp	Low	8,796	2,791	924	12,511
	Medium	5,694	3,931	1,463	11,088
	High	6,230	6,365	5,107	17,702
Total		20,720	13,087	7,494	41,301

3.3.2. Measurement of entrepreneurship status and type

The ESS provides relevant information on respondents' labour market position (*emplrel*), allowing the identification of entrepreneurs based on whether they report being self-

employed or working in a family-owned business. This concept is referred to as “conventional entrepreneurship” in the subsequent sections.

However, the absence of direct measures of entrepreneurial motivations necessitates reliance on proxy-based approaches derived from observable indicators of individual constraints and resource endowment. This limitation reflects a common challenge in survey-based entrepreneurship research. Although this conventional entrepreneurial status is more closely aligned with the broader entrepreneurship literature, the derived entrepreneurial typologies are considered less precise due to data constraints.

Consequently, the present study prioritises an alternative occupation-based entrepreneurship specification. This approach conceptualizes entrepreneurship from an occupational perspective, operationalized by combining the respondent’s employment relation with their occupational status. The detailed operationalization procedure is presented in Appendix A3, and the resulting typologies in Appendix A4.

Occupational entrepreneurship status

Individuals are classified as entrepreneurs if they report being self-employed and simultaneously belong to high-autonomy occupational categories (ISCO-08 major groups 1–3: managers, professionals, and technicians). This operational definition captures a more restrictive and theoretically grounded form of entrepreneurship associated with higher human capital, autonomy, and decision-making capacity.

Conversely, low-skill self-employment and more precarious forms of own-account work are excluded, resulting in a more selective definition. Following this criterion, only 4.5% of individuals in the ESS sample are classified as entrepreneurs, with the remaining 95.5% categorized as non-entrepreneurs (Table 2). This relatively small share reflects the stringent definition adopted.

Comparison with the conventional entrepreneurship measure highlights that entrepreneurship is not a homogeneous condition, as a substantial proportion of self-employed individuals do not belong to high-autonomy occupations.

Table 2: Cross-tabulation between conventional and occupational entrepreneurship measures

		entrepreneur_occ (occupational)		Total
		Not-entrepreneurial Occupation	Entrepreneurial Occupation	
entrepreneur (conventional)	Not-entrepreneur	38,768	0	38,768
	Entrepreneur	3,884	2,261	6,145
Total		42,652	2,261	44,913

Occupational entrepreneurship typologies

To capture heterogeneity, entrepreneurial motivations are approximated through occupational autonomy. Respondents who simultaneously satisfy the conventional entrepreneurship criterion (i.e., those who are self-employed or working in a family business) and the occupational definition (i.e., those who fill an entrepreneurial occupational category) are classified as high-autonomy entrepreneurs, while those who meet only the conventional definition are classified as low-autonomy self-employed.

The empirical distribution reveals 5.0% high-autonomy entrepreneurs, 8.7% low-autonomy self-employed, and 86.2% non-entrepreneurs. This differentiation provides a meaningful proxy for distinguishing between more opportunity-oriented and more constrained forms of entrepreneurship.

3.3.3. Mediating variables

The mediating variables aim to capture the key mechanisms through which entrepreneurship may shape intergenerational mobility outcomes. The detailed operationalization of these measures can be consulted in Appendix A5.

Resources and capital endowment

Resource and capability endowment is facilitated through ESS indicators that capture the educational, institutional and economic resources of the respondent. The specific information considered includes the respondent's highest educational attainment (*eduhvl*); his generalized trust in other people (*ppltrst*), the national parliament (*trstprl*), and the legal system (*trstlgf*); and his household total net income (*hinctnta*). These components represent complementary dimensions of human, financial, and institutional capital. After

standardization, they are aggregated into a composite index representing overall resource endowment.

Network embeddedness

Network embeddedness is measured using ESS data related to social capital interactions, generalized trust, and associativism. The variable components include the frequency with which the respondent engages in social interactions with friends, relatives, or colleagues (*schmeet*); his generalized trust in other people (*ppltrst*), the national parliament (*trstprl*), and the legal system (*trstlgl*); and self-reported attachment to a political party (*clsprty*), employed as a proxy for civic and organizational embeddedness. The standardized components are combined into a network embeddedness index, which captures both bonding and bridging forms of social capital.

Durable cognitive dispositions

Durable cognitive dispositions analysis is constructed from ESS attitudinal measures, which include human-values and behavioural items related to individual orientations towards uncertainty, initiative, and personal agency.

To capture opportunity-oriented openness, the analysis incorporates respondents' predisposition to take risks (*likrisk*), the importance attributed to trying new things (*impdiffa*), seeking adventure (*ipadvnta*) and generating new ideas (*ipcrtna*). Self-efficacy and autonomy are captured by the importance attributed to making independent decisions (*impfreea*) and the respondent's capacity to organize their daily work (*wkdcorga*) and to influence organizational decisions (*iorgact*). Additionally, achievement-oriented dispositions are incorporated through items measuring the importance attributed to being successful (*ipsucesa*) and being admired by others (*ipshabta*). Together, these variables capture key dimensions of entrepreneurial orientation and habitus. After standardization, the diverse components are aggregated into a composite cognitive dispositions index.

3.3.4. Moderating variables

The moderating variables are intended to capture the broader social and institutional conditions that may shape the ability of entrepreneurial activity to translate into upward

mobility. The detailed operationalization procedure of both the social origin index and the welfare regime classification is presented in Appendix A6.

Social origin

The moderating role of social origin is captured through a composite indicator combining parental educational attainment and occupational status, which reflects both the family's educational capital and socioeconomic advantage. The estimation of these dimensions is based on ESS data concerning the father's (*eiscedf*) and mother's (*eiscedm*) highest level of education, as well as the father's (*occf14b*) and mother's (*occm14b*) occupation when the respondent was 14. Following a dominance approach, the social origin index is determined by the highest observed parental education and occupational position, as these capture the maximum level of socioeconomic resources available during early life.

Institutional context

The institutional context is operationalized through a welfare-regime classification, which captures broad structural and institutional differences shaping both entrepreneurial behaviour and mobility outcomes.

The countries included in the ESS are grouped into five welfare-regime types: Social-democratic (Sweden, Finland, Norway); Conservative/Corporatist (Germany, France, Belgium, Austria, Netherlands, Switzerland), Liberal (United Kingdom, Ireland, Iceland), Southern (Portugal, Spain, Italy, Greece, Cyprus) and Eastern (Poland, Hungary, Slovakia, Slovenia, Croatia, Bulgaria, Lithuania, Latvia, Serbia, Montenegro, Estonia, Ukraine, Israel).

3.3.5. Other control variables

The empirical models include a set of individual-level controls, incorporating key demographic characteristics, such as age, gender, and migrant status. The incorporation of these variables intends to isolate the association between intergenerational mobility and the other main explanatory variables by accounting for observable sources of heterogeneity that may affect this relationship. Appendix A7 provides detailed information on the construction of each control variable.

Age is operationalized using the ESS variable that records the respondent's age in completed years (*age*). In addition, age squared is included to capture potential non-linear life-cycle effects. This specification takes into account the fact that the relationship between age and intergenerational mobility may vary across different stages of the life course, acknowledging that additional years of age may exhibit different effects on mobility outcomes.

Gender is measured using the ESS gender variable (*gndr*), which distinguishes between male and female respondents. Controlling for gender differences is motivated by the existence of persistent gender-related inequalities in labour market positions, which may contribute to variation in intergenerational mobility opportunities.

Additionally, **migrant status** is also included as a control variable, operationalized using the ESS variable that records whether the respondents were born in the country where the survey was conducted (*brmcntr*). Migrant individuals are often associated with distinct labour market conditions that commonly lead to greater constraints on access to environments that facilitate economic and occupational advancement, highlighting the importance of accounting for these structural differences.

3.4. Statistical modelling strategy

The dependent variable considered in this study is intergenerational occupational mobility, which comprises, as mentioned before, three possible mobility outcomes: upward mobility, horizontal mobility, and downward mobility. Although the mobility categories may be viewed as ordinal in a broad substantive sense, the analysis employs a multinomial logit specification rather than an ordered-response model. This modelling choice is theoretically and empirically motivated, as upward and downward mobility represent distinct and potentially asymmetric processes, and the proportional-odds assumption required by ordered logit models is unlikely to hold in this context. Consequently, imposing an ordinal structure could lead to biased or overly restrictive estimates. The multinomial framework, therefore, allows the determinants of upward and downward mobility to differ freely, while maintaining horizontal mobility as the reference outcome.

Accordingly, the multinomial logit (mlogit) model constitutes the primary econometric specification, given its capacity to accommodate discrete dependent variables with more than two unordered categories. This specification is particularly appropriate when the focus lies on modelling relative probabilities across multiple outcomes rather than assuming a common ordering structure.

The models are estimated using multinomial logit specifications. Standard errors are clustered at the country level to account for within-country correlation in unobserved determinants of mobility outcomes. This adjustment is essential in cross-national data settings, where individuals within the same country may share common institutional and socio-economic environments. It produces statistical inference that is robust to heteroskedasticity and intra-country dependence while leaving coefficient estimates unchanged.

In this modelling strategy, horizontal mobility is considered the reference category. Consequently, all coefficients are interpreted relative to the likelihood of individuals remaining in the same class position. This choice provides a natural benchmark, as horizontal mobility represents the absence of intergenerational change.

Furthermore, the model estimates the probability of upward or downward mobility relative to horizontal mobility as a function of a set of explanatory variables, including entrepreneurship, capability endowments, network embeddedness, cognitive dispositions, social origin, age, age squared, gender, migrant status, and welfare regime. This comprehensive specification ensures consistency with the conceptual framework outlined in Section 2, incorporating both individual-level and contextual determinants of mobility.

Formally, the multinomial logit model can be expressed as:

$$P(Y_i = j) = \frac{\exp(X_i \gamma_j)}{\sum_{k=1}^J \exp(X_i \gamma_k)}$$

where Y_i denotes the mobility outcome experienced by the individual i , and $j \in \{\text{upward, horizontal, downward}\}$, with horizontal mobility used as the reference category (i.e., $\gamma_{\text{horizontal}} = 0$). X_i represents the vector of explanatory variables, and γ_j denotes the category-specific parameter vector estimated by the multinomial logit model.

Results are reported by Stata as relative risk ratios (RRRs), obtained by exponentiating the estimated coefficients ($RRR = \exp(\gamma_j)$). Values above 1 indicate an increase in the relative risk of the respective mobility outcome compared with horizontal mobility, whereas values below 1 indicate a decrease in that likelihood. This transformation facilitates interpretation by expressing results in multiplicative terms, allowing for a more intuitive assessment of effect sizes across categories.

It is important to note that the multinomial logit model relies on the Independence of Irrelevant Alternatives (IIA) assumption. While this assumption may be restrictive in some contexts, it is considered acceptable here given the conceptual distinction between mobility

categories and the study's focus on relative outcome comparisons rather than substitution patterns.

3.5. Robustness checks

To assess the robustness of the results obtained from the baseline econometric specification, which focuses on intergenerational occupational mobility, an additional series of estimations is conducted using intergenerational educational mobility. This robustness exercise evaluates whether the main findings are sensitive to the choice of mobility indicator.

The objective of this robustness check is to determine whether the association between entrepreneurship and mobility remains consistent when mobility is operationalized through the educational dimension. Given that education and occupation capture related but distinct aspects of socioeconomic status, consistency across these measures strengthens the credibility of the results.

Since the educational mobility variable is classified into the same three categories considered in the occupational mobility specification (upward, horizontal, and downward mobility), it shares the same categorical and non-ordered structure. Consequently, the same multinomial logit regression framework is employed. All explanatory variables included in the baseline model are retained, as is the reference category, which remains horizontal mobility. This ensures methodological consistency across specifications.

By preserving the same estimation strategy while varying only the dependent variable, this robustness check provides a clear assessment of whether the observed findings are specific to occupational mobility or reflect broader patterns of intergenerational mobility. Such consistency tests are particularly important in stratification research, where different dimensions of status may yield divergent results.

In addition, weighted estimations using ESS post-stratification weights are conducted as a further robustness check. These weights correct for sampling design, differential non-response, and population structure, thereby enhancing the representativeness of the results. This approach allows assessment of whether the findings obtained from the unweighted models are preserved when the analysis more accurately reflects the population distributions of the participating European countries, rather than relying solely on the observed sample.

Collectively, these robustness checks strengthen the credibility of the empirical findings by demonstrating their stability across alternative mobility measures and weighting schemes.

4. Empirical Results

4.1. Descriptive evidence

This section examines the descriptive structure of intergenerational mobility and the key mediating and moderating dimensions considered in the empirical framework. All statistics are computed using the labour-force-restricted sample to ensure comparability across entrepreneurial categories and non-entrepreneurs by focusing on individuals actively engaged in the labour market.

The descriptive evidence serves different purposes, specifically: establishes the empirical relevance and variation of intergenerational mobility outcomes in the ESS11 sample; documents systematic differences between entrepreneurial types and non-entrepreneurs; provides preliminary evidence regarding the capability, network, and cognitive mechanisms later examined in the multivariate models; and highlights variation in social origins and institutional contexts, which are subsequently incorporated into the econometric specifications. As a whole, this descriptive analysis offers an initial validation of the theoretical framework developed in Section 2.

4.1.1. Descriptive statistics

Table 3 presents the descriptive statistics for the labour-force restricted sample used throughout the empirical analysis.

Regarding occupational mobility distribution, the upward trajectory represents the largest category (44.45%), followed closely by horizontal mobility (42.11%), while downward mobility accounts for 13.44% of observations. This distribution indicates a relatively high degree of upward mobility alongside substantial persistence, suggesting that both mobility and stability are central features of the analysed population.

Entrepreneurs represent a minority but non-negligible share of the labour-force sample. Using the occupational-autonomy classification described in Section 3, 6.03% of individuals are classified as high-autonomy entrepreneurs, while 8.83% are classified as lower-autonomy self-employed. The remaining 85.15% are non-entrepreneurs.

This distinction is empirically relevant because the two entrepreneurial categories (high-autonomy entrepreneurs and lower-autonomy self-employed) capture structurally different labour-market positions, reflecting distinct combinations of occupational autonomy, skills, and employment relations. This reinforces the argument that entrepreneurship should not

be treated as a homogeneous category. Therefore, disaggregating entrepreneurial forms is essential for understanding intergenerational mobility dynamics.

The mediating variables also display substantial heterogeneity across individuals, with capability endowment exhibiting the highest dispersion ($SD = 0.636$), followed closely by network embeddedness and cognitive dispositions ($SD = 0.534$). This variability suggests that individuals differ significantly in the resources and dispositions that may influence mobility outcomes.

With respect to moderating dimensions, the social origin index reveals considerable variation among individuals ($SD = 0.828$), indicating substantial heterogeneity in inherited socioeconomic resources and family background. The sample is also institutionally diverse, encompassing all major European welfare regimes, with Eastern (40.31%), Conservative (22.96%), and Southern (19.01%) regimes representing the largest shares of observations. This cross-national diversity provides a suitable empirical context for investigating institutional moderation effects.

Demographically, the sample is balanced by gender (50.3% female), has an average age of approximately 45 years, and includes around 10% migrants.

Overall, the descriptive statistics indicate substantial cross-sectional heterogeneity across key variables, which is essential for identifying meaningful associations in subsequent multivariate analyses.

Table 3: Descriptive statistics of key variables (labour-force restricted sample)

Variable		Mean / %	Std. Dev.	Min	Max	N
Occupational Mobility	Upward mobility	44.45%	—	1	3	25,735
	Horizontal mobility	42.11%	—	1	3	25,735
	Downward mobility	13.44%	—	1	3	25,735
Entrepreneurial Status	High-autonomy entrepreneurs	6.03%	—	1	3	27,899
	Lower-autonomy self-employed	8.83%	—	1	3	27,899
	Non-entrepreneurs	85.14%	—	1	3	27,899
Capability endowment		0.180	0.679	-2.274	1.832	28,237
Network embeddedness		0.041	0.534	-2.312	1.828	28,237
Cognitive disposition		0.958	0.534	-2.483	1.794	28,232
Social origin		0.116	0.908	-1.208	2.105	27,762
Welfare Regime	Social-democratic	8.71%	—	1	5	28,237
	Conservative	22.96%	—	1	5	28,237
	Liberal	9.01%	—	1	5	28,237
	Southern	19.01%	—	1	5	28,237
	Eastern	40.31%	—	1	5	28,237
Age		44.71	12.79	—	90	28,027

Variable		Mean / %	Std. Dev.	Min	Max	N
Female		50.30%	0.500	0	1	28,237
Migrant		10.34%	0.304	0	1	28,217

4.1.2. Entrepreneurship and intergenerational mobility

Table 4 presents the distribution of mobility outcomes across entrepreneurial statuses, revealing substantial differences.

High-autonomy entrepreneurs display the highest incidence of upward mobility (64.63%), substantially exceeding both lower-autonomy self-employed (22.71%) and non-entrepreneurs (45.17%). Moreover, a particularly notable pattern among high-autonomy entrepreneurs is the absence of observed downward mobility trajectories. Although this finding should be interpreted with caution, given sample size considerations and the descriptive nature of the analysis, it suggests a strong positive association between entrepreneurial autonomy and favourable mobility outcomes.

By contrast, lower-autonomy self-employed individuals exhibit the weakest upward mobility profile and the highest incidence of downward mobility (23.75%). Horizontal mobility is also particularly concentrated in this group (53.54%), suggesting that more constrained forms of entrepreneurship may be associated with status maintenance or decline rather than advancement.

Taken together, this evidence strongly supports the decision to model entrepreneurship as a differentiated occupational structure rather than as a binary status. It further highlights the importance of accounting for heterogeneity in entrepreneurial engagement when analysing mobility trajectories.

Table 4: Occupational mobility by entrepreneurial status

Mobility outcome	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs	Total
Upward mobility	64.63%	22.71%	45.17%	44.46%
Horizontal mobility	35.37%	53.54%	41.43%	42.09%
Downward mobility	0.00%	23.75%	13.40%	13.45%
N	1,620	2,215	21,883	25,718

4.1.3. Capability, network, and cognitive gradients

Table 5 shows clear and systematic differences in capability endowments, network embeddedness, and cognitive dispositions across entrepreneurial groups.

High-autonomy entrepreneurs consistently exhibit the most advantageous profiles, recording the highest average levels of capability endowment (0.499), network embeddedness (0.072), and cognitive dispositions (0.474). In contrast, lower-autonomy self-employed individuals display comparatively weaker structural positions, particularly in capability (-0.071) and network resources (-0.049), despite relatively elevated cognitive disposition scores (0.393). Non-entrepreneurs generally occupy intermediate positions in capability and network dimensions, but substantially lower levels of cognitive dispositions (0.042).

Overall, these patterns suggest that entrepreneurial categories are associated with differentiated resource configurations rather than merely distinct employment statuses. This reinforces the interpretation of entrepreneurship as a stratified process shaped by underlying resource endowments and dispositions. The observed gradients are broadly consistent with theoretical expectations that access to more autonomous entrepreneurial activities is associated with greater human, social, and cognitive resources.

The descriptive evidence, therefore, provides preliminary support for the theoretical mechanisms identified in Section 2, namely the role of capability accumulation, network embeddedness, and cognitive dispositions in shaping mobility outcomes.

Table 5: Mean values of mediating variable by entrepreneurial status

Variable	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs
Capability endowment	0.499	-0.071	0.190
Network embeddedness	0.072	-0.049	0.048
Cognitive dispositions	0.474	0.393	0.042

4.1.4. Social origin and institutional heterogeneity

Tables 6 and 7 present descriptive evidence on the relationship between entrepreneurial status, social origin, and welfare regime exposure.

Regarding the social origin index, high-autonomy entrepreneurs display substantially more advantageous backgrounds (0.445) than both non-entrepreneurs (0.121) and lower-autonomy self-employed (-0.130), who exhibit the lowest values. This pattern is consistent with the hypothesis that access to high-autonomy entrepreneurship is partly conditioned by inherited socioeconomic resources.

At the same time, high-autonomy entrepreneurs exhibit the highest standard deviation (1.013), suggesting greater internal heterogeneity within this group. This may indicate that

while advantaged origins facilitate entry into high-autonomy entrepreneurship, such pathways are not exclusively restricted to elites.

With respect to welfare regimes, entrepreneurial forms are unevenly distributed across institutional contexts. High-autonomy entrepreneurship is relatively more prevalent in Liberal (7.88%) and Southern (7.20%) regimes, while lower-autonomy self-employment is more concentrated in Southern (15.29%) and Eastern (8.50%) Europe. By contrast, Social-democratic and Conservative regimes exhibit higher proportions of non-entrepreneurs.

Taken together, these patterns suggest that entrepreneurship is embedded within broader systems of social stratification and institutional context. Entrepreneurial autonomy appears unequally distributed across both social origins and welfare-state environments. These findings further motivate the inclusion of social origin and welfare regime as moderating factors in the multivariate analysis.

Table 6: Mean social origin by entrepreneurial status

Indicator	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs	Total
Mean social origin	0.445	-0.130	0.121	0.119
Std. Dev.	1.013	0.813	0.903	0.909
N	1,667	2,425	23,342	27,434

Table 7: Distribution of entrepreneurial status across welfare regimes (row %)

Welfare regime	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs	Total
Social-democratic	5.53%	5.90%	88.57%	100%
Conservative	6.48%	5.52%	88.00%	100%
Liberal	7.88%	8.16%	83.97%	100%
Southern	7.20%	15.29%	77.51%	100%
Eastern	4.91%	8.50%	86.60%	100%

4.1.5. Implications for the econometric analysis

The descriptive evidence reveals three central insights that directly motivate the econometric strategy adopted in the following sections.

First, although entrepreneurship is strongly related to intergenerational mobility outcomes, this relation is not homogeneous across entrepreneurial forms, with different entrepreneurial categories displaying distinct mobility profiles. Second, resource endowments, network embeddedness, and cognitive dispositions vary significantly across different entrepreneurial groups, suggesting that the association between entrepreneurship and mobility outcomes

may be partially shaped by the unequal influence of these dimensions. Third, social origin and welfare-regime context display substantial variation both across respondents and across entrepreneurial categories, indicating that mobility processes are embedded within broader systems of stratification and institutional organisation.

These observed patterns suggest that entrepreneurship operates as a stratified mechanism of mobility rather than as a uniformly beneficial labour-market status. This reinforces the need for a multi-dimensional analytical approach that simultaneously accounts for heterogeneity in entrepreneurial forms, mediating mechanisms, and contextual moderators. Consequently, the multinomial models presented in the following sections examine whether these descriptive differences persist after controlling for observable individual characteristics and whether they vary systematically across social origins and welfare regimes. This transition from descriptive to multivariate analysis ensures a more rigorous evaluation of the hypotheses outlined in Section 2.

4.2. Multinomial logit estimations

4.2.1. Empirical strategy

To examine the relationship between entrepreneurship and intergenerational occupational mobility, the empirical analysis employs multinomial logistic regression models, where the dependent variable captures three possible mobility trajectories: upward mobility, horizontal mobility, and downward mobility. Horizontal mobility is considered the reference outcome category. This specification enables a direct comparison of the relative likelihood of upward and downward transitions against a stable benchmark.

The empirical strategy (Table 8) is restricted to individuals participating in the labour force and proceeds in sequential stages corresponding to the theoretical structure of the hypotheses. This stepwise approach ensures a transparent mapping between theoretical propositions and empirical testing.

Table 8: Empirical modelling strategy

Stage	Purpose	Hypothesis	Function
Model A1	Baseline entrepreneurship effect	H1	Entrepreneurship matters
Model B1	Entrepreneurial heterogeneity	H2	Entrepreneurial heterogeneity matters
Models C1-C4	Mediation mechanisms	H3-H5	Why it matters (mechanisms)
Model D1	Social-origin moderation	H6	For whom it matters (social origin)
Model E1	Welfare-regime moderation	H7	Where it matters (institutions)

First, baseline models estimate the overall association between entrepreneurship and mobility outcomes (Model A1), followed by a differentiation between entrepreneurial types (Model B1), distinguishing high-autonomy entrepreneurs, low-autonomy self-employed, and non-entrepreneurs. These models establish whether entrepreneurial activity and its heterogeneity are systematically associated with distinct intergenerational mobility trajectories. This corresponds to testing whether entrepreneurship operates as a homogeneous or differentiated mobility channel.

Second, hypotheses H3–H5 are examined through a mediation-oriented modelling strategy. Capability endowments, network embeddedness, and cognitive dispositions are progressively introduced into the multinomial specifications in a sequence of nested models (Models C1–C4). The objective is not to claim causal mediation in a strict sense, but rather to assess whether the association between entrepreneurial autonomy and mobility outcomes is attenuated once these theoretically relevant mechanisms are incorporated. A reduction in the magnitude of coefficients across nested specifications is interpreted as evidence consistent with mediation. This approach follows standard practices in non-linear mobility and entrepreneurship research, where mediation is inferred from coefficient changes across specifications.

Third, hypotheses H6–H7 are tested using interaction models capturing moderating effects. Specifically, interaction terms are estimated between entrepreneurial autonomy and social origin (Model D1), as well as between entrepreneurial autonomy and welfare regime type (Model E1). Because interaction effects in multinomial logit models are not directly interpretable through raw coefficients alone, substantive interpretation relies on predicted probabilities and average marginal effects derived from post-estimation margins procedures, ensuring a meaningful interpretation of heterogeneous effects.

All models include the same set of controls: capability endowments, network embeddedness, cognitive dispositions, social origin, age, age squared, gender, migrant status, and welfare regime typology. This consistent specification ensures comparability across models and avoids specification-driven differences in results.

Relative risk ratios (RRRs) are reported for the multinomial logit estimates, alongside predictive margins and marginal effects, to facilitate substantive interpretation of non-linear effects. Given the cross-national structure of the data, standard errors are clustered at the country level in all models to account for potential within-country correlation in unobserved determinants of mobility outcomes and to obtain inference that is robust to

heteroskedasticity and intra-country dependence. This is particularly important in comparative analyses involving institutional heterogeneity across countries.

4.2.2. Does entrepreneurship matter for intergenerational mobility?

Table 9 presents the results of the multinomial logistic regression examining the association between occupational entrepreneurship and intergenerational mobility outcomes (Model A1), with horizontal mobility as the reference category. The model displays substantial explanatory power (Pseudo $R^2 = 0.212$) and is estimated on 25,587 economically active individuals.

The results provide strong evidence of a robust association between entrepreneurship and mobility trajectories, even after controlling for individual resources, demographic characteristics, migration background, and welfare regime context. This finding suggests that entrepreneurship represents a structurally significant dimension within intergenerational mobility processes rather than merely reflecting individual-level heterogeneity.

Specifically, the coefficient for occupational entrepreneurship in the upward mobility equation is positive and statistically significant ($RRR = 4.519$; $p < 0.001$). This implies that individuals classified as occupational entrepreneurs are approximately 4.52 times more likely than non-entrepreneurs to experience upward mobility, rather than horizontal mobility, net of controls. The magnitude of this effect is substantial, indicating a strong association between entrepreneurial activity and upward mobility.

In contrast, the coefficient obtained in the downward mobility equation is effectively zero ($RRR \approx 0$). However, this should not be interpreted as a conventional null effect. As highlighted in the descriptive analysis, there are no occupational entrepreneurs observed in the downward mobility category in the estimation sample. Consequently, the multinomial logit model encounters quasi-complete separation, preventing the estimation of a meaningful downward-mobility risk for entrepreneurial occupations. Thus, the absence of a positive association reflects a data limitation rather than a causal protective effect.

Table 9: Multinomial Logistic Regression of Intergenerational Occupational Mobility (Model A1)

Dependent variable: Intergenerational occupational mobility; Reference category: Horizontal mobility; Estimator: Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).

Variables	Upward mobility	Downward mobility
Occupational entrepreneurship	4.519***	0.000***
	(0.475)	(0.000)
Capability endowment	3.640***	0.478***
	(0.316)	(0.030)
Network embeddedness	0.746***	1.230***
	(0.028)	(0.065)
Cognitive dispositions	1.268***	0.971
	(0.073)	(0.057)
Social origin	0.160***	1.729***
	(0.013)	(0.093)
Age	1.012	0.938***
	(0.010)	(0.011)
Age ²	1.000**	1.001***
	(0.000)	(0.000)
Female	2.249***	0.520***
	(0.138)	(0.034)
Migrant	0.662***	1.167
	(0.039)	(0.142)
Conservative regime	0.893	1.061
	(0.275)	(0.134)
Liberal regime	1.197	0.898
	(0.231)	(0.132)
Southern regime	0.529***	0.784
	(0.093)	(0.125)
Eastern regime	0.778	0.926
	(0.156)	(0.131)
Constant	0.642*	1.733**
	(0.163)	(0.480)
Observations	25,587	
LR χ^2	21215.25 (0.0000)	
Pseudo R ²	0.212	

Notes: Values are relative risk ratios (RRR) from a multinomial logit model (Model A1). Standard errors clustered at the country level (30 clusters) are reported in parentheses. Horizontal mobility is the base outcome in the estimation. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

To facilitate interpretation, Table 10 reports predicted probabilities and average marginal effects derived from the same model.

The results reinforce that entrepreneurial occupation is strongly associated with upward intergenerational mobility, as entrepreneurs exhibit a predicted probability of upward mobility of 0.7050 compared to 0.4286 among non-entrepreneurs. This corresponds to an increase of approximately 27.6 percentage points in the probability of upward mobility.

Conversely, entrepreneurs display a lower probability of horizontal mobility (0.2949 vs 0.4273; AME = -0.1323; $p < 0.01$) and an almost zero probability of downward mobility

relative to non-entrepreneurs (AME = -0.1440 ; $p < 0.01$). These results highlight a pronounced asymmetry in mobility outcomes associated with entrepreneurship.

Table 10: Predictive probabilities and average marginal effects (AME) of Intergenerational Occupational Mobility on Occupational Entrepreneurship (Model A1)

Mobility Outcome	Non-entrepreneur	Occupational entrepreneurs	Difference (AME)
Upward mobility	0.4286*** (0.010)	0.7050*** (0.017)	0.2764*** (0.016)
Horizontal mobility	0.4273*** (0.009)	0.2949*** (0.017)	-0.1323*** (0.017)
Downward mobility	0.1441*** (0.004)	0.0000 (0.000)	-0.1440*** (0.004)

Notes: Values are predicted probabilities from a multinomial logit model (Model A1); Standard errors (in parentheses) derived from the delta method; “Difference” corresponds to the average marginal effect (entrepreneurial occupation minus non-entrepreneurial occupation); *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

When considered together, the RRR estimates and marginal effects provide complementary evidence: Table 9 captures relative differences in risks, while Table 10 illustrates substantive differences in predicted outcomes. The consistency across these metrics strengthens confidence in the robustness of the findings.

Overall, the results provide strong support for Hypothesis H1, confirming that entrepreneurs and non-entrepreneurs exhibit systematically different mobility outcomes. Hypothesis H1a is also strongly supported, as entrepreneurs are significantly more likely to experience upward mobility. Hypothesis H1b is not supported. Contrary to expectations of increased risk exposure, entrepreneurship does not appear to be associated with higher downward mobility in the observed sample.

4.2.3. Does the entrepreneurship type matter for intergenerational mobility?

Table 11 presents the results of the multinomial logistic regression examining the association between entrepreneurial autonomy and intergenerational mobility outcomes (Model B1), with horizontal mobility as the reference category and lower-autonomy self-employed individuals as the reference group for entrepreneurship. The model displays strong explanatory power (Pseudo $R^2 = 0.225$) and is estimated on 25,571 individuals.

The results reveal pronounced heterogeneity within the entrepreneurial population, indicating that entrepreneurship is not associated with a single mobility pattern. Instead,

mobility outcomes vary systematically according to entrepreneurial autonomy, consistent with the distinction between opportunity-driven and necessity-driven entrepreneurship.

High-autonomy entrepreneurs are dramatically more likely to experience upward mobility than lower-autonomy self-employed individuals (RRR = 14.213; $p < 0.01$). This implies that high-autonomy entrepreneurs are more than fourteen times as likely to experience upward rather than horizontal mobility, net of controls. This is an exceptionally large effect, highlighting the central role of entrepreneurial autonomy in shaping intergenerational mobility.

Non-entrepreneurs also exhibit a higher likelihood of upward mobility relative to lower-autonomy self-employed individuals (RRR = 3.643; $p < 0.01$), although the magnitude of this association is considerably smaller. This further underscores the disadvantaged position of lower-autonomy self-employment in mobility terms.

With respect to downward mobility, high-autonomy entrepreneurs are again associated with a zero relative risk (RRR = 0.000), reflecting the same separation issue identified previously. In contrast, lower-autonomy self-employed individuals appear significantly more exposed to downward mobility, as evidenced by the lower relative risk among non-entrepreneurs (RRR = 0.576; $p < 0.01$). This suggests that necessity-type entrepreneurship may be associated with higher vulnerability to downward mobility trajectories.

Table 11: Multinomial Logistic Regression of Intergenerational Occupational Mobility (Model B1)

Dependent variable: Intergenerational occupational mobility; Reference category: Horizontal mobility; Reference group for entrepreneurship: Lower-autonomy self-employment; Estimator: Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).

Variables	Upward mobility	Downward mobility
High-autonomy entrepreneurs	14.213***	0.000***
	(2.396)	(0.000)
Non-entrepreneurs	3.643***	0.576***
	(0.582)	(0.059)
Capability endowment	3.554***	0.485***
	(0.312)	(0.030)
Network embeddedness	0.742***	1.232***
	(0.030)	(0.065)
Cognitive dispositions	1.486***	0.885**
	(0.076)	(0.052)
Social origin	0.153***	1.770***
	(0.013)	(0.097)
Age	1.013	0.939***
	(0.010)	(0.011)
Age ²	1.000**	1.001***
	(0.000)	(0.000)
Female	2.170***	0.530***

Variables	Upward mobility	Downward mobility
	(0.137)	(0.035)
Migrant	0.629*** (0.040)	1.210 (0.147)
Conservative regime	0.855 (0.166)	1.080 (0.129)
Liberal regime	1.194 (0.228)	0.885 (0.126)
Southern regime	0.553*** (0.094)	0.760* (0.120)
Eastern regime	0.756 (0.150)	0.941 (0.126)
Constant	0.182*** (0.049)	2.855*** (0.894)
Observations	25,571	
LR χ^2	27674.06 (0.000)	
Pseudo R ²	0.2250	

Notes: Values are relative risk ratios (RRR) from a multinomial logit model (Model A1). Standard errors clustered at the country level (30 clusters) are reported in parentheses. Horizontal mobility is the base outcome in the estimation. *** p < 0.01, ** p < 0.05, * p < 0.10.

The predicted probabilities reported in Table 12 reinforce these findings. High-autonomy entrepreneurs display a markedly higher probability of upward mobility (0.6983), compared to lower-autonomy self-employed (0.2312) and non-entrepreneurs (0.4509). The difference relative to lower-autonomy self-employment corresponds to an increase of approximately 47 percentage points (+0.4671). This represents a substantively large difference, confirming the strong stratifying role of entrepreneurial autonomy.

By contrast, lower-autonomy self-employment is associated with a higher probability of horizontal mobility (0.5258) and a non-negligible probability of downward mobility (0.2430), indicating a stagnation-prone or risk-prone profile.

The predicted probabilities thus reveal two distinct mobility regimes: High-autonomy entrepreneurship is predominantly associated with upward mobility; Lower-autonomy self-employment is associated with persistence and downward mobility.

Table 12: Predicted probabilities and average marginal effects (AME) of intergenerational occupational mobility by entrepreneurial autonomy (Model B1)

Mobility Outcome	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs	Difference (AME)
Upward mobility	0.6983*** (0.015)	0.2312*** (0.019)	0.4509*** (0.011)	0.4671*** (0.022)
Horizontal mobility	0.3017*** (0.015)	0.5258*** (0.021)	0.4155*** (0.010)	-0.2241*** (0.027)
Downward mobility	0.0000*** (0.000)	0.2430*** (0.015)	0.1335*** (0.005)	-0.2430*** (0.015)

Notes: Values are predicted probabilities from multinomial logit model (Model B1); Standard errors (in parentheses) derived from delta method; “Difference” corresponds to the average marginal effect (high-autonomy entrepreneurial occupation minus low-autonomy self-employment); Horizontal mobility is the base outcome in the estimation but reported here as a predicted probability for completeness; *** p < 0.01, ** p < 0.05, * p < 0.1.

These findings combined provide strong support for Hypothesis H2, indicating that entrepreneurial motivations are systematically associated with distinct intergenerational mobility outcomes.

Hypothesis H2a is strongly supported, as opportunity-oriented entrepreneurs (high-autonomy) are substantially more likely to experience upward mobility trajectories than necessity-oriented entrepreneurs and non-entrepreneurs. Similarly, Hypothesis H2b is also supported, as necessity-driven entrepreneurs (lower-autonomy self-employed) are strongly associated with higher probabilities of horizontal and downward mobility, relative to opportunity-driven entrepreneurs.

The empirical evidence as a whole suggests that the mobility advantages commonly attributed to entrepreneurship are overwhelmingly concentrated among opportunity-oriented, high-autonomy entrepreneurial activities, whereas necessity-oriented forms of self-employment exhibit a markedly less favourable mobility profile. This reinforces the central argument that entrepreneurial heterogeneity is crucial for understanding the relationship between entrepreneurship and intergenerational mobility.

4.2.4. Is the relationship between entrepreneurship and intergenerational mobility mediated by resource endowments, network index, and cognitive dispositions?

To assess whether the relationship between entrepreneurial autonomy and intergenerational mobility operates through differences in resource endowments, network embeddedness, and cognitive dispositions, a series of nested multinomial logit models was estimated (Models C1–C5). Table 13 reports the main results for the upward mobility equation, while full model estimates are presented in Appendix B. The use of nested specifications allows for evaluating whether the inclusion of theoretically relevant variables attenuates the association between entrepreneurial autonomy and mobility, providing evidence consistent with mediation.

Across all specifications, entrepreneurial autonomy remains strongly and statistically significantly associated with upward mobility. In the baseline specification (Model C1), high-autonomy entrepreneurs exhibit substantially higher relative risk ratios (RRR) of upward mobility compared to lower-autonomy self-employed individuals. Importantly, this association remains large and relatively stable across all subsequent specifications, including those controlling for capability endowment (Model C2), network embeddedness (Model C3),

cognitive dispositions (Model C4), and the fully specified model (Model C5). The persistence of this coefficient across nested models indicates that the mobility advantage associated with high-autonomy entrepreneurship cannot be fully explained by the mediating mechanisms considered.

Capability endowment

When capability endowment is introduced in Model C2, the coefficient for high-autonomy entrepreneurs declines from 14.996 (C1) to 13.797 (C2), suggesting that part of the association between entrepreneurial autonomy and upward mobility operates through differences in human, financial, and institutional resources. This modest attenuation is consistent with partial mediation.

Moreover, capability endowments are a strong and highly significant predictor of upward mobility ($RRR = 3.375$; $p < 0.01$), and this effect remains robust in the full specification ($RRR = 3.554$; $p < 0.01$). Substantively, this implies that higher levels of combined human and economic resources are associated with a greater likelihood of upward mobility relative to horizontal mobility.

However, the inclusion of capability endowment does not substantially reduce the entrepreneurial autonomy coefficient, which remains large and statistically significant. The reduction from 14.996 to 13.797 indicates some attenuation, but not to an extent that would suggest that resource endowments constitute the primary transmission mechanism. Thus, capability endowments explain part, but not the majority, of the observed entrepreneurial advantage.

Consequently, the evidence provides partial support for Hypothesis H3. Resource endowments contribute to explaining why high-autonomy entrepreneurs experience more favourable mobility outcomes, but they do not fully account for this relationship. Similarly, Hypothesis H3a receives partial support, as capability endowments are strongly associated with upward mobility and explain a limited portion of the entrepreneurial advantage.

Network embeddedness

The inclusion of network embeddedness in Model C3 produces only negligible changes in the entrepreneurial autonomy coefficient (from 14.996 in C1 to 14.908 in C3). This absence

of attenuation suggests that network embeddedness does not mediate the relationship between entrepreneurial autonomy and mobility outcomes.

Network embeddedness is positively associated with upward mobility in Model C3 (RRR = 1.224; $p < 0.01$). However, it is important to clarify that in Model C5 the RRR for network embeddedness is 0.742 ($p < 0.01$), which indicates a *negative* association (values below 1 imply a lower relative risk of upward mobility relative to horizontal mobility, not a “negative coefficient” in linear terms). Thus, once additional controls are included, higher network embeddedness is associated with a reduced likelihood of upward mobility relative to horizontal mobility.

This reversal in sign suggests that the initial positive association between network embeddedness and mobility is likely confounded by correlated factors such as capability endowments and cognitive dispositions. In other words, network effects appear to overlap substantially with other dimensions of individual advantage.

More importantly, the near absence of attenuation in the entrepreneurial autonomy coefficient provides little evidence that network embeddedness functions as a meaningful transmission channel linking entrepreneurship to mobility outcomes. Instead, networks appear to operate as an independent correlate of mobility rather than as a mediating mechanism.

Accordingly, Hypothesis H4 is not supported, as the evidence does not indicate that network embeddedness mediates the relationship between entrepreneurial autonomy and mobility. Hypothesis H4a receives weak or conditional support, insofar as network embeddedness is associated with upward mobility in simpler specifications, but this relationship is not robust to the inclusion of other mechanisms.

Cognitive dispositions

The inclusion of cognitive dispositions in Model C4 produces only marginal changes in the entrepreneurial autonomy coefficient, which increases slightly from 14.996 (C1) to 15.631 (C4). This lack of attenuation (and slight increase) clearly contradicts a mediation interpretation, as mediating variables would be expected to reduce, not amplify, the focal coefficient.

At the same time, cognitive dispositions are positively and strongly associated with upward mobility (RRR = 1.722; $p < 0.01$), with the effect remaining robust in the full specification

(RRR = 1.486; $p < 0.01$). Thus, individuals with more future-oriented, risk-tolerant, and achievement-oriented dispositions are significantly more likely to experience upward mobility.

However, because the entrepreneurial autonomy coefficient remains unchanged, these results indicate that cognitive dispositions do not explain the higher mobility associated with high-autonomy entrepreneurship. Instead, they operate as an independent dimension of stratification affecting all individuals, regardless of entrepreneurial status.

Consequently, Hypothesis H5 is not supported in its mediation form. Hypothesis H5a receives partial support, as cognitive dispositions are positively associated with upward mobility, but they do not mediate the relationship between entrepreneurial autonomy and mobility outcomes.

Table 13: Nested Multinomial Logistic Regression of Intergenerational Occupational Mobility (Models C1-C5)

Dependent variable: Intergenerational occupational mobility; Reference category: Horizontal mobility; Multinomial logistic regression (RRR reported); Upward mobility equation only. Standard errors clustered at the country level (30 clusters).

Variables	Model C1 Baseline	Model C2 (+ Capability)	Model C3 (+ Networks)	Model C4 (+ Cognition)	Model C5 Full model (= B2)
Occupational entrepreneurship (High-autonomy)	14.996*** (2.724)	13.797*** (2.461)	14.908*** (2.708)	15.631*** (2.648)	14.213*** (2.396)
Occupational entrepreneurship (Non-entrepreneurs)	3.273*** (0.551)	3.077*** (0.519)	3.258*** (0.548)	4.122*** (0.652)	3.643*** (0.582)
Capability endowment		3.375*** (0.287)			3.554*** (0.312)
Network embeddedness			1.224*** (0.055)		0.742*** (0.030)
Cognitive dispositions				1.722*** (0.076)	1.486*** (0.076)
Social origin	0.255*** (0.015)	0.161*** (0.013)	0.253*** (0.015)	0.240*** (0.014)	0.153*** (0.013)
Age	1.044*** (0.009)	1.016* (0.010)	1.047*** (0.009)	1.049*** (0.009)	1.013 (0.010)
Age ²	0.999*** (0.000)	1.000*** (0.000)	0.999*** (0.000)	0.999*** (0.000)	1.000** (0.000)
Female	1.952*** (0.139)	2.084*** (0.133)	1.943*** (0.139)	2.038*** (0.148)	2.170*** (0.137)
Migrant	0.616*** (0.049)	0.614*** (0.040)	0.602*** (0.047)	0.604*** (0.046)	0.629*** (0.040)
Conservative regime	0.638** (0.118)	0.909 (0.174)	0.651** (0.122)	0.597*** (0.110)	0.855 (0.166)
Liberal regime	0.834 (0.149)	1.305 (0.234)	0.874 (0.149)	0.794 (0.146)	1.194 (0.228)
Southern regime	0.361*** (0.053)	0.647** (0.111)	0.383*** (0.056)	0.316*** (0.045)	0.553*** (0.094)

Variables	Model C1 Baseline	Model C2 (+ Capability)	Model C3 (+ Networks)	Model C4 (+ Cognition)	Model C5 Full model (= B2)
Eastern regime	0.448*** (0.069)	0.868 (0.163)	0.485*** (0.073)	0.417*** (0.066)	0.756 (0.150)
Constant	0.226*** (0.053)	0.192*** (0.050)	0.195*** (0.047)	0.154*** (0.036)	0.182*** (0.049)
Observations	25,572	25,572	25,572	25,571	25,571
LR χ^2	15534.07	20237.00	17870.85	21001.99	27674.06
Pseudo R ²	0.1620	0.2189	0.1632	0.1701	0.2250

Notes: Values are relative risk ratios (RRR) from multinomial logit model; Standard errors clustered at the country level (30 clusters) are reported in parentheses; Horizontal mobility is the base outcome in the estimation; *** p < 0.01, ** p < 0.05, * p < 0.1.

Overall interpretation of mediation results

The estimated results point to a predominantly non-mediated structure of entrepreneurial mobility effects. Among the proposed mechanisms, capability endowment emerges as the most relevant explanatory pathway, producing a modest attenuation of the entrepreneurial autonomy coefficient while exerting a strong independent association with upward mobility. By contrast, network embeddedness contributes little to explaining entrepreneurial differences, and cognitive dispositions appear to operate primarily as an independent correlate of mobility rather than as a mediating mechanism.

Crucially, the persistence of a large and highly significant entrepreneurial autonomy coefficient across all nested specifications indicates that entrepreneurial autonomy captures an additional dimension of advantage that is not fully observable through the included variables.

From a theoretical perspective, this result is particularly informative. Rather than reducing entrepreneurial autonomy to a mere function of resources, networks, or dispositions, the findings suggest that it constitutes an independent stratifying factor in intergenerational mobility processes. This may reflect unobserved factors such as selection, institutional positioning, market opportunities, or entrepreneurial returns to autonomy that are not fully captured in the available data.

Accordingly, the evidence supports a model of complementary, rather than fully mediating, mechanisms, in which resources, networks, and cognitive dispositions contribute to mobility outcomes but do not absorb the core effect of entrepreneurial autonomy. This reinforces the interpretation of entrepreneurship, particularly high-autonomy entrepreneurship, as a distinct channel of socioeconomic mobility.

4.2.5. Is the impact of entrepreneurship on intergenerational mobility moderated by social origin?

Table 14 presents the results of the multinomial logistic regression that introduced interaction terms between entrepreneurial autonomy and social origin (Model D1). The results indicate that the association between entrepreneurial autonomy and intergenerational mobility varies systematically across social backgrounds, providing clear evidence that social origin moderates the relationship between entrepreneurship and mobility outcome.

The main effect of high-autonomy entrepreneurship is strongly associated with upward mobility ($RRR = 2896.956$; $p < 0.01$). However, in models including interaction terms, the main effect cannot be interpreted independently, as it reflects the effect of entrepreneurship when social origin is equal to zero. Therefore, substantive interpretation must consider both the main and interaction effects jointly.

The interaction between high-autonomy entrepreneurship and social origin is strongly negative ($RRR \approx 0$; $p < 0.01$). Importantly, this does not imply a literal “zero effect,” but rather indicates an extremely strong negative moderation, likely amplified by quasi-complete separation in the data. Substantively, this suggests that the upward-mobility advantage associated with high-autonomy entrepreneurship declines as social origin increases.

This finding implies that entrepreneurial autonomy yields its strongest relative mobility returns among individuals from less advantaged social origins. However, this should be interpreted in relative, not absolute, terms, as the comparison is made against horizontal mobility within each group. Thus, rather than indicating that advantaged individuals do not benefit from entrepreneurship, the results suggest that the *relative advantage* is larger for disadvantaged individuals.

A similar moderating pattern emerges for non-entrepreneurs. Although non-entrepreneurial status is positively associated with upward mobility ($RRR = 3.078$; $p < 0.01$), the interaction with social origin is negative ($RRR = 0.627$; $p < 0.01$), indicating that the relative likelihood of upward mobility decreases as social origin increases. This reflects the well-known empirical tendency for upward mobility opportunities to be structurally constrained among already advantaged groups.

Regarding downward mobility, higher levels of social origin are associated with an increased relative risk of downward mobility among the reference group (lower-autonomy self-employed) ($RRR = 4.412$; $p < 0.01$). This does not imply that advantaged individuals are

more likely to experience downward mobility in absolute terms, but rather that their relative likelihood of downward versus horizontal mobility is higher within this framework.

For non-entrepreneurs, the negative interaction term ($RRR = 0.371$; $p < 0.01$) indicates that the relative risk of downward mobility is attenuated compared to lower-autonomy self-employed individuals. For high-autonomy entrepreneurs, the interaction effect in the downward-mobility equation must be interpreted with caution due to quasi-complete separation, as downward mobility is virtually absent in this group, resulting in unstable or extreme estimates.

Table 14: Multinomial Logistic Regression of Intergenerational Occupational Mobility with Social-Origin Moderation (Model D1)

Dependent variable: Intergenerational occupational mobility; Reference category: Horizontal mobility; Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).

Variables	Upward mobility	Downward mobility
High-autonomy entrepreneurs	2896.956***	0.000***
	(3790.355)	(0.000)
Non-entrepreneurs	3.078***	0.654***
	(0.500)	(0.070)
Social origin	0.285***	4.412***
	(0.049)	(0.506)
High-autonomy X Social origin	0.000***	0.001***
	(0.000)	(0.001)
Non-entrepreneurs X Social origin	0.627***	0.371***
	(0.105)	(0.051)
Capability endowment	3.522***	0.490***
	(0.315)	(0.030)
Network embeddedness	0.748***	1.235***
	(0.030)	(0.068)
Cognitive dispositions	1.466***	0.898*
	(0.072)	(0.053)
Age	1.014	0.937***
	(0.010)	(0.011)
Age ²	1.000**	1.001***
	(0.000)	(0.000)
Female	2.203***	0.534***
	(0.141)	(0.037)
Migrant	0.622***	1.186
	(0.040)	(0.146)
Conservative regime	0.896	1.054
	(0.169)	(0.125)
Liberal regime	1.257	0.865
	(0.233)	(0.119)
Southern regime	0.597***	0.792
	(0.100)	(0.120)
Eastern regime	0.774	0.898
	(0.150)	(0.121)
Constant	0.202***	2.776***
	0.054	(0.849)
Observations	25,571	

Variables	Upward mobility	Downward mobility
LR χ^2	—	
Pseudo R ²	0.2422	

Notes: Values are relative risk ratios (RRR) from multinomial logit model; Standard errors clustered at the country level (30 clusters) are reported in parentheses; Horizontal mobility is the base outcome in the estimation; *** p < 0.01, ** p < 0.05, * p < 0.1; LR χ^2 not reported due to model specification (interaction effects and quasi-complete separation).

Because interaction effects in multinomial logit models are difficult to interpret directly from relative risk ratios, substantive interpretation relies primarily on predicted probabilities derived from post-estimation margins. The results reported in Tables 15 and 16 provide a clearer picture of the moderating role of social origin.

For upward mobility, the predicted probabilities reveal that high-autonomy entrepreneurship is associated with exceptionally high probabilities of upward mobility among individuals from disadvantaged social backgrounds. At low levels of social origin, the predicted probability of upward mobility approaches unity among high-autonomy entrepreneurs, whereas the corresponding probabilities are substantially lower among lower-autonomy self-employed individuals and non-entrepreneurs.

More importantly, the entrepreneurial advantage declines sharply as social origin increases. The decline is particularly steep for high-autonomy entrepreneurs, whose probability of upward mobility falls dramatically at higher levels of social origin. By contrast, the decline among non-entrepreneurs is more gradual.

However, this steep decline should be interpreted with caution. The extreme probabilities (close to 1 or 0) likely reflect quasi-complete separation in the data rather than precise population-level probabilities. Therefore, the key takeaway is not the exact level of probabilities but the strong interaction pattern indicating heterogeneity in returns.

These patterns suggest that entrepreneurship, particularly in high-autonomy forms, may provide relatively stronger mobility opportunities for individuals starting from disadvantaged positions. This is consistent with a relative “compensatory advantage” interpretation, rather than a strict equalizing effect.

The downward mobility margins reinforce this interpretation. Among lower-autonomy self-employed individuals, the probability of downward mobility increases substantially with social origin, rising from low levels among disadvantaged individuals to very high levels among advantaged individuals. Non-entrepreneurs display a similar but less pronounced pattern.

For high-autonomy entrepreneurs, downward mobility remains virtually absent across the entire social-origin distribution. Again, this should be interpreted cautiously, as it reflects the near absence of observed downward transitions in this group rather than a generalizable structural relationship.

Table 15: Predicted probabilities of upward mobility by social origin and entrepreneurial status

Derived from margins ent_autonomy, at(social_origin=(-1.5(0.5)2)) predict(outcome(1))

Social Origin	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs
-1.5	1.000***	0.655***	0.893***
	(0.000)	(0.042)	(0.010)
-1.0	1.000***	0.524***	0.794***
	(0.000)	(0.033)	(0.012)
-0.5	1.000***	0.384***	0.648***
	(0.000)	(0.024)	(0.013)
0.0	0.998***	0.252***	0.472***
	(0.002)	(0.024)	(0.012)
0.5	0.852***	0.143***	0.301***
	(0.071)	(0.024)	(0.012)
1.0	0.085***	0.069***	0.167***
	(0.023)	(0.019)	(0.010)
1.5	0.001	0.028**	0.081***
	(0.001)	(0.011)	(0.008)
2.0	0.000	0.009*	0.036***
	(0.000)	(0.005)	(0.005)

Table 16: Predicted probabilities of downward mobility by social origin and entrepreneurial status

Derived from margins ent_autonomy, at(social_origin=(-1.5(0.5)2)) predict(outcome(3))

Social Origin	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs
-1.5	0.000**	0.017***	0.016***
	(0.000)	(0.003)	(0.002)
-1.0	0.000***	0.044***	0.035***
	(0.000)	0.005	(0.003)
-0.5	0.000***	0.102***	0.068***
	(0.000)	(0.009)	(0.005)
0.0	0.000***	0.207***	0.116***
	(0.000)	(0.017)	(0.006)
0.5	0.000***	0.362***	0.173***
	(0.000)	(0.030)	(0.006)
1.0	0.000***	0.544***	0.235***
	(0.000)	(0.042)	(0.007)
1.5	0.000	0.713***	0.297***
	(0.000)	(0.044)	(0.011)
2.0	0.000	0.838***	0.357***
	(0.000)	(0.036)	(0.018)

Taken together, these findings provide clear support for Hypothesis H6, as social origin moderates the relationship between entrepreneurship and mobility outcomes.

However, Hypothesis H6a is not supported. Contrary to expectations, entrepreneurs from more advantaged social origins are not more likely to experience upward mobility. Instead, the relative mobility advantage associated with high-autonomy entrepreneurship is stronger among individuals from less advantaged backgrounds.

Hypothesis H6b is also not supported. Although lower-autonomy self-employment is associated with less favourable outcomes, the probability of downward mobility increases with social origin rather than being concentrated among disadvantaged individuals. This result likely reflects the structure of relative comparisons (against horizontal mobility) rather than absolute risk exposure.

Overall, the evidence suggests that entrepreneurial autonomy does not primarily operate as a mechanism of social reproduction. Instead, it appears to generate relatively larger mobility returns for individuals originating from disadvantaged backgrounds.

However, it is important to emphasise that this should not be interpreted as a fully compensatory or equalizing mechanism. Rather, the results indicate that entrepreneurship, especially high-autonomy entrepreneurship, amplifies mobility differentially across the social-origin distribution. Thus, the findings are most consistent with a model of conditional or heterogeneous returns to entrepreneurship, in which the relative benefits are greater for disadvantaged individuals, while absolute advantages may remain linked to initial endowments.

4.2.6. Is the impact of entrepreneurship on intergenerational mobility moderated by welfare regime types?

To assess whether the mobility returns to entrepreneurship vary across welfare regimes, Model E1 introduced interaction terms between entrepreneurial autonomy and each welfare condition. The results provide only limited and inconsistent evidence that welfare regimes systematically moderate the relationship between entrepreneurship and intergenerational mobility.

The main coefficient for high-autonomy entrepreneurship remains strongly positive and statistically significant in the upward-mobility equation ($RRR = 26.503$, $p < 0.01$), indicating that high-autonomy entrepreneurs are substantially more likely than lower-autonomy self-employed individuals to experience upward mobility within the reference category of Social

Democratic welfare regimes. As in previous interaction models, however, this coefficient reflects the effect at the reference category and must be interpreted jointly with interaction terms.

All interaction coefficients between high-autonomy entrepreneurship and welfare regimes are below unity, suggesting that the relative mobility advantage may be somewhat lower outside Social-democratic contexts. However, none of these interaction terms are statistically significant, and therefore there is no robust evidence that the upward-mobility association of high-autonomy entrepreneurship differs across welfare regimes.

Accordingly, the estimates do not support the existence of systematic institutional moderation for high-autonomy entrepreneurs. This is an important result: despite cross-national differences in welfare-state arrangements, the relative mobility advantage associated with high-autonomy entrepreneurship appears stable.

By contrast, several interaction effects involving non-entrepreneurs are statistically significant. In particular, the interaction terms for Conservative (RRR = 0.516; $p < 0.05$), Southern (RRR = 0.318; $p < 0.01$), and Eastern regimes (RRR = 0.253; $p < 0.01$) are negative and significant in the upward-mobility equation. This indicates that, relative to Social-democratic regimes, the upward-mobility advantage of non-entrepreneurs is weaker in these institutional contexts.

Importantly, these are relative comparisons to horizontal mobility and to the reference group; they do not imply that absolute mobility levels are necessarily lower, but rather that the relative likelihood of upward mobility differs across regimes. Overall, these findings suggest that welfare regimes may influence mobility outcomes more strongly for non-entrepreneurs than for high-autonomy entrepreneurs.

Regarding downward mobility, the results are broadly consistent with previous models. High-autonomy entrepreneurs again display a near-zero relative risk of downward mobility, reflecting the absence of downward transitions in this group and the associated quasi-complete separation issue. Therefore, these coefficients should not be interpreted as structural protection against downward mobility but rather as a limitation of the estimation sample.

Most interaction terms involving welfare regimes in the downward-mobility equation are statistically insignificant, indicating limited evidence that institutional context systematically alters downward-mobility risks, particularly for high-autonomy entrepreneurs.

Table 17: Multinomial Logistic Regression of Intergenerational Occupational Mobility with Social-Origin Moderation (Model E1)

Dependent variable: Intergenerational occupational mobility; Reference category: Horizontal mobility; Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).

Variables	Upward mobility	Downward mobility
High-autonomy entrepreneurs	26.503***	0.000***
	(10.997)	(0.000)
Non-entrepreneurs	10.377***	0.499***
	(2.582)	(0.046)
Conservative	1.582	1.136
	(0.563)	(0.142)
Liberal	1.979	1.361
	(1.064)	(0.427)
Southern	1.551	0.513***
	(0.548)	(0.076)
Eastern	2.682**	0.772
	(1.102)	(0.136)
High-autonomy X Conservative	0.622	0.902
	(0.286)	(0.678)
High-autonomy X Liberal	0.439	0.805
	(0.321)	(0.771)
High-autonomy X Southern	0.806	2.623
	(0.374)	(2.079)
High-autonomy X Eastern	0.491	1.228
	(0.255)	(0.849)
Non-entrepreneurs X Conservative	0.516**	0.946
	(0.136)	(0.143)
Non-entrepreneurs X Liberal	0.611	0.593**
	(0.332)	(0.139)
Non-entrepreneurs X Southern	0.318***	1.614***
	(0.090)	(0.203)
Non-entrepreneurs X Eastern	0.253***	1.245
	(0.098)	(0.206)
Capability endowment	3.557***	0.485***
	(0.316)	(0.030)
Network embeddedness	0.743***	1.233***
	(0.030)	(0.066)
Cognitive dispositions	1.476***	0.892**
	(0.074)	(0.051)
Age	1.011	0.941***
	(0.010)	(0.011)
Age ²	1.000*	1.001***
	(0.000)	(0.000)
Female	2.174***	0.530***
	(0.137)	(0.036)
Migrant	0.623***	1.201
	(0.039)	(0.148)
Social origin	0.152***	1.771***
	(0.013)	(0.097)
Constant	0.071***	3.130***
	(0.027)	(0.793)
Observations	25,571	

Variables	Upward mobility	Downward mobility
LR χ^2	—	
Pseudo R ²	0.2270	

Notes: Values are relative risk ratios (RRR) from multinomial logit model; Standard errors clustered at the country level (30 clusters) are reported in parentheses; Horizontal mobility is the base outcome in the estimation; *** p < 0.01, ** p < 0.05, * p < 0.1; LR χ^2 not reported due to model specification (interaction effects and quasi-complete separation).

Because interaction effects in multinomial logit models are difficult to interpret directly from relative risk ratios, predicted probabilities derived from post-estimation margins provide a clearer and more intuitive interpretation (Tables 18 and 19).

For upward mobility, high-autonomy entrepreneurs exhibit remarkably stable predicted probabilities across welfare regimes, ranging from 0.6641 in Liberal regimes to 0.7199 in Eastern regimes. This relatively narrow range (approximately six percentage points) strongly suggests that the mobility advantage associated with high-autonomy entrepreneurship is largely invariant across institutional contexts.

By contrast, lower-autonomy self-employed individuals display greater cross-national variation. Their predicted probabilities range from 0.1418 in Social-democratic regimes to 0.2712 in Eastern regimes. This larger dispersion indicates that institutional context plays a more important role for necessity-driven (low-autonomy) entrepreneurship than for high-autonomy entrepreneurial activity.

Among non-entrepreneurs, upward-mobility probabilities also vary across regimes, with the highest levels observed in Liberal systems (0.5416) and the lowest in Southern regimes (0.3911). This reinforces the interpretation that institutional context is more consequential for standard labour-market trajectories than for high-autonomy entrepreneurial pathways.

Turning to downward mobility, high-autonomy entrepreneurs again exhibit predicted probabilities close to zero across all welfare regimes. As previously noted, these boundary values reflect the empirical absence of downward mobility cases in this group and should be interpreted cautiously.

Among lower-autonomy self-employed individuals, downward mobility is substantially more prevalent and varies across welfare regimes. The highest probabilities are observed in Liberal (0.3315), Conservative (0.3059), and Social-democratic (0.2948) regimes, while Southern (0.1808) and Eastern (0.2250) regimes show lower probabilities. This variation indicates that institutional environments may shape the risks associated with necessity-driven entrepreneurship. However, the pattern does not align neatly with standard welfare-state expectations.

Table 18: Predicted probabilities of upward mobility by welfare regime and entrepreneurial status
Derived from margins welfare5#ent_autonomy, predict(outcome(1))

Welfare Regime	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs
Social-democratic	0.6837***	0.1418***	0.5045***
	(0.026)	(0.034)	(0.026)
Conservative	0.6815***	0.1885***	0.4684***
	(0.025)	(0.016)	(0.020)
Liberal	0.6641***	0.2099***	0.5416***
	(0.035)	(0.042)	(0.018)
Southern	0.7134***	0.2056***	0.3911***
	(0.013)	(0.015)	(0.011)
Eastern	0.7199***	0.2712***	0.4409***
	(0.017)	(0.037)	(0.023)

Table 19: Predicted probabilities of downward mobility by welfare regime and entrepreneurial status
Derived from margins welfare5#ent_autonomy, predict(outcome(3))

Welfare Regime	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs
Social-democratic	0.0000*	0.2948***	0.1286***
	(0.000)	(0.021)	(0.011)
Conservative	0.0000**	0.3059***	0.1421***
	(0.000)	(0.020)	(0.009)
Liberal	0.0000*	0.3315***	0.1045***
	(0.000)	(0.042)	(0.009)
Southern	0.0000**	0.1808***	0.1297***
	(0.000)	(0.017)	(0.009)
Eastern	0.0000***	0.2250***	0.1362***
	(0.000)	(0.022)	(0.008)

Overall, the findings provide limited support for Hypothesis H7. While some variation in mobility outcomes across welfare regimes is observed, particularly among lower-autonomy self-employed individuals and non-entrepreneurs, the mobility advantage associated with high-autonomy entrepreneurship remains remarkably stable across institutional contexts.

Hypothesis H7a receives partial but inconclusive support. Although necessity-driven entrepreneurs exhibit variation in downward-mobility risks across regimes, the pattern does not conform to theoretical expectations. Lower risks are observed in Southern and Eastern regimes rather than in more generous Social-democratic systems. This suggests that factors beyond welfare generosity, such as labour-market structure or selection into self-employment, may be driving these differences.

Hypothesis H7b is not supported. Opportunity-driven entrepreneurs display consistently high probabilities of upward mobility across all welfare regimes, and the interaction effects with institutions are statistically insignificant. This indicates that the returns to high-autonomy entrepreneurship are largely independent of institutional context.

In synthesis, the results indicate that entrepreneurial autonomy constitutes a robust and relatively context-invariant pathway to upward mobility. While welfare regimes shape the mobility outcomes of lower-autonomy self-employed individuals and non-entrepreneurs, their influence on high-autonomy entrepreneurial trajectories appears limited. These findings suggest that high-autonomy entrepreneurship operates as a form of labour-market positioning that transcends institutional constraints, whereas other labour-market trajectories remain more sensitive to national institutional environments. Consequently, the results point to a weaker-than-expected role of institutional moderation, qualifying the theoretical expectation that welfare regimes systematically shape entrepreneurial mobility outcomes.

4.2.7. Robustness checks

To assess the robustness of the main findings, two complementary checks were conducted. First, the analysis was re-estimated using intergenerational educational mobility as an alternative dependent variable. Second, all baseline models were re-estimated using ESS post-stratification weights. The detailed results of these robustness tests are presented in Appendix B and Appendix C.

The estimations based on intergenerational educational mobility reveal patterns broadly consistent with those obtained for occupational mobility. In particular, occupational entrepreneurs continue to display a higher likelihood of upward mobility relative to non-entrepreneurs, confirming that the main association does not depend on the specific operationalization of mobility. Similarly, high-autonomy entrepreneurs consistently outperform both lower-autonomy self-employed individuals and non-entrepreneurs, exhibiting higher predicted probabilities of upward mobility. Although the magnitude of these differences is smaller than in the occupational mobility models, the directional consistency strengthens the robustness of the central findings.

Nonetheless, some differences emerge regarding the distribution of mobility outcomes. In contrast to the occupational mobility results, horizontal educational mobility becomes the most prevalent outcome across all entrepreneurial categories. Additionally, downward mobility among high-autonomy entrepreneurs is no longer negligible. Specifically, approximately 5% of high-autonomy entrepreneurs experience downward educational mobility, which contrasts with the near absence of such cases in the occupational mobility specification. This difference is methodologically important, as it eliminates the quasi-

complete separation observed in the occupational models and allows for more stable estimation of downward-mobility risks.

The robustness analysis of the mediating mechanisms also confirms patterns consistent with the baseline results. Capability endowment continues to partially account for the mobility advantage associated with high-autonomy entrepreneurship, while network embeddedness and cognitive dispositions remain significant predictors of mobility outcomes but exhibit limited explanatory power in accounting for differences between entrepreneurial groups. This reinforces the interpretation that these variables act as complementary, rather than dominant, mechanisms in shaping mobility trajectories.

Similarly, the moderating role of social origin remains robust across specifications. The upward mobility advantage associated with high-autonomy entrepreneurship persists and continues to be relatively stronger among individuals from less advantaged social backgrounds. This consistency across occupational and educational measures strengthens the validity of the heterogeneous effects identified in the main analysis.

By contrast, institutional context again shows limited moderating influence. Differences in predicted probabilities across welfare regimes remain relatively modest, and the interaction effects do not exhibit consistent or statistically robust patterns. This further supports the conclusion that the mobility returns to high-autonomy entrepreneurship are largely independent of institutional context.

Taken together, these results provide strong support for the overall robustness of the main findings across different operationalizations of intergenerational mobility. Entrepreneurship remains a key mechanism shaping mobility trajectories, whether mobility is measured through occupational status or educational attainment. This suggests that the role of entrepreneurship extends across multiple dimensions of social stratification, reinforcing its analytical relevance.

Finally, the weighted estimations using ESS post-stratification weights corroborate the robustness of the primary occupational findings. Re-estimating baseline models A1 and B1 with weights yields results that are highly consistent with the unweighted specifications, as the direction, magnitude, and statistical significance of the estimated relative risk ratios and predicted probabilities remain largely unchanged.

This stability indicates that the results are not driven by sample composition or unequal representation across countries. Rather, the similarity between weighted and unweighted

estimates suggests that the ESS sample provides a reliable basis for inference and that the findings are broadly representative of the populations covered in the survey.

Overall, the robustness checks substantially strengthen confidence in the empirical results, demonstrating that the observed relationships between entrepreneurship and intergenerational mobility are stable across alternative model specifications, measurement strategies, and sampling adjustments.

4.2.8. Hypotheses appraisal and control variables

Given the large number of hypotheses examined throughout the empirical analysis, Table 20 provides a consolidated assessment of the extent to which each hypothesis is supported by the evidence. This summary facilitates interpretation by distinguishing between hypotheses that receive full support, partial or weak support, or no empirical support, thereby highlighting the principal contributions of the study. It also enables a systematic alignment between the theoretical expectations developed in Section 2 and the empirical evidence presented in Section 4.

Table 20: Synthesis of the hypotheses assessment

Topic	Hypothesis	Assessment
Entrepreneurship and mobility outcomes	H1: Entrepreneurs exhibit different intergenerational mobility outcomes than non-entrepreneurs	Supported
	H1a: Entrepreneurs are more likely than non-entrepreneurs to experience upward intergenerational mobility.	Supported
	H1b: Entrepreneurs are also more exposed to downward mobility risks than non-entrepreneurs.	Not supported
Entrepreneurial heterogeneity (opportunity vs necessity entrepreneurship)	H2: Entrepreneurial motivations are systematically associated with intergenerational mobility outcomes.	Supported
	H2a: Opportunity-driven entrepreneurs are more likely to experience upward intergenerational mobility than necessity-driven entrepreneurs.	Supported
	H2b: Necessity-driven entrepreneurs are more likely to experience horizontal or downward mobility than opportunity-driven entrepreneurs.	Supported
Resource endowments and capital accumulation	H3: The relationship between entrepreneurial motivations and mobility outcomes is mediated by access to resources and capital endowment.	Partially supported
	H3a: Opportunity-driven entrepreneurs have greater access to financial and human capital, which increases their likelihood of upward mobility.	Supported (limited explanatory role)
Network embeddedness	H4: The relationship between entrepreneurial motivations and mobility outcomes is mediated by embeddedness in entrepreneurial networks.	Not supported

Topic	Hypothesis	Assessment
	H4a: Entrepreneurs with broader and more resource-rich networks experience more favourable mobility outcomes.	Limited support
Cognitive dispositions and entrepreneurial habitus	H5: The relationship between entrepreneurial motivations and mobility outcomes is mediated by habitus-related cognitive dispositions.	Not supported
	H5a: Future-oriented and risk-tolerant dispositions increase the likelihood of upward mobility among entrepreneurs	Limited support
Social origin as a moderator	H6: Social origin moderates the relationship between entrepreneurship and mobility outcomes.	Supported (with effects opposite to expectations)
	H6a: Entrepreneurs from advantaged social origins are more likely to experience upward mobility than entrepreneurs from disadvantaged origins.	Not supported
	H6b: Necessity-driven entrepreneurship is more strongly associated with downward or horizontal mobility among individuals from disadvantaged backgrounds.	Not supported
Welfare regimes and institutional context	H7: Welfare regimes moderate the relationship between entrepreneurship and mobility outcomes.	Limited support
	H7a: In more generous and coordinated welfare regimes, necessity-driven entrepreneurs face lower risks of downward mobility.	Weak support (not consistent with theory)
	H7b: Opportunity-driven entrepreneurship yields higher mobility returns in institutional contexts characterized by strong entrepreneurial ecosystems and social protection.	Not supported

Collectively, the empirical evidence provides strong support for the argument that entrepreneurship constitutes an important mechanism shaping intergenerational occupational mobility, although the magnitude and nature of its effects vary substantially across entrepreneurial forms. This reinforces the central premise of the study that entrepreneurship operates as a differentiated and stratified mobility channel rather than a homogeneous labour-market experience.

The results confirm that entrepreneurs and non-entrepreneurs exhibit systematically different mobility outcomes (H1), with entrepreneurship being strongly associated with upward mobility but not with greater exposure to downward mobility. Importantly, the absence of a positive association with downward mobility should be interpreted in light of the quasi-complete separation observed in the data for high-autonomy entrepreneurs, rather than as evidence of universal protection against downward risk. Hypothesis H1a is therefore strongly supported, while H1b is not supported.

Substantial heterogeneity is observed within the entrepreneurial population (H2). Upward mobility is overwhelmingly concentrated among high-autonomy, opportunity-oriented

entrepreneurs, whereas lower-autonomy self-employment is associated with comparatively less favourable mobility trajectories, including a higher prevalence of horizontal and downward mobility. These findings confirm that entrepreneurial motivations, proxied through occupational autonomy, constitute a central dimension structuring mobility outcomes. Accordingly, H2, H2a, and H2b are all supported.

The analysis of mediating mechanisms indicates that capability endowments partially account for the mobility advantage associated with high-autonomy entrepreneurship, providing partial support for H3 and H3a. However, the relatively limited attenuation of the entrepreneurship coefficient across nested models suggests that resource endowments do not fully explain this relationship. Thus, while access to capital and skills is an important component of entrepreneurial success, it does not exhaust the mechanisms underlying mobility advantages.

By contrast, neither network embeddedness (H4) nor cognitive dispositions (H5) emerge as meaningful mediating channels. Although both are significantly associated with mobility outcomes, their inclusion does not substantially reduce the magnitude of the entrepreneurial autonomy coefficient, indicating that they operate as complementary or independent factors rather than as transmission mechanisms. Consequently, H4 and H5 are not supported in their mediation form, while H4a and H5a receive only limited support, reflecting their independent association with mobility outcomes.

The moderation analyses further reveal that entrepreneurial mobility returns are socially conditioned. Social origin significantly moderates the relationship between entrepreneurship and mobility (H6), although the direction of this moderation differs from the initial theoretical expectation. Specifically, the upward-mobility advantage associated with high-autonomy entrepreneurship is stronger among individuals from less advantaged social backgrounds and declines as social origin improves. This pattern should be interpreted as a relative effect, indicating that entrepreneurial autonomy yields larger marginal mobility gains at lower points of the social-origin distribution. As a result, H6 is supported at a general level, but H6a and H6b are not supported.

With respect to institutional moderation, welfare regimes exert only a limited influence on the entrepreneurship–mobility relationship (H7). While some variation in mobility outcomes is observed across institutional contexts, particularly among lower-autonomy self-employed individuals and non-entrepreneurs, the mobility advantage associated with high-autonomy entrepreneurship remains remarkably stable across regimes. The absence of statistically

significant interaction effects for high-autonomy entrepreneurs indicates that their mobility returns are largely invariant across institutional contexts.

Hypothesis H7a receives only partial support, as variations in downward mobility among necessity-driven entrepreneurs are observed across regimes, but the pattern does not align with theoretical expectations regarding welfare-state generosity. Hypothesis H7b is not supported, as opportunity-driven entrepreneurs do not exhibit significantly higher returns in stronger institutional environments.

Control variables

The control variables display consistent patterns across model specifications. Female respondents are positively associated with upward mobility and negatively associated with downward mobility, relative to horizontal mobility. This likely reflects structural differences in educational attainment and occupational transitions across genders in the sample. Conversely, migrant status is negatively associated with upward mobility and positively associated with downward mobility, indicating persistent structural disadvantages in labour-market integration and mobility opportunities for migrants.

Overall synthesis

On balance, the evidence points to entrepreneurial autonomy as a robust and largely independent pathway to upward intergenerational mobility. While resources, social background, and institutional environments influence mobility outcomes, the distinction between high-autonomy (opportunity-driven) and low-autonomy (necessity-driven) entrepreneurship emerges as the central factor structuring mobility trajectories. Importantly, the findings suggest that entrepreneurship cannot be understood as a uniform mechanism of mobility. Instead, its effects are highly conditional, depending on the type of entrepreneurial engagement and the interaction between individual and structural factors. High-autonomy entrepreneurship is consistently associated with strong upward mobility, whereas lower-autonomy self-employment exhibits a more constrained and risk-prone mobility profile. These results support a stratified and context-sensitive view of entrepreneurship, in which entrepreneurial autonomy constitutes a key channel of socioeconomic advancement, but one that operates alongside, rather than fully through, resources, networks, dispositions, and institutional conditions.

5. Conclusion

Motivated by the widespread view of entrepreneurship as a vehicle for socioeconomic advancement, despite mixed empirical evidence regarding its mobility outcomes (Brändle & Kuckertz, 2023; Brändle et al., 2025; Lindquist & Vladasel, 2025), this study set out to provide a comprehensive understanding of how, for whom, and under which conditions entrepreneurship contributes to intergenerational mobility.

Despite a growing body of literature on entrepreneurship and social mobility, empirical research remains limited, particularly in cross-national comparative settings. To address this gap, this study leveraged data from the European Social Survey Round 11 to examine the association between entrepreneurship and intergenerational socioeconomic mobility across European countries using a harmonized analytical framework.

The empirical analysis was guided by the conceptualization of entrepreneurship as a socially embedded activity, in which mobility outcomes are shaped not only by entrepreneurial motivations, but also by the social, economic, and institutional contexts in which entrepreneurial activity takes place. This perspective enabled an integrated assessment of direct effects, mediating mechanisms, and moderating conditions.

5.1. Main findings

The results demonstrate that entrepreneurship is positively associated with upward intergenerational mobility relative to non-entrepreneurship. However, this advantage is highly uneven across entrepreneurial forms. Individuals engaged in high-autonomy entrepreneurship exhibit substantially higher probabilities of upward mobility, while lower-autonomy self-employment is associated with comparatively less favourable mobility trajectories.

This evidence is consistent with prior research highlighting the heterogeneous nature of entrepreneurship and its differentiated returns (Bögenhold, 2019; Dilli et al., 2018; Rider et al., 2023), as well as with studies distinguishing opportunity- and necessity-driven entrepreneurship in shaping economic outcomes (Acs, 2006; van Stel et al., 2023).

Regarding mediating mechanisms, capability endowments, network embeddedness, and cognitive dispositions are all significantly associated with mobility outcomes. However, only capability endowments partially explain the mobility advantage of high-autonomy entrepreneurs. Network embeddedness and cognitive dispositions, although relevant

predictors of mobility, do not operate as substantive mediating channels. This suggests that entrepreneurial autonomy captures an additional dimension of advantage that goes beyond observable resources and individual traits.

The moderation analysis reveals that social origin significantly conditions entrepreneurial mobility outcomes. Contrary to theoretical expectations, the relative mobility advantage associated with high-autonomy entrepreneurship is strongest among individuals from less advantaged social backgrounds and diminishes as social origin improves. This indicates that entrepreneurial autonomy generates relatively larger marginal mobility gains for disadvantaged individuals, although not necessarily equalizing outcomes in absolute terms.

In contrast, institutional context exerts a more limited influence. Welfare regimes do not significantly alter the mobility advantage associated with high-autonomy entrepreneurship, which remains largely stable across countries. Institutional differences are more relevant for lower-autonomy self-employment and non-entrepreneurial trajectories, suggesting that necessity-driven pathways are more sensitive to contextual conditions.

5.2. Main contributions

This study contributes to the literature on entrepreneurship and social stratification by advancing a multi-dimensional and stratified understanding of entrepreneurial mobility outcomes.

From a theoretical perspective, the findings challenge the view of entrepreneurship as a uniformly beneficial mechanism of social mobility. Instead, they support a framework in which entrepreneurship operates as a differentiated and socially embedded process, consistent with recent calls to conceptualize entrepreneurship as a stratified mobility channel shaped by social structure and unequal access to resources (Brändle et al., 2025; Rider et al., 2023). In doing so, the study contributes to a growing body of research emphasizing the role of social class origin in shaping entrepreneurial trajectories (Brändle & Kuckertz, 2023; Ge et al., 2022; Lindquist & Vlasel, 2025).

Empirically, the study provides novel cross-national evidence using harmonized data from the European Social Survey. By simultaneously analysing entrepreneurial heterogeneity, mediating mechanisms, and moderating factors, it extends existing research on intergenerational mobility in Europe (Breen & Jonsson, 2005; Bukodi et al., 2020) by explicitly integrating entrepreneurship into a comparative mobility framework. This responds

to recent calls for more systematic and cross-national evidence on entrepreneurial mobility outcomes (Lindquist & Vladasel, 2025).

Methodologically, the study contributes in several ways. First, it adopts a multinomial modelling framework that captures upward, horizontal, and downward mobility trajectories, aligning with recent work emphasizing the importance of multidirectional mobility analysis (Bukodi et al., 2020; Mazumder & Acosta, 2015). Second, it integrates mediation and moderation analyses within a unified empirical design, allowing for a more comprehensive assessment of mechanisms and conditional effects. Third, the use of occupational autonomy as a proxy for entrepreneurial motivation offers a practical and theoretically grounded solution in contexts where direct measures are unavailable, complementing existing approaches that distinguish between opportunity- and necessity-driven entrepreneurship (Reynolds et al., 2002; van der Zwan et al., 2016).

5.3. Policy implications

The findings carry important policy implications. While entrepreneurship is associated with upward mobility, this relationship is highly dependent on the form of entrepreneurial activity. Policies focused solely on increasing rates of self-employment are unlikely to produce meaningful improvements in mobility outcomes, a concern echoed in prior research highlighting the heterogeneity of entrepreneurship and its uneven economic returns (Acs, 2006; Margolis, 2014; Sternberg & Wennekers, 2005).

Instead, policy efforts should prioritise the promotion of high-autonomy, resource-intensive entrepreneurial activities. This requires strengthening the broader conditions that enable opportunity-oriented entrepreneurship, including human capital accumulation and access to financial resources, which have been consistently identified as key drivers of entrepreneurial success (Clough et al., 2019; Levine & Rubinstein, 2017).

Targeted support for individuals from disadvantaged backgrounds may be particularly effective. This is consistent with evidence that institutional and individual resources can help alleviate structural barriers to upward mobility (Boudreaux, 2014; OCDE, 2018), thereby enhancing the mobility potential of entrepreneurship.

5.4. Limitations and directions for future research

Despite its contributions, the study presents several limitations that open avenues for future research.

First, the absence of direct measures of entrepreneurial motivation in the ESS data represents a key limitation. Although autonomy-based typologies provide a useful proxy, future research would benefit from datasets that explicitly distinguish between opportunity- and necessity-driven entrepreneurship, allowing for more precise empirical testing.

Second, the mediation analysis is associational rather than causal. While the nested modelling strategy provides insight into potential mechanisms, it does not identify causal relationships. Future studies should explore longitudinal designs or quasi-experimental approaches to better capture the dynamic interplay between entrepreneurship, resources, and mobility outcomes.

Third, the persistence of a strong entrepreneurship effect suggests the presence of unobserved factors, such as selection processes, institutional positioning, or market conditions, that are not fully captured in the current framework. Investigating these dimensions represents a promising direction for future research.

These limitations do not challenge the core contributions of the study but rather delineate the scope within which its findings should be interpreted and extended. They highlight the need for continued empirical and methodological refinement in the study of entrepreneurship and social mobility, with particular attention to causal identification and the role of structural context.

Entrepreneurship does not constitute a universal path to social mobility, but rather a stratified mechanism whose outcomes depend on the nature of entrepreneurial engagement and individuals' starting conditions. By showing that high-autonomy entrepreneurship serves as a particularly powerful channel of advancement, this study highlights the importance of expanding access to high-quality entrepreneurial opportunities to promote more equitable mobility across generations.

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Appendices

Appendix A: Variables construction

Appendices A1–A7 provide detailed information regarding the construction of the variables described in Section 2. All constructed variables were generated using ESS Round 11 integrated data and are fully reproducible from the Stata code provided in the following appendices.

A1. Construction of Intergenerational Occupational Mobility Variable

Occupational intergenerational mobility is constructed using harmonised occupational information for respondents (isco08) and their parents (occf14b, occm14b), based on the ISCO-08 classification system and self-reported parental occupational categories.

Occupational data and harmonisation

While respondent occupations are measured using the detailed ISCO-08 4-digit classification, parental occupations (at age 14 of the respondent) are reported in broad categorical form for both father and mother. To ensure comparability across generations, both occupational measures are mapped into a common three-level socioeconomic status (SES) hierarchy.

The three-level occupational hierarchy is relatively coarse and may mask finer distinctions within occupational categories. Nevertheless, the approach is necessary in order to ensure harmonisation across generations.

Respondent occupations (isco08) are collapsed into major occupational groups by truncating the classification to the 1-digit ISCO level:

$$\text{occ_group} = \text{floor}(\text{isco08}/1000)$$

Based on this structure, occupations are grouped into three hierarchical status levels (high, middle, or low) and saved in a new variable: occ_status_resp.

Respondent's occupation classification

ISCO major group	Description	Status category
1	Managers	High
2	Professionals	High

3	Technicians	High
4	Clerical support	Middle
5	Service workers	Middle
6	Skilled agriculture	Low
7	Craft workers	Low
8	Machine operators	Low
9	Elementary occupations	Low

Parental occupational variables (occf14b; occm14b) are already coded in 1-9 occupational categories, which correspond broadly to a hierarchical structure. These variables are therefore recoded into the same 3-level socioeconomic tiers, generating two additional variables: occ_status_father and occ_status_mother.

Parents' occupation classification

Original category	Description	Status category
1	Professional and technical occupations	High
2	Higher administrator occupations	High
3	Clerical occupations	Middle
4	Sales occupations	Middle
5	Service occupations	Middle
6	Skilled worker	Low
7	Semi-skilled worker	Low
8	Unskilled worker	Low
9	Farm worker	Low

This harmonisation ensures consistency between generations despite differences in occupational coding detail.

To construct the parental background variable, and following common practice in the intergenerational mobility literature, the highest status parent is considered in order to capture the family's maximum socioeconomic resources:

$$\text{gen occ_status_parent} = \max(\text{occ_status_father}, \text{occ_status_mother})$$

Mobility Score and Categories

Occupational mobility is calculated as the difference between respondent's status and parental status:

$$\text{occ_mobility_score} = \text{occ_status_resp} - \text{occ_status_parent}$$

For the econometric model, the resulting scores are converted into a categorical outcome:

- 1 = Upward mobility ($\text{occ_mobility_score} > 0$)
- 2 = Horizontal mobility ($\text{occ_mobility_score} = 0$)
- 3 = Downward mobility ($\text{occ_mobility_score} < 0$)

This categorical variable – `occ_mobility` – constitutes the dependent variable for the multinomial logit model.

Missing data treatment and sample composition

Both parental and respondent occupations contain missing values, making it necessary to ensure that mobility scores are computed only when both occupational statuses are observed.

When creating `occ_mobility_score` missing values are automatically propagated. Consequently, if either parental or respondent occupational status is missing, the resulting mobility score is also coded as missing. However, when constructing the categorical mobility variable, an additional condition is required, since Stata treats missing values (.) as large numeric values. As a result, observations with missing values could be incorrectly classified as upward mobility if no missing value restriction is imposed. The categorical mobility variable is therefore constructed as follows:

```
gen occ_mobility = .
replace occ_mobility = 3 if occ_mobility_score < 0
replace occ_mobility = 2 if occ_mobility_score == 0
replace occ_mobility = 1 if occ_mobility_score > 0 & !missing(occ_mobility_score)
```

The final analytical sample contains 41,301 valid observations.

A1.1. Stata commands for constructing intergenerational mobility based on occupation

**** Repondent's occupation status**

```
gen occ_group = floor(isco08/1000)
tab occ_group
```

```

gen occ_status_resp = .
replace occ_status_resp = 3 if inlist(occ_group,1,2,3)
replace occ_status_resp = 2 if inlist(occ_group,4,5)
replace occ_status_resp = 1 if inlist(occ_group,6,7,8,9)
label define lbl_status 1 "Low" 2 "Middle" 3 "High"
label values occ_status_resp lbl_status
tab occ_status_resp

** Father's occupation status
gen occ_status_father = .
replace occ_status_father = 3 if inlist(occf14b,1,2)
replace occ_status_father = 2 if inlist(occf14b,3,4,5)
replace occ_status_father = 1 if inlist(occf14b,6,7,8,9)
label values occ_status_father lbl_status
tab occ_status_father

** Mother's occupation status
gen occ_status_mother = .
replace occ_status_mother = 3 if inlist(occm14b,1,2)
replace occ_status_mother = 2 if inlist(occm14b,3,4,5)
replace occ_status_mother = 1 if inlist(occm14b,6,7,8,9)
label values occ_status_mother lbl_status
tab occ_status_mother

** Parent's occupation status
// The highest status parent
egen occ_status_parent = rowmax(occ_status_father occ_status_mother)
label values occ_status_parent lbl_status
tab occ_status_parent

** Occupational Intergenerational Mobility
// Mobility is the difference between respondent status and parental status
gen occ_mobility_score = occ_status_resp - occ_status_parent
tab occ_mobility_score

// Convert into mobility categories

```

```

gen occ_mobility = .
replace occ_mobility = 3 if occ_mobility_score < 0 & !missing(occ_mobility_score)
replace occ_mobility = 2 if occ_mobility_score == 0 & !missing(occ_mobility_score)
replace occ_mobility = 1 if occ_mobility_score > 0 & !missing(occ_mobility_score)
label define lbl_mobility 3 "Downward mobility" 2 "Horizontal mobility" 1 "Upward Mobility"
label values occ_mobility lbl_mobility
tab occ_mobility

** Intergenerational mobility matrix
tab occ_status_resp occ_status_parent

```

A2. Construction of Intergenerational Educational Variables

Educational intergenerational mobility is constructed using harmonised educational attainment information from the ESS, serving as a robustness check to the baseline occupational mobility specification.

Educational data and harmonisation

Both respondent and parental education are measured using the detailed ISCED classification (edulvlb, edulvlfb, edulvlmb), which ESS harmonized into ES-ISCED (eisced, eiscedf, eiscedm).

Based on the harmonized variables, respondent's and their parents' educational attainment are recoded into the same common three-level educational hierarchy (low, medium and high), in order to ensure comparability across generations. As a result, three categorical variables are created: edu_resp, edu_father, and edu_mother.

Educational attainment classification

eisced	Description	Education category
1	ES-ISCED I – less than lower secondary	Low education
2	ES-ISCED II – lower secondary	Low education
3	ES-ISCED IIIb – lower upper secondary	Medium education
4	ES-ISCED IIIa – upper upper secondary	Medium education
5	ES-ISCED IV – advanced vocational	Medium education
6	ES-ISCED V1 – lower tertiary	High education
7	ES-ISCED V2 – higher tertiary	High education

To construct the parental educational background variable, following the same dominance approach adopted in intergenerational occupational mobility, the highest parental education is considered to capture the family's maximum educational resources available in the household:

$$\text{egen edu_parent} = \text{rowmax}(\text{edu_father} \text{ edu_mother})$$

Mobility Score and Categories

Educational mobility is defined as the difference between the respondent's education and parental education:

$$\text{gen edu_mobility_score} = \text{edu_resp} - \text{edu_parent}$$

For the econometric model, the resulting scores are converted into a categorical outcome:

- 1 = Upward mobility ($\text{edu_mobility_score} > 0$)
- 2 = Horizontal mobility ($\text{edu_mobility_score} = 0$)
- 3 = Downward mobility ($\text{edu_mobility_score} < 0$)

This categorical variable – `edu_mobility` – is used as the dependent variable in multinomial specifications as a robustness alternative to occupational mobility.

Missing data treatment and sample composition

The construction of the categorical educational intergenerational mobility variable (`edu_mobility`) follows the same rationale adopted for the occupational mobility variable (detailed in A1.1), in order to preserve missing value information in both respondent and parental education and avoid the artificial inflation of upward mobility classifications.

The final analytical sample contains 47,561 valid observations.

A2.1. Stata commands for constructing intergenerational mobility based on education

**** Respondent education**

```
gen edu_resp = .
replace edu_resp = 1 if inrange(eiscsed,1,2)
replace edu_resp = 2 if inrange(eiscsed,3,5)
replace edu_resp = 3 if inrange(eiscsed,6,7)
label define lbl_edu 1 "Low education" 2 "Medium education" 3 "High education"
label values edu_resp lbl_edu
tab edu_resp
```

**** Father education**

```
gen edu_father = .
replace edu_father = 1 if inrange(eiscsdf,1,2)
replace edu_father = 2 if inrange(eiscsdf,3,5)
replace edu_father = 3 if inrange(eiscsdf,6,7)
label values edu_father lbl_edu
tab edu_father
```

```
** Mother education
```

```
gen edu_mother = .  
replace edu_mother = 1 if inrange(eiscedm,1,2)  
replace edu_mother = 2 if inrange(eiscedm,3,5)  
replace edu_mother = 3 if inrange(eiscedm,6,7)  
label values edu_mother lbl_edu  
tab edu_mother
```

```
** Parental education
```

```
// The parent with the highest educational level  
egen edu_parent = rowmax(edu_father edu_mother)  
label values edu_parent lbl_status  
tab edu_parent
```

```
** Educational Intergenerational Mobility
```

```
// Mobility is the difference between respondent education and parental education  
gen edu_mobility_score = edu_resp - edu_parent  
tab edu_mobility_score
```

```
// Convert into mobility categories
```

```
gen edu_mobility = .  
replace edu_mobility = 3 if edu_mobility_score < 0 & !missing(edu_mobility_score)  
replace edu_mobility = 2 if edu_mobility_score == 0 & !missing(edu_mobility_score)  
replace edu_mobility = 1 if edu_mobility_score > 0 & !missing(edu_mobility_score)  
label values edu_mobility lbl_mobility  
tab edu_mobility  
codebook edu_mobility
```

```
* Intergenerational mobility matrix
```

```
tab edu_resp edu_parent
```

A3. Construction of Occupational Entrepreneurial Status

Occupational entrepreneurial status is constructed using information from the employment relation ESS variable (`emplrel`) and the respondent's ISCO-08 occupational classification (`isco08`), providing a stricter and more selective proxy for entrepreneurship.

First, to ensure comparability across occupational categories, respondent occupations (`isco08`) are considered based on the 1-digit ISCO level variable (`occ_group`), previously created for the construction of occupational intergenerational mobility.

$$\text{occ_group} = \text{floor}(\text{isco08}/1000)$$

Based on this harmonised classification, occupational entrepreneurial status (`entrepreneur_occ`) identifies as entrepreneurs respondents who simultaneously satisfy two conditions: (1) Respondents are self-employed (`emplrel == 2`) and (2) Respondents belong to relatively high-autonomy occupational categories corresponding to ISCO major group 1-3 (Managers, Professionals, Technicians). The variable is operationalized through the following construction:

```
gen entrepreneur_occ = 0
```

```
replace entrepreneur_occ = 1 if emplrel == 2 & inrange(occ_group,1,3)
```

The resulting binary variable formally represents:

1 = Entrepreneurial Occupation

0 = Not-entrepreneurial Occupation

A3.1. Stata commands for constructing occupational entrepreneurial status

```
// Considers Managers (ISCO major group 1), Professionals (ISCO major group 2);  
Technicians (ISCO major group 3)
```

```
gen entrepreneur_occ = 0
```

```
replace entrepreneur_occ = 1 if inrange(occ_group,1,3) & emplrel == 2
```

```
label define lbl_ent_occ 0 "Not-entrepreneurial occupation" 1 "Entrepreneurial occupation"
```

```
label values entrepreneur_occ lbl_ent_occ
```

```
tab entrepreneur_occ
```

A4. Construction of Occupational Entrepreneurial Types

Occupational entrepreneurship types are operationalized by integrating conventional measures of entrepreneurship based on employment relations with the occupational approach, which constitutes the baseline entrepreneurship measure in the present study.

First, conventional entrepreneurial status is constructed using ESS data on respondents' employment relation (`emplrel`). Based on this information, a binary variable (`entrepreneur`) is created, classifying as entrepreneurs respondents who report being self-employed (`emplrel == 2`) or working in a family business (`emplrel == 3`). Employees (`emplrel == 1`) and active labour-force with missing entrepreneurial status are classified as non-entrepreneurs.

It is important to note that the ESS does not distinguish between ownership and employment within family businesses. Consequently, respondents working in family firms are classified as entrepreneurs following the broader occupational-choice literature, although some cases may involve non-owner family employment.

```
gen entrepreneur = .
```

```
replace entrepreneur = 1 if emplrel == 2
```

```
replace entrepreneur = 1 if emplrel == 3
```

```
replace entrepreneur = 0 if emplrel == 1
```

```
replace entrepreneur = 0 if pdwrk == 1 & missing(entrepreneur)
```

Subsequently, the occupational entrepreneurship variable (`entrepreneur_occ`) is combined with the conventional entrepreneurship measure (`entrepreneur`), resulting in a categorical variable (`ent_autonomy`) that reflects different forms of entrepreneurial autonomy, interpreted as follows:

```
1 = High-autonomy entrepreneurs (if entrepreneur == 1 & entrepreneur_occ == 1)
```

```
2 = Low-autonomy self-employed (if entrepreneur == 1 & entrepreneur_occ == 0)
```

```
3 = Non-entrepeneurs (if entrepreneur == 0)
```

The final analytical sample contains 44,913 valid observations.

A4.1. Stata commands for constructing occupational entrepreneurship types

**** Conventional Entrepreneurial Status (auxiliary)**

```

gen entrepreneur = .
* Self-employed
replace entrepreneur = 1 if emplrel == 2
* Family business / own-account activity
replace entrepreneur = 1 if emplrel == 3
* Employees
replace entrepreneur = 0 if emplrel == 1
* Active labour-force non-entrepreneurs
replace entrepreneur = 0 if pdwrk == 1 & missing(entrepreneur)

```

```

label define lbl_ent 0 "Non-entrepreneur" 1 "Entrepreneur"
label values entrepreneur lbl_ent
tab entrepreneur

```

```

** Occupational entrepreneurship types
gen ent_autonomy = .
* Non-entrepreneurs
replace ent_autonomy = 3 if entrepreneur == 0
* Lower-autonomy self-employment
replace ent_autonomy = 2 if entrepreneur == 1 & entrepreneur_occ == 0
* High-autonomy entrepreneurs
replace ent_autonomy = 1 if entrepreneur == 1 & entrepreneur_occ == 1

```

```

label define lbl_ent_autonomy 1 "High-autonomy entrepreneurs" 2 "Low-autonomy self-employment" 3 "Non-entrepreneurs"
label values ent_autonomy lbl_ent_autonomy

```

A5. Construction of Mediating Variables

A5.1. Resource and capital endowment index

The resource and capability endowment index captures broader entrepreneurial resources beyond education, reflecting the idea that mobility outcomes depend on multiple forms of capital. This multidimensional structure is consistent with resource-based entrepreneurship theory and institutional approaches to economic mobility.

Dimension	Interpretation
Education	Cognitive and productive skills
Institutional efficacy	Ability to navigate institutions
Income	Financial and material resources

For the construction of the resource and capital endowment index, the following ESS variables are considered, each representing a different dimension of the respondent's resources:

Dimension	ESS Variable	Description
Education	eisced	Highest level of education
Institutional efficacy	ppltrst	Most people can be trusted, or you can't be too careful
	trstprl	Trust in the country's parliament
	trstlgl	Trust in the legal system
Income	hinctnta	Household's total net income, all sources

First, since the harmonized education variable (eisced) codes the category “Other” as 55, this value requires treatment in order to force its classification as a missing value before the standardization procedure. Otherwise, the value 55 would be incorrectly interpreted as a valid educational category, which would misstate the standardized distribution and the resulting composite index.

```
gen eiscd_clean = eiscd
```

```
replace eiscd_clean = . if eiscd_clean == 55
```

Second, since the trust dimension is measured through three different ESS indicators, these variables are aggregated into a single trust measure (trust_index), representing generalized and institutional trust. The aggregation into a composite indicator is supported by a reliability assessment that demonstrates acceptable internal consistency across the three variables ($\alpha = 0.7195$)

```
egen trust_index = rowmean(ppltrst trstprl trstlgl)
```

Given that the variables of education, income, and newly generated trust are each measured in distinct ranges, a standardization procedure is required in order to facilitate the integration of these indicators in a composite variable.

```
egen z_edu = std(eiscd_clean)
```

```
egen z_trust = std(trust_index)
```

```
egen z_income = std(hinctnta)
```

The final resource and capability endowment index is then constructed as the average of the standardized components, with higher values representing higher levels of educational, institutional, and economic resources. The obtained sample ranges from approximately -2.3 to 2.4.

```
egen capability_endowment = rowmean(z_edu z_trust z_income)
```

A5.2. Network embeddedness index

The construction of the network embeddedness index is grounded in social capital theory and entrepreneurship research, emphasising the role of social networks in opportunity identification, risk reduction, and resource acquisition.

Network embeddedness is conceptualised as a multidimensional construct capturing three complementary dimensions:

Dimension	Interpretation
Social patterns/ Relational intensity	Frequency of direct social interaction
(Generalized) Trust	Trust in others and institutions
Associativism/ Organizational embeddedness	Participation in civic/associational life

Together, these dimensions reflect the individual's position within socially dense environments that facilitate: access to information and opportunities, mobilisation of social support, reduction of transaction and search costs, and improved capacity to translate resources into mobility gains.

The network embeddedness mediating effect is captured based on the following ESS indicators:

Dimension	ESS Variable	Description
Social Patterns	scmeet	How often socially meet with friends, relatives or colleagues
Trust	ppltrst	Most people can be trusted or you can't be too careful
	trstprl	Trust in the country's parliament

	trstlgl	Trust in the legal system
Associativism	clsprty	Feel closer to a particular party than all other parties

Because ESS contains limited indicators of associational participation in Round 11, political attachment is used as a proxy for organizational embeddedness and civic connectedness.

The same standardization procedure is implemented in order to avoid artificial ponderations in the final index, as the trust index (previously created) and the social activity and associativism indicators are registered in different scales.

$$\text{egen } z_{\text{socialmeet}} = \text{std}(\text{sclmeet})$$

$$\text{egen } z_{\text{trust}} = \text{std}(\text{trust_index})$$

$$\text{egen } z_{\text{assoc}} = \text{std}(\text{clsprty})$$

The final network embeddedness index is then constructed as the average of the standardized components. The resulting sample ranges from approximately -2.3 to 1.9, with higher values being indicative of greater embeddedness connections.

$$\text{egen network_index} = \text{rowmean}(z_{\text{socialmeet}} \ z_{\text{trust}} \ z_{\text{assoc}})$$

A5.3. Durable cognitive dispositions index

The respondent's cognitive dispositions and habitus formation are observed in attitudinal orientations, which are operationalized using the following ESS variables:

Dimension	ESS Variable	Description
Opportunity-oriented openness	likrisk	I like to take risks, to what extent
	impdiffa	Important to try new and different things in life
	ipadvnta	Important to seek adventures and have an exciting life
	ipcrtiva	Important to think new ideas and being creative
Self-efficacy and autonomy	impfreea	Important to make own decisions and be free
	wkdcorga	Allowed to decide how daily work is organised
	iorgact	Allowed to influence policy decisions about activities of organisation
Achievement-oriented dispositions	ipsucesa	Important to be successful and that people recognise achievements
	ipshabta	Important to show abilities and be admired

The ESS human-values variables, namely impdiffa, ipadvnta, ipcrtiva, impfreea, ipsucesa, ipshabta, are originally coded with lower values translating stronger identification with the corresponding value (e.g. 1 = very much like me). Since the remaining indicators and the

previously constructed indexes follow the opposite logic, it is necessary to reverse-code these variables in order to ensure that the scales' directions are harmonized.

```
foreach var in impdiffa ipadvnta ipcrtiva impfreea ipsucesa ipshabta {
    gen r_`var' = 7 - `var'
}
```

After harmonization, all variables are standardized to ensure the comparability across indicators measured using distinct scales and units of measurement.

```
egen z_likrisk = std(likrisk)
egen z_impdiffa = std(r_impdiffa)
egen z_ipadvnta = std(r_ipadvnta)
egen z_ipcrtiva = std(r_ipcrtiva)
egen z_impfreea = std(r_impfreea)
egen z_wkdcorga = std(wkdcorga)
egen z_iorgact = std(iorgact)
egen z_ipsucesa = std(r_ipsucesa)
egen z_ipshabta = std(r_ipshabta)
```

The standardized variables are then employed in the construction of three intermediate components, corresponding to the different attitudinal dimensions. Each component is calculated as the mean of the corresponding ESS indicators, with reliability assessments indicating that acceptable internal consistency was found across the grouped variables.

```
egen opportunity_open = rowmean(z_likrisk z_impdiffa z_ipadvnta z_ipcrtiva) //
alpha = 0.6883

egen agency_autonomy = rowmean(z_impfreea z_wkdcorga z_iorgact) // alpha =
0.6311

egen achievement_status = rowmean(z_ipsucesa z_ipshabta) // alpha = 0.7037
```

The final composite durable cognitive disposition index is then constructed by calculating the mean of the different attitudinal dimensions, ranging from approximately -2.5 to 1.8. As the value increases, the respondents display higher cognitive dispositions.

```
egen cognitive_index = rowmean(opportunity_open agency_autonomy achievement_status)
```

Reliability analysis indicates acceptable internal consistency across the three attitudinal dimensions (Cronbach's α ranging from 0.63 to 0.70), supporting their aggregation into higher-order cognitive-disposition constructs.

A5.4. Stata commands for constructing the moderating variables

**** RESOURCE/CAPABILITY ENDOWMENT INDEX (H3)**

* Construct components

// Clean edu

gen eiscd_clean = eiscd

replace eiscd_clean = . if eiscd_clean == 55

// Generalised trust / institutional trust

egen trust_index = rowmean(ppltrst trstprl trstlgl)

* Reliability assessment

alpha ppltrst trstprl trstlgl

** alpha = 0.7195

* Standardisation

egen z_edu = std(eiscd_clean)

egen z_trust = std(trust_index)

egen z_income = std(hinctnta)

* Capability Index

egen capability_endowment = rowmean(z_edu z_trust z_income)

label variable capability_endowment "Resource/Capability Endowment Index"

summ capability_endowment

**** NETWORK EMBEDDEDNESS INDEX (H4)**

* Standardisation

```

egen z_socialmeet = std(sclmeet)
egen z_trust // already created
egen z_assoc = std(clsprty)

* Network embeddedness index

egen network_index = rowmean(z_socialmeet z_trust z_assoc)
label variable network_index "Network embeddedness index"
summ network_index

** DURABLE COGNITIVE DISPOSITIONS INDEX (H5)

* Reverse-code ESS human-values variables
foreach var in impdiffa ipadvnta ipcrtiva impfreea ipsucesa ipshabta {
    gen r_`var' = 7 - `var'
}

* Standardisation

egen z_likrisk = std(likrisk)
egen z_impdiffa = std(r_impdiffa)
egen z_ipadvnta = std(r_ipadvnta)
egen z_ipcrtiva = std(r_ipcrtiva)
egen z_impfreea = std(r_impfreea)
egen z_wkdcorga = std(wkdcorga)
egen z_iorgact = std(iorgact)
egen z_ipsucesa = std(r_ipsucesa)
egen z_ipshabta = std(r_ipshabta)

* Construct components (dimension indices)

egen opportunity_open = rowmean(z_likrisk z_impdiffa z_ipadvnta z_ipcrtiva)
egen agency_autonomy = rowmean(z_impfreea z_wkdcorga z_iorgact)
egen achievement_status = rowmean(z_ipsucesa z_ipshabta)

```

* Composite durable cognitive disposition index

```
egen cognitive_dispositions = rowmean(opportunity_open agency_autonomy  
achievement_status)
```

```
label variable cognitive_dispositions "Durable cognitive dispositions index"
```

```
summ cognitive_dispositions
```

* Reliability assessment

```
alpha likrisk impdiffa ipadvnta ipcrtiva
```

```
**alpha=0.6883
```

```
alpha impfreea wkdcorga iorgact
```

```
**alpha=0.6311
```

```
alpha ipsucesa ipshabta
```

```
**alpha=0.7037
```

A6. Construction of Moderating Variables

A6.1. Social origin index

The social origin index is grounded on the ESS indicators that concern the father's (eiscdf) and mother's (eiscdm) highest level of education, and the father's (occf14b) and mother's (occm14b) occupation when the respondent was 14.

The harmonized education variables (eiscdf and eiscdm) code the category "Other" as 55, which warrants special treatment in order to ensure that the corresponding classification observations are reclassified as missing values before the standardization procedure. Otherwise, the value 55 would be incorrectly interpreted as a valid educational category, which would misstate the parental education measure.

```
gen eiscdf_clean = eiscdf
replace eiscdf_clean = . if eiscdf_clean == 55
gen eiscdm_clean = eiscdm
replace eiscdm_clean = . if eiscdm_clean == 55
```

Supported by the "cleaned" educational variables, the parental education component follows a dominance approach, whereby the household educational background is represented by the highest educational attainment observed among parents.

```
egen parent_edu = rowmax(eiscdf_clean eiscdm_clean)
```

The parental occupational component corresponds to the occupational prestige of the respondent's household. Supported by the ESS parental occupational categories 1-2 (professionals and technicians, and higher administrators) as high occupational status categories, a binary variable is thus created for the father (high_occ_f) and mother (high_occ_m), where:

1 = parent belongs to high occupational categories (1-2: professional/technical occupations and higher administrator occupations)

0 = parent does not belong to high occupational categories (categories 3-9)

Considering the same dominance approach adopted for education, the occupational prestige component corresponds to the highest occupation observed among parents.

```
egen high_origin_occ = rowmax(high_occ_f high_occ_m)
```

Subsequently, the educational and occupational dimensions variables were standardized, with the goal of ensuring uniformity across distinct samples.

```
egen z_parentedu = std(parent_edu)
```

```
egen z_originocc = std(high_origin_occ)
```

Based on this, the social origin index is then constructed as the mean of both dimensions. The obtained sample ranges from approximately -1,2 to 2,1, with higher values translating higher social origins.

```
egen social_origin = rowmean(z_parentedu z_originocc)
```

A6.2. Welfare regime classification

The welfare regime typology follows an extended Esping-Andersen tradition frequently employed in comparative European research, incorporating a distinct post-socialist Eastern European category.

The welfare regime classification is anchored in the ESS country variable (cntry). Based on the respondents' country, a new categorical variable (welfare5) is created to distinguish between five welfare regimes: (1) social-democratic; (2) conservative; (3) liberal; (4) southern, and (5) eastern.

```
gen welfare5 = .
```

```
replace welfare5 = 1 if inlist(cntry, "SE", "FI", "NO")
```

```
replace welfare5 = 2 if inlist(cntry, "DE", "FR", "BE", "AT", "NL", "CH")
```

```
replace welfare5 = 3 if inlist(cntry, "GB", "IE", "IS")
```

```
replace welfare5 = 4 if inlist(cntry, "PT", "ES", "IT", "GR", "CY")
```

```
replace welfare5 = 5 if inlist(cntry, "PL", "HU", "SK", "SI", "HR", "BG", "LT") |  
inlist(cntry, "LV", "RS", "ME", "EE", "UA", "IL")
```

A6.3. Stata commands for constructing the moderating variables

```
** SOCIAL ORIGIN INDEX (H6)
```

```

* Construct components
// Parental Education
gen eiscdf_clean = eiscdf
replace eiscdf_clean = . if eiscdf_clean == 55
gen eiscdm_clean = eiscdm
replace eiscdm_clean = . if eiscdm_clean == 55
egen parent_edu = rowmax(eiscdf_clean eiscdm_clean)
// Parent Occupation Prestige
gen high_occ_f = .
gen high_occ_m = .
replace high_occ_f = 1 if inlist(occf14b,1,2)
replace high_occ_f = 0 if inrange(occf14b,3,9)
replace high_occ_m = 1 if inlist(occm14b,1,2)
replace high_occ_m = 0 if inrange(occm14b,3,9)
egen high_origin_occ = rowmax(high_occ_f high_occ_m)

* Standardisation
egen z_parentedu = std(parent_edu)
egen z_originocc = std(high_origin_occ)

* Social origin index
egen social_origin = rowmean(z_parentedu z_originocc)
label variable social_origin "Social origin index"
summ social_origin

** WELFARE REGIME CLASSIFICATION (H7)

* Welfare regime classification
gen welfare5 = .
* Social-democratic
replace welfare5 = 1 if inlist(cntry, "SE", "FI", "NO")
* Conservative / Corporatist
replace welfare5 = 2 if inlist(cntry, "DE", "FR", "BE", "AT", "NL", "CH")
* Liberal
replace welfare5 = 3 if inlist(cntry, "GB", "IE", "IS")
* Southern

```

```

replace welfare5 = 4 if inlist(cntry, "PT", "ES", "IT", "GR", "CY")
* Eastern
replace welfare5 = 5 if inlist(cntry, "PL", "HU", "SK", "SI", "HR", "BG", "LT") |
inlist(cntry, "LV", "RS", "ME", "EE", "UA", "IL")
label define lbl_welfare5 1 "Social-democratic" 2 "Conservative" 3 "Liberal" 4 "Southern" 5
"Eastern"

label values welfare5 lbl_welfare5
tab welfare5

```

A7. Construction of Control Variables

A7.1. Age and Age squared

The ESS variable `agea` records the respondent's age at the time the interview was conducted. This information is used to construct the variable `age`. In addition, an age squared variable is created (`age2`), in order to account for potential non-linear life-cycle effects, given the fact that the marginal effect of age may not be consistent over time.

```
gen age = agea
```

```
gen age2 = age^2
```

A7.2. Gender

The ESS variable `gndr` identifies the respondents' gender, coded as male (`gndr == 1`) and female (`gndr == 2`). Based on this information, a new binary variable is constructed (`female`), in order to facilitate the inclusion and interpretation of gender differences in the econometric models.

```
gen female = .
```

```
replace female = 1 if gndr == 2
```

```
replace female = 0 if gndr == 1
```

Under this coding scheme, 0 corresponds to male respondents, and 1 to female ones.

A7.3. Migrant Status

Migrant status is operationalized using the ESS variable `brncntr`, which captures if the respondents were born in the country where the study was conducted (`brncntr == 1`), or if they were born outside that country (`brncntr == 2`).

Grounded in this information, a binary migrant-status variable (`migrant`) is constructed:

```
gen migrant = .
```

```
replace migrant = 1 if brncntr == 2
```

```
replace migrant = 0 if brncntr == 1
```

According to this coding framework, 0 corresponds to native-born individuals, and 1 to migrant respondents.

Appendix B: Nested Multinomial Logistic Regression of Intergenerational Occupational Mobility

Table B1. Multinomial Logistic Regression of Intergenerational Occupational Mobility (Models C1-C5)

Dependent variable: Intergenerational occupational mobility; Reference category: Horizontal mobility; Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).

Variables	Model C1 Baseline		Model C2 (+ Capability)		Model C3 (+ Networks)		Model C4 (+ Cognition)		Model C5 Full model (= B2)	
	Upward Mobility	Downward Mobility	Upward Mobility	Downward Mobility	Upward Mobility	Downward Mobility	Upward Mobility	Downward Mobility	Upward Mobility	Downward Mobility
Occupational entrepreneurship (High-autonomy)	14.996*** (2.724)	0.000*** (0.000)	13.797*** (2.461)	0.000*** (0.000)	14.908*** (2.708)	0.000*** (0.000)	15.631*** (2.648)	0.000*** (0.000)	14.213*** (2.396)	0.000*** (0.000)
Occupational entrepreneurship (Non-entrepreneurs)	3.273*** (0.551)	0.586** (0.063)	3.077*** (0.519)	0.607*** (0.064)	3.258*** (0.548)	0.586*** (0.063)	4.122*** (0.652)	0.540*** (0.056)	3.643*** (0.582)	0.576*** (0.059)
Capability endowment			3.375*** (0.287)	0.512*** (0.028)					3.554*** (0.312)	0.485*** (0.030)
Network embeddedness					1.224*** (0.055)	0.922 (0.048)			0.742*** (0.030)	1.232*** (0.065)
Cognitive dispositions							1.722*** (0.076)	0.817*** (0.048)	1.486*** (0.076)	0.885*** (0.052)
Social origin	0.255*** (0.015)	1.404*** (0.095)	0.161*** (0.013)	1.729*** (0.095)	0.253*** (0.015)	1.406*** (0.094)	0.240*** (0.014)	1.431*** (0.099)	0.153*** (0.013)	1.770*** (0.097)
Age	1.044*** (0.009)	0.915*** (0.013)	1.016* (0.010)	0.934*** (0.011)	1.047*** (0.009)	0.913*** (0.013)	1.049*** (0.009)	0.914*** (0.013)	1.013 (0.010)	0.939*** (0.011)
Age ²	0.999*** (0.000)	1.000*** (0.000)	1.000*** (0.000)	1.001*** (0.000)	0.999*** (0.000)	1.000*** (0.000)	0.999*** (0.000)	1.000*** (0.000)	1.000*** (0.000)	1.001*** (0.000)
Female	1.952*** (0.139)	0.556*** (0.035)	2.084*** (0.133)	0.539*** (0.036)	1.943*** (0.139)	0.558*** (0.035)	2.038*** (0.148)	0.548*** (0.035)	2.170*** (0.137)	0.530*** (0.035)
Migrant	0.616*** (0.049)	1.219* (0.144)	0.614*** (0.040)	1.231* (0.147)	0.602*** (0.047)	1.230*** (0.146)	0.604*** (0.046)	1.236* (0.145)	0.629*** (0.040)	1.210 (0.147)
Conservative regime	0.638** (0.118)	1.200* (0.129)	0.909 (0.174)	1.055 (0.115)	0.651** (0.122)	1.191* (0.126)	0.597*** (0.110)	1.228* (0.134)	0.855 (0.166)	1.080 (0.129)
Liberal regime	0.834	1.031	1.305	0.851	0.874	1.015	0.794	1.050	1.194	0.885

	(0.149)	(0.143)	(0.234)	(0.117)	(0.149)	(0.141)	(0.146)	(0.149)	(0.228)	(0.126)
Southern regime	0.361***	0.938	0.647**	0.715**	0.383***	0.917	0.316***	0.981	0.553***	0.760*
	(0.053)	(0.133)	(0.111)	(0.111)	(0.056)	(0.132)	(0.045)	(0.137)	(0.094)	(0.120)
Eastern regime	0.448***	1.218*	0.868	0.876	0.485***	1.182	0.417***	1.257*	0.756	0.941
	(0.069)	(0.140)	(0.163)	(0.106)	(0.073)	(0.136)	(0.066)	(0.150)	(0.150)	(0.126)
Constant	0.226***	4.350***	0.192***	3.216***	0.195***	4.637***	0.154***	4.806***	0.182***	2.855***
	(0.053)	(1.616)	(0.050)	(1.010)	(0.047)	(1.779)	(0.036)	(1.780)	(0.049)	(0.894)
Observations	25,572		25,572		25,572		25,571		25,571	
LR χ^2	15534.07 (0.000)		20237.00 (0.000)		17870.85 (0.000)		21001.99 (0.000)		27674.06 (0.000)	
Pseudo R ²	0.1620		0.2189		0.1632		0.1701		0.2250	

Notes: Values are relative risk ratios (RRR) from multinomial logit model; Standard errors clustered at the country level (30 clusters) are reported in parentheses; Horizontal mobility is the base outcome in the estimation; *** p < 0.01, ** p < 0.05, * p < 0.1.

Appendix C: Robustness tests using intergenerational educational mobility

Empirical studies on intergenerational mobility, in addition to measuring mobility through occupational status (Bukodi et al., 2020), also commonly consider the comparison between respondents' educational attainment and that of their parents (Abrantes & Abrantes, 2014; Campos-Matos & Kawachi, 2015; Schuck & Steiber, 2018). Accordingly, as a robustness check, intergenerational mobility is alternatively operationalized through the educational perspective. Using the harmonised educational variables from the ESS, an alternative dependent variable - edu_mobility - was constructed (detailed in Appendix A2), allowing for the distinction between upward, horizontal, and downward educational mobility.

To ensure comparability with the main econometric specification, the same multinomial logit regression was employed. All explanatory variables included in the baseline model were also retained, as was the reference category, which remained the horizontal mobility.

Does entrepreneurship matter for intergenerational mobility?

Table C1. Multinomial Logistic Regression of Intergenerational Educational Mobility (Model A1)
Dependent variable: Intergenerational educational mobility; Reference category: Horizontal mobility; Estimator: Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).

Variables	Upward mobility	Downward mobility
Occupational entrepreneurship	1.364**	0.765**
	(0.112)	(0.101)
Capability endowment	7.021**	0.148**
	(1.092)	(0.017)
Network embeddedness	0.537**	1.820**
	(0.037)	(0.158)
Cognitive dispositions	1.219**	0.893*
	(0.079)	(0.061)
Social origin	0.130**	4.339**
	(0.019)	(0.406)
Age	1.022	0.857**
	(0.016)	(0.012)
Age ²	1.000	1.002**
	(0.000)	(0.000)
Female	1.452**	0.721**
	(0.094)	(0.045)
Migrant	1.025	1.096
	(0.126)	(0.165)
Conservative regime	0.667	0.642**
	(0.190)	(0.122)
Liberal regime	1.585**	0.718
	(0.261)	(0.207)
Southern regime	1.641**	0.335**
	(0.288)	(0.074)
Eastern regime	1.101	0.402**
	(0.285)	(0.110)

Constant	0.166**	4.470**
	(0.058)	1.405
Observations	26,887	
LR χ^2	13102.42 (0.0000)	
Pseudo R ²	0.2942	

Notes: Values are relative risk ratios (RRR) from a multinomial logit model (Model A1). Standard errors clustered at the country level (30 clusters) are reported in parentheses. Horizontal mobility is the base outcome in the estimation. *** p < 0.01, ** p < 0.05, * p < 0.10.

Table C2. Predictive probabilities and average marginal effects (AME) of Intergenerational Educational Mobility on Occupational Entrepreneurship (Model A1)

Mobility Outcome	Non-entrepreneur	Occupational entrepreneurs	Difference (AME)
Upward mobility	0.3899** (0.017)	0.4397** (0.022)	0.0498** (0.013)
Horizontal mobility	0.5236** (0.016)	0.4895** (0.021)	-0.0340** (0.013)
Downward mobility	0.0865** (0.005)	0.0707 (0.009)	-0.0158** (0.006)

Notes: Values are predicted probabilities from a multinomial logit model (Model A1); Standard errors (in parentheses) derived from the delta method; “Difference” corresponds to the average marginal effect (entrepreneurial occupation minus non-entrepreneurial occupation); *** p < 0.01, ** p < 0.05, * p < 0.1.

Does entrepreneurship type matter for intergenerational mobility?

Table C3. Multinomial Logistic Regression of Intergenerational Educational Mobility (Model B1)

Dependent variable: Intergenerational educational mobility; Reference category: Horizontal mobility; Reference group for entrepreneurship: Lower-autonomy self-employment; Estimator: Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).

Variables	Upward mobility	Downward mobility
High-autonomy entrepreneurs	1.725**	0.598**
	(0.150)	(0.092)
Non-entrepreneurs	1.317**	0.747**
	(0.090)	(0.072)
Capability endowment	6.899**	0.148**
	(1.063)	(0.018)
Network embeddedness	0.539**	1.821**
	(0.037)	(0.161)
Cognitive dispositions	1.257**	0.860**
	(0.089)	(0.057)
Social origin	0.130**	4.365**
	(0.019)	(0.414)
Age	1.019	0.857**
	(0.016)	(0.011)
Age ²	1.000	1.002**
	(0.000)	(0.000)
Female	1.439**	0.731**
	(0.092)	(0.045)
Migrant	1.012	1.081
	(0.130)	(0.168)
Conservative regime	0.660	0.641**
	(0.187)	(0.123)
Liberal regime	1.588**	0.720
	(0.253)	(0.207)
Southern regime	1.659**	0.331**
	(0.291)	(0.076)
Eastern regime	1.093	0.408**

	(0.283)	(0.112)
Constant	0.135***	5.927***
	(0.048)	(2.029)
Observations	26,578	
LR χ^2	—	
Pseudo R ²	0.2952	

Notes: Values are relative risk ratios (RRR) from a multinomial logit model (Model A1). Standard errors clustered at the country level (30 clusters) are reported in parentheses. Horizontal mobility is the base outcome in the estimation. *** p < 0.01, ** p < 0.05, * p < 0.10; LR χ^2 not reported due to model specification.

Table C4. Predicted probabilities and average marginal effects (AME) of intergenerational educational mobility by entrepreneurial autonomy (Model B1)

Mobility Outcome	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs	Difference (AME)
Upward mobility	0.4388*** (0.022)	0.3519*** (0.016)	0.3956*** (0.017)	0.0869*** (0.014)
Horizontal mobility	0.4897*** (0.021)	0.5442*** (0.017)	0.5198*** (0.016)	-0.0545*** (0.015)
Downward mobility	0.0715*** (0.009)	0.1039*** (0.009)	0.0846*** (0.005)	-0.0324*** (0.008)

Notes: Values are predicted probabilities from multinomial logit model (Model B1); Standard errors (in parentheses) derived from delta method; “Difference” corresponds to the average marginal effect (high-autonomy entrepreneurial occupation minus low-autonomy self-employment); Horizontal mobility is the base outcome in the estimation but reported here as a predicted probability for completeness; *** p < 0.01, ** p < 0.05, * p < 0.1.

Is the relationship between entrepreneurship and intergenerational mobility mediated by resource endowments, network index, and cognitive dispositions?

Table C5. Nested Multinomial Logistic Regression of Intergenerational Educational Mobility (Models C1-C5) *Dependent variable: Intergenerational educational mobility; Reference category: Horizontal mobility; Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).*

Variables	Model C1 Baseline		Model C2 (+ Capability)		Model C3 (+ Networks)		Model C4 (+ Cognition)		Model C5 Full model (= B2)	
	Upward Mobility	Downward Mobility	Upward Mobility	Downward Mobility	Upward Mobility	Downward Mobility	Upward Mobility	Downward Mobility	Upward Mobility	Downward Mobility
Occupational entrepreneurship (High-autonomy)	2.751*** (0.246)	0.418*** (0.057)	1.761*** (0.148)	0.590*** (0.092)	2.736*** (0.243)	0.422*** (0.057)	2.735*** (0.236)	0.422*** (0.057)	1.725*** (0.150)	0.598*** (0.092)
Occupational entrepreneurship (Non-entrepreneurs)	1.437*** (0.093)	0.641*** (0.066)	1.209*** (0.076)	0.788** (0.076)	1.433*** (0.092)	0.645*** (0.066)	1.705*** (0.105)	0.583*** (0.059)	1.317*** (0.090)	0.747*** (0.072)
Capability endowment	-	-	5.755***	0.180***	-	-	-	-	6.899***	0.148***
	-	-	(0.834)	(0.020)	-	-	-	-	(1.063)	(0.018)
Network embeddedness	-	-	-	-	1.123**	0.861**	-	-	0.539***	1.821***
	-	-	-	-	(0.059)	(0.060)	-	-	(0.037)	(0.161)
Cognitive dispositions	-	-	-	-	-	-	1.545***	0.748***	1.257***	0.860**
	-	-	-	-	-	-	(0.092)	(0.043)	(0.089)	(0.057)
Social origin	0.296*** (0.026)	2.294*** (0.135)	0.141*** (0.019)	4.100*** (0.373)	0.295*** (0.026)	2.300*** (0.135)	0.282*** (0.025)	2.347*** (0.139)	0.130*** (0.019)	4.365*** (0.414)
Age	1.061*** (0.016)	0.818*** (0.015)	1.031** (0.016)	0.846*** (0.012)	1.063*** (0.017)	0.816*** (0.015)	1.065*** (0.017)	0.816*** (0.014)	1.019 (0.016)	0.857*** (0.011)
Age ²	0.999*** (0.000)	1.002*** (0.000)	1.000 (0.000)	1.002*** (0.000)	0.999*** (0.000)	1.002*** (0.000)	0.999*** (0.000)	1.002*** (0.000)	1.000 (0.000)	1.002*** (0.000)
Female	1.356*** (0.076)	0.776*** (0.052)	1.392*** (0.084)	0.753*** (0.047)	1.352*** (0.076)	0.780*** (0.051)	1.395*** (0.080)	0.763*** (0.051)	1.439*** (0.092)	0.731*** (0.045)
Migrant	0.872 (0.131)	1.106 (0.164)	0.937 (0.127)	1.134 (0.181)	0.861 (0.128)	1.120 (0.163)	0.862 (0.127)	1.132 (0.164)	1.012 (0.130)	1.081 (0.168)
Conservative regime	0.450*** (0.108)	0.847 (0.113)	0.695 (0.180)	0.616*** (0.108)	0.455*** (0.110)	0.836 (0.113)	0.423*** (0.105)	0.875 (0.120)	0.660 (0.187)	0.641** (0.123)
Liberal regime	0.909 (0.071)	1.062 (0.288)	1.773*** (0.212)	0.660 (0.206)	0.934 (0.065)	1.035 (0.291)	0.869 (0.081)	1.096 (0.287)	1.588*** (0.253)	0.720 (0.207)
Southern regime	0.730*** (0.084)	0.628** (0.120)	1.911*** (0.313)	0.296*** (0.067)	0.756** (0.088)	0.600** (0.120)	0.661*** (0.074)	0.665** (0.122)	1.659*** (0.291)	0.331*** (0.076)
Eastern regime	0.487***	0.838	1.295	0.347***	0.509***	0.791	0.462***	0.877	1.093	0.408***

	(0.070)	(0.124)	(0.305)	(0.090)	(0.073)	(0.116)	(0.068)	(0.127)	(0.283)	(0.112)
Constant	0.170***	17.238***	0.104***	9.048***	0.156***	19.256***	0.126***	20.008***	0.135***	5.927***
	(0.053)	(7.672)	(0.036)	3.153	(0.050)	(8.803)	(0.040)	(8.814)	(0.048)	(2.029)
Observations	26,579		26,579		26,579		26,578		26,578	
LR χ^2	9361.45 (0.000)		11530.78 (0.000)		19882.39 (0.000)		27453.17 (0.000)		—	
Pseudo R ²	0.1643		0.2838		0.1650		0.1703		0.2952	

Notes: Values are relative risk ratios (RRR) from multinomial logit model; Standard errors clustered at the country level (30 clusters) are reported in parentheses; Horizontal mobility is the base outcome in the estimation; *** p < 0.01, ** p < 0.05, * p < 0.1; LR χ^2 not reported due to model specification.

Is the impact of entrepreneurship on intergenerational mobility moderated by social origin?

Table C6. Multinomial Logistic Regression of Intergenerational Educational Mobility with Social-Origin Moderation (Model D1) *Dependent variable: Intergenerational educational mobility; Reference category: Horizontal mobility; Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).*

Variables	Upward mobility	Downward mobility
High-autonomy entrepreneurs	1.965*** (0.252)	1.542** (0.272)
Non-entrepreneurs	1.494*** (0.155)	0.990 (0.141)
Social origin	0.098*** (0.028)	6.564*** (1.085)
High-autonomy X Social origin	1.447 (0.371)	0.394*** (0.060)
Non-entrepreneurs X Social origin	1.318 (0.302)	0.655*** (0.077)
Capability endowment	6.913*** (1.071)	0.148*** (0.018)
Network embeddedness	0.539*** (0.037)	1.830*** (0.162)
Cognitive dispositions	1.260*** (0.090)	0.863** (0.059)
Age	1.019 (0.016)	0.856*** (0.012)
Age ²	1.000 (0.000)	1.002*** (0.000)
Female	1.439*** (0.092)	0.730*** (0.046)
Migrant	1.012 (0.130)	1.082 (0.168)
Conservative regime	0.660 (0.186)	0.638** (0.123)
Liberal regime	1.584*** (0.252)	0.713 (0.205)
Southern regime	1.649*** (0.288)	0.340*** (0.077)
Eastern regime	1.096 (0.283)	0.405*** (0.112)
Constant	0.119*** (0.045)	4.712*** (1.657)
Observations	26,578	
LR χ^2	—	
Pseudo R ²	0.2962	

Notes: Values are relative risk ratios (RRR) from multinomial logit model; Standard errors clustered at the country level (30 clusters) are reported in parentheses; Horizontal mobility is the base outcome in the estimation; *** p < 0.01, ** p < 0.05, * p < 0.1; LR χ^2 not reported due to model specification (interaction models and quasi-complete separation).

Table C7. Predicted probabilities of upward mobility by social origin and entrepreneurial status *Derived from `margins ent_autonomy, at(social_origin=(-1.5(0.5)2)) predict(outcome(1))`*

Social Origin	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs
-1.5	0.8909***	0.8847***	0.8829***

	(0.022)	(0.030)	(0.019)
-1.0	0.7839***	0.7476***	0.7645***
	(0.029)	(0.034)	(0.023)
-0.5	0.6293***	0.5482***	0.5951***
	(0.030)	(0.024)	(0.023)
0.0	0.4484***	0.3332***	0.4033***
	(0.025)	(0.022)	(0.019)
0.5	0.2773***	0.1625***	0.2320***
	(0.018)	(0.025)	(0.015)
1.0	0.1469***	0.0632***	0.1120***
	(0.014)	(0.019)	(0.012)
1.5	0.0672***	0.0202**	0.0458***
	(0.010)	(0.009)	(0.007)
2.0	0.0272***	0.0054	0.0164***
	(0.006)	(0.003)	(0.004)

Table C8. Predicted probabilities of downward mobility by social origin and entrepreneurial status
Derived from margins ent_autonomy, at(social_origin=(-1.5(0.5)2)) predict(outcome(3))

Social Origin	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs
-1.5	0.0075***	0.0014**	0.0026***
	(0.003)	(0.001)	(0.000)
-1.0	0.0188***	0.0061***	0.0085***
	(0.006)	(0.002)	(0.001)
-0.5	0.0396***	0.0206***	0.0231***
	(0.009)	(0.004)	(0.002)
0.0	0.0718***	0.0559***	0.0527***
	(0.013)	(0.008)	(0.004)
0.5	0.1158***	0.1260***	0.1038***
	(0.016)	(0.014)	(0.007)
1.0	0.1713***	0.2412***	0.1815***
	(0.019)	(0.023)	(0.011)
1.5	0.2375***	0.3981***	0.2867***
	(0.026)	(0.036)	(0.016)
2.0	0.3134***	0.5744***	0.4139***
	(0.035)	(0.047)	(0.023)

Is the impact of entrepreneurship on intergenerational mobility moderated by social origin?

Table C9. Multinomial Logistic Regression of Intergenerational Educational Mobility with Social-Origin Moderation (Model E1) *Dependent variable: Intergenerational occupational mobility; Reference category: Horizontal mobility; Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).*

Variables	Upward mobility	Downward mobility
High-autonomy entrepreneurs	1.087	0.262***
	(0.222)	(0.089)
Non-entrepreneurs	1.376	0.473***
	(0.291)	(0.056)
Conservative	0.931	0.429**

	(0.323)	(0.147)
Liberal	1.090	0.424*
	(0.291)	(0.218)
Southern	1.515*	0.173***
	(0.382)	(0.050)
Eastern	1.188	0.260***
	(0.332)	(0.091)
High-autonomy X Conservative	1.470	2.201*
	(0.461)	(0.985)
High-autonomy X Liberal	2.380***	2.535
	(0.520)	(1.698)
High-autonomy X Southern	1.781***	1.703
	(0.397)	(0.958)
High-autonomy X Eastern	1.345	2.976***
	(0.288)	(1.197)
Non-entrepreneurs X Conservative	0.661	1.507
	(0.180)	(0.392)
Non-entrepreneurs X Liberal	1.466*	1.730**
	(0.331)	(0.430)
Non-entrepreneurs X Southern	1.085	2.091**
	(0.250)	(0.656)
Non-entrepreneurs X Eastern	0.890	1.566**
	(0.210)	(0.279)
Capability endowment	6.904***	0.148***
	(1.069)	(0.018)
Network embeddedness	0.540***	1.824***
	(0.037)	(0.160)
Cognitive dispositions	1.256***	0.860**
	(0.088)	(0.058)
Age	1.019	0.857***
	(0.016)	(0.011)
Age ²	1.000	1.002***
	(0.000)	(0.000)
Female	1.436***	0.731***
	(0.092)	(0.046)
Migrant	1.010	1.079
	(0.129)	(0.167)
Social origin	0.129***	4.368***
	(0.019)	(0.414)
Constant	0.134***	9.239***
	(0.053)	(3.085)
Observations	26,578	
LR χ^2	—	
Pseudo R ²	0.2958	

Notes: Values are relative risk ratios (RRR) from multinomial logit model; Standard errors clustered at the country level (30 clusters) are reported in parentheses; Horizontal mobility is the base outcome in the estimation; *** p < 0.01, ** p < 0.05, * p < 0.1; LR χ^2 not reported due to model specification (interaction models and quasi-complete separation).

Table C10: Predicted probabilities of upward mobility by welfare regime and entrepreneurial status

Derived from margins welfare5#ent_autonomy, predict(outcome(1))

Welfare Regime	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs
Social-democratic	0.3499***	0.3234***	0.3810***

	(0.023)	(0.034)	(0.023)
Conservative	0.3989***	0.3232***	0.3118***
	(0.049)	(0.039)	(0.038)
Liberal	0.4979***	0.3467***	0.4570***
	(0.023)	(0.023)	(0.007)
Southern	0.512***	0.404***	0.4671***
	(0.032)	(0.023)	(0.019)
Eastern	0.4244***	0.3635***	0.3968***
	(0.030)	(0.030)	(0.036)

Table C11: Predicted probabilities of downward mobility by welfare regime and entrepreneurial status
Derived from `margins welfare5#ent_autonomy, predict(outcome(3))`

Welfare Regime	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs
Social-democratic	0.0899***	0.1998***	0.1280***
	(0.028)	(0.028)	(0.012)
Conservative	0.0846***	0.1242***	0.1011***
	(0.011)	(0.016)	(0.007)
Liberal	0.0867***	0.1221***	0.1016***
	(0.017)	(0.034)	(0.014)
Southern	0.0349***	0.0664***	0.0638***
	(0.010)	(0.006)	(0.008)
Eastern	0.0732***	0.0890***	0.072***
	(0.016)	(0.016)	(0.010)

Appendix D: Robustness tests using ESS post-stratification weights

As an additional robustness check, the baseline models (A1 and B1) were re-estimated using the ESS post-stratification weights. This procedure allows the estimates to more closely reflect the European population represented by the countries considered in the ESS, rather than relying solely on the observed sample.

Accordingly, the ESS post-stratification weights were incorporated into the multinomial logit estimation through the Stata command [pweight=anweight]. Under this specification, discrepancies between the sample composition and the underlying population structure of each country are adjusted, and differences in country population size are also taken into account, being assigned proportionally greater influence to more populous countries.

By comparing weighted and unweighted estimations, this robustness check evaluates whether the main findings are maintained when the analysis is adjusted and more accurately reflects the European population.

Does entrepreneurship matter for intergenerational mobility?

Table D1. Multinomial Logistic Regression of Intergenerational Occupational Mobility (Model A1)
Dependent variable: Intergenerational occupational mobility; Reference category: Horizontal mobility; Estimator: Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).

Variables	Upward mobility	Downward mobility
Occupational entrepreneurship	4.532***	0.000***
	(0.907)	(0.000)
Capability endowment	3.611***	0.478***
	(0.356)	(0.051)
Network embeddedness	0.744***	1.212*
	(0.056)	(0.136)
Cognitive dispositions	1.311***	0.995
	(0.075)	(0.111)
Social origin	0.163***	1.621***
	(0.014)	(0.083)
Age	1.012	0.963*
	(0.010)	(0.020)
Age ²	1.000**	1.000
	(0.000)	(0.000)
Female	2.240***	0.559***
	(0.182)	(0.041)
Migrant	0.577***	1.159
	(0.073)	(0.200)
Conservative regime	1.050	0.984
	(0.227)	(0.095)
Liberal regime	1.040	0.964
	(0.201)	(0.092)
Southern regime	0.617**	0.708*
	(0.122)	(0.138)

Eastern regime	1.036	0.699***
	(0.295)	(0.089)
Constant	0.550**	1.175
	(0.154)	(0.547)
Observations	25,587	
LR χ^2	1151520.23 (0.000)	
Pseudo R ²	0.2138	

Notes: Values are relative risk ratios (RRR) from a multinomial logit model (Model A1). Standard errors clustered at the country level (30 clusters) are reported in parentheses. Horizontal mobility is the base outcome in the estimation. *** p < 0.01, ** p < 0.05, * p < 0.10.

Table D2. Predictive probabilities and average marginal effects (AME) of Intergenerational Occupational Mobility on Occupational Entrepreneurship (Model A1)

Mobility Outcome	Non-entrepreneur	Occupational entrepreneurs	Difference (AME)
Upward mobility	0.4208*** (0.012)	0.6998*** (0.032)	0.2789*** (0.029)
Horizontal mobility	0.4247*** (0.011)	0.3002*** (0.032)	-0.1245*** (0.030)
Downward mobility	0.1545*** (0.004)	0.0000*** (0.000)	-0.1545*** (0.004)

Notes: Values are predicted probabilities from a multinomial logit model (Model A1); Standard errors (in parentheses) derived from the delta method; "Difference" corresponds to the average marginal effect (entrepreneurial occupation minus non-entrepreneurial occupation); *** p < 0.01, ** p < 0.05, * p < 0.1.

Does entrepreneurship type matter for intergenerational mobility?

Table D3. Multinomial Logistic Regression of Intergenerational Occupational Mobility (Model B1)

Dependent variable: Intergenerational occupational mobility; Reference category: Horizontal mobility; Reference group for entrepreneurship: Lower-autonomy self-employment; Estimator: Multinomial logistic regression (RRR reported); Standard errors clustered at the country level (30 clusters).

Variables	Upward mobility	Downward mobility
High-autonomy entrepreneurs	15.233***	0.000***
	(3.843)	0.000
Non-entrepreneurs	3.801***	0.515***
	(0.607)	(0.112)
Capability endowment	3.541***	0.482***
	(0.351)	(0.053)
Network embeddedness	0.740***	1.217*
	(0.056)	(0.138)
Cognitive dispositions	1.483***	0.905
	(0.078)	(0.113)
Social origin	0.156***	1.662***
	(0.014)	(0.082)
Age	1.010	0.964
	(0.009)	(0.022)
Age ²	1.000**	1.000
	(0.000)	(0.000)
Female	2.192***	0.565***
	(0.178)	(0.041)
Migrant	0.561***	1.186
	(0.077)	(0.196)
Conservative regime	1.006	1.010
	(0.209)	(0.088)
Liberal regime	1.024	0.964
	(0.196)	(0.082)
Southern regime	0.623**	0.697*

	(0.120)	(0.138)
Eastern regime	1.022	0.707***
	(0.287)	(0.088)
Constant	0.159***	2.146
	(0.044)	(1.282)
Observations	25,571	
LR χ^2	615899.81 (0.000)	
Pseudo R ²	0.2265	

Notes: Values are relative risk ratios (RRR) from a multinomial logit model (Model A1). Standard errors clustered at the country level (30 clusters) are reported in parentheses. Horizontal mobility is the base outcome in the estimation. *** p < 0.01, ** p < 0.05, * p < 0.10.

Table D4. Predicted probabilities and average marginal effects (AME) of intergenerational occupational mobility by entrepreneurial autonomy (Model B1)

Mobility Outcome	High-autonomy entrepreneurs	Lower-autonomy self-employed	Non-entrepreneurs	Difference (AME)
Upward mobility	0.6945*** (0.031)	0.2149*** (0.020)	0.4408*** (0.011)	0.4796*** (0.029)
Horizontal mobility	0.3055*** (0.031)	0.5054*** (0.040)	0.4161*** (0.010)	-0.1999*** (0.060)
Downward mobility	0.0000*** (0.000)	0.2797*** (0.033)	0.1430*** (0.004)	-0.2797*** (0.033)

Notes: Values are predicted probabilities from multinomial logit model (Model B1); Standard errors (in parentheses) derived from delta method; “Difference” corresponds to the average marginal effect (high-autonomy entrepreneurial occupation minus low-autonomy self-employment); Horizontal mobility is the base outcome in the estimation but reported here as a predicted probability for completeness; *** p < 0.01, ** p < 0.05, * p < 0.1.