INDIVIDUAL DETERMINANTS OF SELF-EMPLOYMENT ENTRY: WHAT DO WE REALLY KNOW?

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Abstract. The analysis of the decision to enter into self-employment is a hot topic in the economic literature. Among the elements that most directly influence this decision, individual factors are central. This study produces a comprehensive survey of the impact of these factors, covering both the theoretical arguments and the main conclusions emerging from the empirical studies. We analyze 12 critical determinant factors of the entry into self-employment grouped into seven categories: (1) basic individual characteristics (gender, age, marital status, and children); (2) family background (parents and spouse); (3) personality characteristics; (4) human capital (education and experience); (5) health condition; (6) nationality and ethnicity; and (7) access to financial resources. While for some of the factors solid conclusions can be found, for others additional research is still needed in order to shed further light on their influence.

Keywords. Individual determinant factors; Self-employment; Survey

1. Introduction

In recent decades, self-employment has been considered as a central issue concerning labor market choices. Self-employment is not only an interesting solution for individuals who have few opportunities in the wage sector or earn less than others with similar observable characteristics, but is also an opportunity for dynamic individuals who seek a different career path. The evidence reveals that this option is followed by many workers. For example, according to OECD (2014), self-employment rates are 16.6% for the European Union as a whole and 16.1% for the OECD. Data for individual countries nevertheless show considerable disparity (USA: 6.8%; Canada: 8.9%; France: 9.5%; Australia: 10.5%; Germany: 11.6%; Japan: 11.8%; UK: 13.9%; Chile: 26.6%; Korea: 28.2%; Mexico: 33.7%; Greece: 36.8%; Turkey: 37.1%).

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The complex nature of self-employment poses considerable challenges for the design of economic policy measures, requiring a clear understanding of the mechanisms behind self-employment entry. Such knowledge is a prerequisite to defining a coherent set of measures aiming to induce and support the transition to a self-employed condition while simultaneously assuring an efficient allocation of public resources.

Researchers must clarify the conditions and the barriers that individuals face when entering self-employment. This is particularly important since it “is increasingly recognized as the broad-based driver of economic growth and societal well-being” (Kelley et al., 2013, p. 2). By now, it is fair to say that they are making their part to accomplish the task. Recent years have seen the fast growth of a vast body of research on this issue. From an academic perspective, the interest in this topic is visible through the large number of studies produced, through their scientific impact, and through the quality of the journals in which they are being published. A mere Google Scholar search indicates that some of the now classic contributions to this literature (such as Evans and Leighton (1989), Evans and Jovanovic (1989), and Blanchflower and Oswald (1998), just to mention a few examples) are highly cited studies, with around 2000 citations. Moreover, many other more recent studies are also influential works, obtaining hundreds of citations.

The exponential and unprecedented attention that the literature on self-employment has been capturing during the last 15 years is perhaps the most remarkable implication of profound changes that characterize the study of this topic in that period, leading to the emergence of an enormous body of theoretical and (mainly) empirical literature with many nuances, different arguments, and frequently nonconsensual empirical results. Some of the most important of these changes deserve particular mention. First, critical demographic and social trends such as ageing and an increased female participation in the labor market have led to a modification of the policy agenda and the definition of new priorities. This has given a decisive incentive to research on these issues, seeking to provide stronger support for interventions that promote the well-being of these groups, while simultaneously creating better conditions to assure the sustainability of the social security systems. Second, in the context of some self-employment determinants, very influential contributions such as Hurst and Lusardi (2004) and Lazear (2005), have generated a marked change in the dominant perspectives and opened new and fruitful research avenues. Third, remarkable changes have also occurred at the empirical level, including the availability of richer and more comprehensive databases. This allows for new insights concerning specific areas of interest, a more robust test of some hypotheses, and also the use of more adequate proxies for several variables (e.g., the study of the influence of role models and personality traits and of older workers’ engagement in self-employment have benefited from this change). Still in this context, the enlargement of the number of countries covered in the empirical studies allows for firmer conclusions.

All of these reasons and the large volume of research already produced confer special importance to the emergence of updated surveys that may provide useful maps for understanding the state-of-the-art of a literature with economic, social, and policy implications, thereby providing a more solid background for future research. The goal of this study is to focus on the individual-level determinants of entry into self-employment. Defining this goal implies three choices. First, we put the emphasis on recent literature. Second, by focusing exclusively on the individual determinants, we can analyze in more detail the mechanisms that operate in each factor while also discussing the evidence available. Third, we concentrate our analysis on the transitions toward self-employment, not covering other important but distinct aspects such as success and exit.

The remainder of the paper is organized in nine sections. In the first seven we examine each group of determinants, namely: basic individual characteristics (Section 2); family background (Section 3); personality characteristics (Section 4); human capital (Section 5); health condition (Section 6); nationality and ethnicity (Section 7); and access to financial resources (Section 8). Section 9 summarizes the contents of the previous sections while Section 10 presents some final remarks.
2. Basic Individual Characteristics

2.1 Gender

From the vast group of empirical studies analyzing the link between gender and self-employment entry, it emerges as a central finding that women have a lower propensity to enter into self-employment than do men (e.g., Blanchflower, 2000; Leoni and Falk, 2010; Stefanović and Stošić, 2012; Verheul et al., 2012; Koellinger et al., 2013). At the quantitative level the differences in the probability of transition to self-employment are considerable, in some cases reaching values of 50% favorable to men. Several studies that analyze the effect of being a male on the probability of transition into self-employment by estimating a probit model report the following coefficients for this variable: 0.176–0.316 for Germany (Sorgner and Fritsch, 2013); 0.1877–0.1882 in Sweden (Nykvist, 2008); 0.221–0.231 in Finland (Johansson, 2000); and 0.093–0.312 for the UK (Georgellis et al., 2005a).

Additionally, there is support for two other findings: (1) female self-employment rates have been increasing over time (Devine, 1994; Caputo and Dolinsky, 1998; Koellinger et al., 2013); and (2) female self-employment activities have different contours than those carried out by males (Georgellis and Wall, 2005).

From a theoretical perspective, several mechanisms are at work. First, a well-established fact points out that women are more risk averse than men (Croson and Gneezy, 2009; Parker, 2009; Dohmen et al., 2011). Thus, women are less prone to move toward self-employment and, when this occurs, to adopt more careful strategies regarding the amount of capital invested and the occupations chosen (Stefanović and Stošić, 2012).

Second, women and men are predominantly engaged in different sectors, with an overrepresentation of females in the service and trade sector (Bates, 1995; Vejsiu, 2011). Since these sectors offer fewer possibilities of developing a career as self-employed, the propensity of women to follow this employment pathway is lower. One possible explanation for this occupational segregation by gender derives from different preferences in terms of fields of study (Leoni and Falk, 2010). As shown by Charles and Bradley (2002, p. 580), there is “female underrepresentation in engineering, math/computer science (and to a lesser degree, natural science); female overrepresentation in education, humanities, and health fields.”

Third, according to the theory of class mobility, employees with lower levels of job satisfaction but high enough levels of human, social, and financial capital are more likely to switch to self-employment, seeking to improve their current situation (Budig, 2006). Clark (1997) shows that although women have on average worse jobs than men, they report higher levels of job satisfaction, which can probably be explained by their lower expectations.

The theories of discrimination offer a fourth rationale of analysis, pointing in this case to a positive gap favorable to women. Differences might arise due to employers’ behaviors that reduce women’s opportunities for wage employment, thereby pushing them into self-employment as an escape strategy (Rosti and Chelli, 2005; Williams, 2012).

As documented by Carter and Shaw (2006), women are less likely to seek external finance and depend more heavily on their own resources. As financial resources are an important prerequisite to self-employment, this is usually seen as a barrier to entry. Explanations for this gender gap might be associated with either discrimination against women or with different borrowing behaviors (Sena et al., 2012).

Another element of gender differentiation is related to social capital. Men’s social networks are more diversified and include more powerful and work-centered contacts (Koellinger et al., 2013). The disadvantage of women in this regard can be explained on the following grounds: (1) due to family responsibilities, women have less time to invest in networking, and their contacts are based essentially on family and friends; and (2) since women have lower status jobs, their work-related contacts are less powerful.
Finally, it is important to note that motivations to entry into self-employment differ considerably between genders (Biehl et al., 2014). While men are mainly driven by higher potential returns, women want flexibility aimed at a better work-life balance (Wellington, 2006; Gurley-Calvez et al., 2009).

2.2 Age

Concerning age, the theoretical literature has underscored several arguments supporting two main ideas: (1) a positive influence of age; and (2) the existence of a threshold above which the impact of this variable is reversed. From the combination of these aspects emerges an inverse U-shaped relationship between age and self-employment, which is consistent with the model of Lévesque and Minniti (2006).

We may highlight three reasons justifying why older individuals are more likely to be self-employed. First, older people have on average a larger amount of several key resources that facilitate the transition to self-employment, namely general and specific human capital, financial capital, and social capital. Second, age is positively correlated with a stronger desire for flexible employment situations. This may arise due to the wish for a partial reform or a limiting health status (Cahill et al., 2013). A third line of reasoning focuses on self-employment as a job alternative for individuals who, toward the end of their career, want to postpone the age at which they leave the labor market (Kerr and Armstrong-Stassen, 2011; Van Solinge, 2014). This is consistent with the evidence reported by Cahill et al. (2013), according to which a considerable number of older individuals move to some form of bridge employment between their main career employment and their final labor force withdrawal. Interestingly, “despite the importance of bridge employment to older-aged workers, organizations, and society, scholars have noted that research on this topic is still in its early stages” (Jones and McIntosh, 2010, p. 291).

In turn, some other important arguments identify a negative influence of age on self-employment entry above a given threshold. These include: higher risk aversion levels, lower physical and mental availability for long work weeks, stress situations that are usually associated with self-employment activities, and less time to recover the initial investment made at the entry (Hintermaier and Steinberger, 2005).

At the empirical level, studies aimed at testing the nonlinear impact of this variable include age and age squared in their econometric models. These exercises have consistently provided a solid confirmation of the predicted relationship (e.g., Fairlie, 1999; Dunn and Holtz-Eakin, 2000; Blanchflower, 2004; Andersson and Hammarstedt, 2010a; Caliendo et al., 2014). As stated by Parker (2009), for instance, the age at which the probability of transition to self-employment usually peaks ranges between 35 and 44 years. However, in the study by Georgellis et al. (2005a), taking the case of UK as reference, the peak occurs later, around 48 years.

2.3 Marital Status and Children

The current state of research provides strong support for the belief that marital status influences labor market outcomes. Regarding self-employment, several arguments can be examined (Parker, 2009; Özcan, 2011). First, if an individual is married, the wealth of the potentially self-employed person increases. This not only directly increases the probability of transition to self-employment, but also assures that if financial difficulties arise, wealth will allow the activity to survive for a longer period (Budig, 2006). Second, the spouse may participate in the business, and is a worker that is more probable to pursue the best interests of the business (Borjas, 1986). Third, spouses are a/the critical source of emotional support (Bosma et al., 2004).
A less unequivocal prediction emerges from the *specialization hypothesis of the neoclassical theory of family* (Becker, 1991). According to this perspective, spouses maximize the joint utility by specializing, as a function of their individual productivity, in either domestic work or market work. Since job experience is critical to improve performance, this theoretical framework implies that marriage impacts negatively on one of the spouse’s labor market outcome (the one who specializes in domestic work) while the opposite occurs for the other. All this generic discussion remains valid for the case of self-employment, implying that one of the spouses increases his/her probability of transiting to self-employment after marriage. The well-known fact that a high share of domestic work and childcare is assumed by women allows us to expect a positive (negative) impact of marriage on the likelihood of self-employment for men (women). A nuance in this prediction emerges from the heterogeneity of self-employment situations (e.g., women may choose self-employment to work part-time in order to reconcile household responsibilities and market work).

Considering the social and demographic transformations in the last decades regarding marital instability, increase of cohabitation, delay in the age at marriage, or the higher female participation in the labor force (Stevenson and Wolfers, 2007; Teachman *et al.*, 2013; Özcan, 2011) criticized the traditional approach, which captures marital status through a dummy variable with value 1 if the individual is married and 0 otherwise. Assuming that singlehood, cohabitation, being divorced, or widowed are equal to nonmarried is problematic, since several features may differ among these states (e.g., degree of specialization within the household, networks, or nonfinancial resources).

The (positive) influence of this determinant has been reported in the literature (Taylor, 1996; Ahn, 2010; Özcan, 2011; Brown *et al.*, 2011; Eliasson and Westlund, 2013). Studies that analyze the determinants of the probability of transition into self-employment through a probit model report the following estimates for the impact of marital status: 0.1064 for married and 0.1803 for divorced for the US economy (Ahn, 2010); 0.1243–0.1760 for married/cohabiting for full-time self-employment and 0.0534–0.0618 for part-time self-employment for Sweden (Eliasson and Westlund, 2013); 0.036 for married in Finland (Johansson, 2000); 0.0318–0.0472 for married in Sweden (Nykvist, 2008). In terms of marginal effects, Brown *et al.* (2011) find that compared to being single, being married increases the probability of transition to self-employment by 0.012, while the corresponding effect for separated/divorced reaches 0.015 and for widowed is 0.023. The studies by Sorgner and Fritsch (2013) and Cowling (2000) are exceptions to this overall picture. For most of the 13 countries analyzed, Cowling (2000) concludes that being married does not have a positive impact on the probability of self-employment entry.

In addition to marital status, the existence of children is usually also considered to provide a better picture about how family composition affects the likelihood of self-employment. Let us start by exploring the two rationales that suggest a negative impact of children. First, the time and resources that parents dedicate to child-rearing might be difficult to reconcile with self-employment, which is usually more demanding than wage-sector jobs (Fairchild, 2009). Second, family responsibilities might increase risk aversion. Turning now to the reasons for a positive impact, self-employment is often associated with more independence and flexibility in managing working time, which can be an advantage in the presence of children. Furthermore, having children increases the concerns with financial issues and introduces an additional motivation for seeking activities that offer the possibility of higher returns, such as self-employment (Dawson *et al.*, 2014). Finally, teenage children might help in the family business (Georgellis and Wall, 2005).

Among the empirical studies, a positive correlation between children and the probability of being self-employed predominates (Lin *et al.*, 2000; Wellington, 2006; Brown *et al.*, 2011). Studying the determinants of self-employment for women, Wellington (2006) suggests that the presence of a young child has a positive impact of about 3 percentage points (p.p.). Moreover, each additional child generates a positive effect of about 1 p.p. On the contrary, the results of Sena *et al.* (2012) suggest a negative impact, while Georgellis and Wall (2005) obtain a nonsignificant effect.
3. Family Background

3.1 Parents

The influence of parents is a highly studied topic in the area of self-employment research. Most studies (e.g., Dunn and Holtz-Eakin, 2000; Hundley, 2006; Barnir and Mclaughlin, 2011; Eren and Sula, 2012) suggest that having a parent with self-employment experience is a critical predictor of the decision to follow the same career path (Le, 1999). Fairlie (1999) and Taylor (2001) obtain results suggesting an increase of the transition probability of about 0.02. Dunn and Holtz-Eakin (2000) reach a similar value. Having two self-employed parents increases the impact to 0.034. Considering the case of Sweden, the evidence obtained by Andersson and Hammarstedt (2011) sustains that the influence of having a self-employed parent is higher in the case of males. In the specific case of native males, the self-employment propensity increases by 1.6 p.p. when the mother is self-employed and 4 p.p. in the case of the father.

The impact of parents can occur through five main channels: (1) transference of general human capital, that is, managerial skills, knowledge, values, and attitudes needed to perform well as self-employed (Hundley, 2006; Barnir and Mclaughlin, 2011); (2) transference of specific human capital, namely knowledge about parental occupations/businesses and contacts (Kim et al., 2006; White et al., 2007); (3) financial conditions, that is, access to wealth or income, minimizing capital market constraints and acting as a safety net in case of unexpected adverse business conditions (Sanders and Nee, 1996; Hundley, 2006); (4) inheritance of the parents’ business; and (5) exposure to parental role models (Bandura, 1986). As stated by Chlosta et al. (2012, p. 121), “growing up in an entrepreneurial family offers the opportunity to learn from the self-employed parent (. . .) getting a realistic job preview of self-employment.”

However, empirical literature does not provide a consensual answer to the question of which of these mechanisms predominates. Using data for France, Colombier and Masclet (2008) analyze the reasons for intergenerational correlation in self-employment, and show that individuals tend to enter into self-employment occupations that are the same as, or very similar to, those of their parents, which is consistent with the transmission of specific knowledge and capabilities. Dunn and Holtz-Eakin (2000) highlight the importance of the human capital channels and, on a lower scale, the financial resources mechanism. Finally, the importance of the role model effect is confirmed for instance by Carr and Sequeira (2007) and Chlosta et al. (2012). Dohmen et al. (2012) add that risk and trust attitudes are positively correlated between parents and children, giving support to a process of intergenerational transmission. The validity of this intergenerational link is also studied by Andersson and Hammarstedt (2010a). They find that having a self-employed parent positively influences the propensity to self-employment for the third-generation individuals. In turn, the self-employment experience of grandparents has a positive effect on foreign-born but does not seem to be an important factor for natives.

3.2 Spouse

Another important finding concerning the influence of family background is the existence of a positive correlation across spouses regarding the propensity to choose self-employment (Parker, 2008). Three main reasons can be advanced. First, the existence of a phenomenon of positive assortative mating, that is, individuals tend to match with others with similar characteristics, such as education, age, and labor market pathways (Andersson and Hammarstedt, 2010b). A second argument concerns the financial or human capital theory (Caputo and Dolinsky, 1998), according to which the benefits from sharing skills, knowledge, network of contacts, and financial resources already discussed in the case of parents can also occur between spouses. Third, as emphasized by the family business theory, when one spouse is in self-employment, there is the possibility of the other joining the spouse’s business (Lin et al., 2000).
With these theoretical considerations in mind, let us now shift our attention to the empirical analysis. Bruce (1999) analyzes the impact of a husband’s self-employment experience on the probability of the wife becoming self-employed, concluding that a positive influence of 6.5 p.p. exists. He also finds support for the three arguments presented above. Other studies focus separately on each theoretical argument. The first – the positive assortative mating – is confirmed by Brown et al. (2006), Andersson and Hammarstedt (2010b), and Dohmen et al. (2012), respectively for the UK, Sweden, and Germany. In turn, Parker (2008) concludes that the second mechanism is the most important in the case of the USA, and Lin et al. (2000) obtain evidence consistent with the family business theory, concluding that those with self-employed spouses are four times more likely to enter self-employment than those without.

Despite these theoretical arguments and their empirical confirmation, there is also an argument pointing to an opposite prediction. The risk diversification explanation suggests that self-employed workers usually face high levels of financial uncertainty and therefore couples may wish to diversify risk through the combination of different types of employment (Parker, 2008).

Going a step further, some studies are shifting the spotlight away from family to friends, colleagues, and neighbors, suggesting that this influence may also matter (Lafuente et al., 2007), namely through the role model channel (Bosma et al., 2012).

4. Personality Characteristics

In their seminal work, Kihlstrom and Laffont (1979) abandon the homogeneity assumption regarding the attitude toward risk and conclude that the probability of entry into self-employment is greater for individuals with lower levels of risk aversion. Using psychometric data for Finland, Ekelund et al. (2005) confirm that risk aversion has a negative effect on the choice to become self-employed. In a similar vein, using a sample of young males, Ahn (2010, p. 439) concludes that “the estimated effect of relative risk tolerance proves to be positive, statistically significant at 1% level, and economically quite important: the estimated marginal effect suggests that a 0.28 increase in an individual’s level of risk tolerance (i.e., an increase of one standard deviation) increases his probability of entering self-employment by 0.0061, or 13% of the unconditional transition rate.” Several other studies address this topic, reaching similar qualitative conclusions (Macko and Tyszka, 2009; Brown et al., 2011). Beyond confirming that individuals who are less averse to risk have a greater propensity to become self-employed, Caliendo et al. (2009) verify that this holds true only in the case of wage earners, while for individuals who were previously unemployed or inactive this variable has no impact.

In addition to risk attitude, several other psychological factors may also critically influence the entry into self-employment (Rauch and Frese, 2007). The most studied personality traits include overconfidence (Camerer and Lovallo, 1999; Koellinger et al., 2007, 2013), overoptimism (Macko and Tyszka, 2009), need for achievement (McClelland, 1961; Rauch and Frese, 2007), need for autonomy (Brandstätter, 1997; Croson and Minniti, 2012), self-efficacy (Chen et al., 1998; Rauch and Frese, 2007; Van Solinge, 2014), internal locus of control (Rotter, 1966; Eren and Sula, 2012), assertiveness (Brandstätter, 1997; Caliendo and Kritikos, 2008), narcissism (Mathieu and St-Jean, 2013), and taste for variety (Åstebro and Thompson, 2011). The abundant evidence on these topics reveals high concordance, pointing to the validation of their importance (Brandstätter, 2011).

Although there is no consensus on the specific dimensions that typify the most relevant factors, a fundamental and broader approach at this level is the Five-Factor model. This model, developed by Costa and McCrae (1992), provides a useful framework for exploring the relationship between personality traits and the propensity for self-employment, considering the following dimensions: (1) extraversion; (2) openness to experience; (3) agreeableness; (4) conscientiousness; and (5) emotional stability. Zhao and Seibert (2006) provide a survey on this issue.
Schmitt-Rodermund (2004) and Obschonka et al. (2010) show that individuals with a stronger entrepreneurial personality exhibit high scores with respect to (1), (2), and (4), and lower values in the other dimensions. The evidence obtained by Caliendo et al. (2014), with data for Germany, is very similar, the only difference being the inexistence of a substantial distinction regarding dimension (4). To sum up, the vast amount of study on this issue allows us to safely accept the importance of the psychological factors to an adequate understanding of the transitions into self-employment, making it a phenomenon that needs an effective multidisciplinary approach.

5. Human Capital

5.1 Education

The influence of education on self-employment is far from conclusive. In the theoretical sphere, several opposing arguments can be called into the discussion. Individuals with higher educational levels: (1) have better job opportunities in the wage sector (Van der Sluis et al., 2008); (2) are, on average, more able to identify self-employment opportunities; and (3) might have greater managerial ability, a critical precondition to succeed in self-employment occupations (Lucas, 1978).

The empirical results replicate the theoretical ambiguity. Several studies suggest a positive impact of education (e.g., Borjas and Bronars, 1989; Bates, 1995; Kim et al., 2006; Zissimopoulos et al., 2009). Considering, for example, the study by Zissimopoulos et al. (2009), it is possible to conclude that, when compared to those with less than high school, having some college increases the likelihood of entry by 0.9 p.p., while having college increases the same probability by 1.3 p.p. Nevertheless, evidence supporting the opposite conclusion can also be found in the literature (Kidd, 1993; Bruce, 1999; Clark and Drinkwater, 2000). In turn, Blanchflower (2004) detects a positive impact of education in the case of USA but the opposite occurs in Europe. Exploring a less studied but related question (the determinants of opportunity vs. necessity self-employment), Block and Wagner (2010) find that these two groups of self-employed have similar levels of education. Additionally, in a survey of the empirical literature on this specific subject, Van der Sluis et al. (2008) conclude that the influence of education on the transition to self-employment is insignificant.

How can we rationalize these contradictory perspectives and results? A promising avenue emerges from some recent empirical research – consolidated by the theoretical framework provided by Poschke (2013) – according to which there is a U-shaped relationship between education and self-employment entry (Blanchflower, 2000; Åstebro et al., 2011). Two main reasons offer a justification for this (Joona and Wadensjö, 2013). The first is the existence of distinct motivations to move to self-employment. While those at the bottom of the ability distribution (measured through education) are more likely to make this transition involuntarily, being motivated by necessity as, for example, the risk of job loss or unemployment (Von Greiff, 2009), more educated individuals are more opportunity-driven. Second, the impact of education can be obscured when the differences across industries (Bates, 1995) or fields of study (Falk and Leoni, 2009) are not taken into account.

In addition, Van der Sluis et al. (2008) highlight critical methodological problems that can also cause differences in the empirical results. The first relates to a serious problem of heterogeneity concerning the measurement of educational attainment levels (some studies consider years of schooling while others use dummy variables to capture the highest level of education concluded by the individual). Another issue relates to the endogeneity of education in the process of self-selection into self-employment. This issue arises if in the estimated models education appears to be a determinant factor of self-employment entry but at the same time is correlated with the errors in the model. In general, this correlation can be caused by measurement errors or omitted variables (Block et al., 2013). In this area, typical omitted variables include ability or other unobserved characteristics. The use of the instrumental variables methodology
can be a good solution in the presence of this problem. Nevertheless, it is still an underexploited avenue, thereby suggesting future research opportunities to shed more light on this question.

5.2 Experience

As emphasized by Jovanovic (1982), individuals learn from previous experiences, making experience a critical component of human capital. Research is almost consensual in finding a positive impact of this factor on the entry into self-employment (Evans and Leighton, 1989; Lin et al., 2000; Taylor, 2001; Georgellis et al., 2005a; Poschke, 2013). Comparing with individuals without previous self-employment experience, Taylor (2001) and Poschke (2013) identify an increase between 0.031 and 0.036 in the probability of entry. Further, Lin et al. (2000) conclude that persons with previous paid employment experience are 35% more likely to become self-employed. Additionally, Eliasson and Westlund (2013), applying a probit model, analyze the effects of self-employment experience on the probability of entry, and find that the impact is greater for full-time self-employment (with estimated coefficients between 0.7925 and 0.8387) than in the case of part-time self-employment (0.1995–0.2509).

Throughout their career individuals might accumulate three different types of experience, which create better conditions to foster the ability to run one’s own business: (1) managerial experience, that is, a set of skills that is critical to make decisions regarding day-to-day operations and to define the long-term strategy of the firm (Shane, 2003); (2) industry-specific experience, that is, with time spent working in a specific sector, individuals are better able to identify business opportunities, possess a richer network of contacts in terms of suppliers and clients, know how to select better workers, have better chances to obtain external funding, and strengthen their reputation among relevant stakeholders (Kim et al., 2006); and (3) previous self-employment experience, which promotes higher confidence levels, leading the individual to believe that he/she has the capacity to identify and succeed when good opportunities arise (Shane, 2003).

Nevertheless, individuals with more experience are likelier to have jobs with longer tenure, allowing them to accumulate more job-specific and firm-specific human capital. These assets afford monetary and nonmonetary returns that are lost if the person accepts a job elsewhere or switches to self-employment (Georgellis et al., 2005b).

Initiating what would become a very rich new research line, Lazear (2005) develops a model of choice between paid employment and self-employment, showing that the probability of transition to self-employment positively depends on the diversity of experience (jack-of-all-trades hypothesis). The idea is that a background in a vast number of different roles enhances the skills and the capacity to perform well as self-employed while the same is not necessarily true in the case of paid employment, in which it is specialization that is required and rewarded (Wagner, 2006). There are, by now, several studies that have validated this theory (Wagner, 2006; Åstebro and Thompson, 2011; Stuetzer et al., 2013a, b; Lechmann and Schnabel, 2014). For example, Wagner (2006, p. 2419) concludes that “compared with a hypothetical person with no professional degree and only one field of experience a hypothetical person with three degrees and two fields of experience has an estimated probability of being a nascent entrepreneur that is three times as high.”

Nevertheless, when we look closer at the empirical studies that seek to assess the hypothesis introduced by Lazear (2005), we detect several features that can be considered as limitations and that continue to call for further contributions. First, skill-mix is a very complex dimension to assess. Because of this, there is a trade-off between using data sets that are nationally representative but provide less adequate proxies for skill-mix (as, e.g., the number of prior jobs or industries in which the individual has worked) and using smaller samples covering specific groups such as the alumni of a given university or nascent entrepreneurs of a specific region to which it is easier to apply more detailed questionnaires. Second, in most cases, due to lack of data, studies use cross-sectional data. This leads us to the core drawback emphasized by Silva (2007, p. 119): “cross-sectional tests of the jack-of-all-trades theory cannot control for individual
unobservable characteristics, which may simultaneously affect skill acquisition and occupational choice.” Taking this into account, the empirical exercise conducted in this study does not validate the jack-of-all-trades hypothesis. Third, many of these studies include only a very reduced number of control variables. A more substantial methodological question is raised by Lechmann and Schnabel (2014), who advocate that most empirical studies concentrate on the implications of the hypothesis put forward by Lazear (2005) without analyzing its underlying assumption that entrepreneurs perform many tasks. Using data for Germany, the study confirms this hypothesis, verifying that self-employed individuals perform more tasks than employees but also concludes that the difference is small.

As a last remark, it is important to stress another angle of analysis that considers education and experience jointly. Individuals tend to evaluate the current job against their expectations, which usually depend on their human capital and on the conditions offered to others with similar characteristics. Joonna and Wadensjö (2013) report evidence suggesting that both positive and negative differentials increase self-employment propensity.

6. Health Condition

The literature on the effects of poor health (illness or disability) on the decision of self-employment entry is scarce. Until the 1990s, the empirical studies that included this dimension in their econometric models (e.g., Quinn, 1980; Borjas, 1986) did so by incorporating among their explanatory variables a dummy with value 1 if health limits work. This strategy was mainly dictated by data availability constraints. Since then, progress has been made. For example, in the US economy, the Health and Retirement Survey applied since 1992, covering middle-aged and older Americans, includes questions on the respondent’s (and his/her spouse’s) health status and on health insurance coverage. For some other countries or groups of countries, household and/or labor force surveys have also started to contemplate this issue (obviously with a large degree of variance in terms of detail).

When we consider the empirical evidence already produced, it is fair to say that it is far from conclusive. While some studies find a positive association between poor health and the self-employment option (Borjas, 1986; Zissimopoulos and Karoly, 2007; Pagán, 2009; Jones and Latreille, 2011), others point in the opposite direction (Taylor, 2001; Parker and Rougier, 2007; Cahill et al., 2013). Zissimopoulos and Karoly (2007) detect that a poor health status increases the probability of transition to self-employment by 0.009 in the case of men and 0.003 in the case of women. With a sample of males, Ahn (2010) obtains a positive effect of 0.037. On the contrary, the results obtained by Cahill et al. (2013) suggest that changing from good to very good/excellent health impacts positively on the likelihood of self-employment entry (0.025 for women and 0.04 for men).

This mixed evidence is not surprising given the heterogeneity of data and methodological options made by each of these studies. The differences derive not only from the proxies used to evaluate the individual health status, but also from the age group under scrutiny and the specific health problem being analyzed.

Concerning the age groups, while some studies include individuals from 18 to 65 years of age (e.g., Taylor, 2001), others dedicate their attention exclusively to older individuals, usually aged above 50 (e.g., Zissimopoulos and Karoly, 2007; Parker and Rogier, 2007; Cahill et al., 2013). When the analysis is limited to older age groups, the framework that is used to examine self-employment typically changes because the retirement option strongly competes with an active participation in the labor market. For this reason, instead of binary choice models, some papers use multinomial choice models to address this issue.

Also at the methodological level, there is the option of focusing on general health problems or, more specifically, on disability issues. Among the studies already mentioned, only Pagán (2009) and Jones and Latreille (2011) explore in detail the link between disability and self-employment.

Finally, considering the theoretical arguments, the reason usually put forward for the positive association between poor health and self-employment is the better adjustment that independent activities allow
between illness/disability and work concerning duties, hours, and location (Pagán, 2009; Jones and Latreille, 2011). Furthermore, the low opportunity cost derived from the few existing employment opportunities for some of these individuals, due to employer discrimination, makes self-employment an attractive solution and often the last resort for being able to work. However, individuals in situations of illness or disability may see their ability to move to an independent activity diminished since it usually implies higher levels of stress and working hours (Gorgievski et al., 2010). The decision regarding transition to self-employment of individuals with poor health may also reflect the fact that the benefits offered by the social security systems are usually more limited for the self-employed than for employees.

7. Nationality and Ethnicity

The above-average propensity of immigrants to opt for a self-employment career path is a widely accepted and studied fact. For example, with regard to the case of the USA, Fairchild (2009) finds that being foreign-born increases the probability of transition to self-employment by 26%. Considerable research has contributed to a better understanding of two issues: (1) why natives and immigrants have different propensities to self-employment (Borjas, 1986; Fairlie and Meyer, 1996; Clark and Drinkwater, 2000; Constant and Zimmermann, 2006; Andersson and Hammarstedt, 2011; Fritsch et al., 2012); and (2) why self-employment rates differ among different groups of immigrants (Borjas and Bronars, 1989; Oyelere and Belton, 2012; Andersson et al., 2013; Lofstrom and Bates, 2013). Economists and sociologists have dedicated much effort to developing several research streams, which taken together offer a better comprehension of this complex and multifaceted relationship.

A pioneering contribution is the middleman minority theory (Bonacich, 1973). The middleman minorities are, at least in the initial phases, sojourners who do not have the intention of staying permanently in the host country (Zhou, 2004; Nestorowicz, 2012). They are focused on the future and tend to choose occupations (e.g., trade or some independent professions) that not only allow more rapid wealth accumulation, but also permit shorter periods of residence (Fairlie and Meyer, 1996).

Another critical approach to understand immigrant self-employment is the designated discrimination hypothesis. This set of ideas can be divided into three main streams: employer discrimination, credit market discrimination, and consumer discrimination. The first form of discrimination favors the transition of immigrants to self-employment, while the opposite occurs in the other two cases. Employer discrimination involves fewer wage employment opportunities for immigrants and the existence of barriers in the access to medium-high paid jobs (Moore, 1983; Clark and Drinkwater, 2000). Central in this context is the concept of blocked mobility (Raijman and Tienda, 2000), which refers to the case in which upward mobility is strongly limited, leading immigrants to see self-employment as the only pathway to achieve their goals. In turn, credit market discrimination materialized in immigrants having lower loan approval rates and being able to borrow only small amounts of money at higher interest rates is confirmed by Blanchflower et al. (2003) and Blanchard et al. (2008). The idea of consumer discrimination, developed by Borjas and Bronars (1989), describes how majority groups discriminate against minority group members. In their theoretical model, majority consumers buy from minority sellers only if their prices are sufficiently lower than those established by majority sellers. Consequently, the return to productivity is less in the case of minority business owners. Therefore, the selection into self-employment is different across racial or ethnic groups. Constant and Zimmermann (2006) estimate the influence of the perception of discrimination on the decision of becoming self-employed in Germany and conclude that immigrants who feel discriminated against are 46 p.p. more likely to enter self-employment than those who do not feel discriminated.

Third, considerable attention has been dedicated to the enclave hypothesis (Wilson and Portes, 1980; Boyd, 1991). The growth of the immigrant population in certain geographical areas and the tendency to cluster into ethnic enclaves leads to the emergence of (large enough) markets characterized by preferences and needs that can be exploited with advantage by co-ethnics. In fact, immigrants not only have a better
knowledge of the demand side but can also benefit from the possibility of recruiting co-ethnic immigrants paying below-market wages (Blackburn and Ram, 2006; Ram et al., 2007). In addition, immigrants in these areas have access to bonding social capital, that is, a high-density network of the same ethnicity and socioeconomic status (Portes and Sensebrenner, 1993). This is important because it promotes cooperation and reduces free riding problems (Waldinger et al., 2006). Furthermore, as suggested by Boyd (1991), inner-city enclaves promote self-employment since the competition from natives is usually less intense, allowing lower initial and operating costs.

Fourth, immigrants often come from countries with a strong self-employment tradition. This home-country self-employment hypothesis suggests that this previous experience constitutes a form of sector-specific human capital, facilitating the transition to a self-employment situation in the host country (Hammarstedt and Shukur, 2009).

Fifth, as suggested by Zhou (2004), immigrant self-employment is closely linked to group-specific cultural values, behavior patterns, social structures, resources, and coping strategies. This is in line with the cultural theory proposed by Light (1972), according to which the sociocultural background is a key explanation for differences between groups regarding their propensity to self-employment.

Sixth, some authors have argued that immigrants are more likely to reveal values and attitudes that are important for self-employment, such as higher risk tolerance, thrift, and willingness to work longer periods of time with lower salaries (Sowell, 1995).

Seventh, we must consider the human capital theory. However, this view does not provide a clear-cut prediction. A dominant perspective argues that home-country human capital is a factor that may force involuntary entry into self-employment (Friedberg, 2000; Kanas et al., 2009) because this human capital: (1) reduces the opportunities in salaried employment; and (2) creates better conditions for success in self-employment. Considering that many immigrants come from developing countries, it is reasonable to expect that they have important disadvantages vis-à-vis natives (lower quality education, less qualified work experience, and language proficiency difficulties). Additionally, the transferability of knowledge and experience of these individuals to the host-country is often not easy to accomplish. Finally, the uncertainty about the real value of this type of human capital creates obstacles to its full recognition, adding to other reasons that motivate employer discrimination. All of these features reduce job opportunities in the wage sector. Complementary, home-country human capital may be critical for self-employment (Sanders and Nee, 1996). For example, ethnic language skills facilitate access to ethnic resources and the interaction with co-ethnic employees, suppliers, and customers (Evans, 1989; Waldinger et al., 2006).

An opposite perspective argues, however, that the problems cited above are more critical to self-employed individuals because many immigrants are concentrated in low-skill jobs in which these issues play a less vital role (Evans, 1989). Moreover, several crucial aspects to succeed in self-employment are market-specific, making their transference across countries more difficult and therefore devaluing the home-country human capital for immigrant self-employment. If this line of reasoning is valid, the expectable outcome is that immigrants with more home-country specific human capital are more likely to be salary employed (Kanas et al., 2009).

8. Access to Financial Resources

Economic literature has emphasized the existence of a positive relationship between household wealth and entry into self-employment (Evans and Jovanovic, 1989; Evans and Leighton, 1989). The importance of this relationship derives from two reasons, both related to the fact that some activities require a considerable initial investment: (1) own capital can be used to start a self-employment activity; and (2) more wealth means more collateral, which increases the likelihood of obtaining external funding.

Despite the considerable empirical support for this argument (e.g., Johansson, 2000; Zissimopoulos et al., 2009), an influential field of research alerts us to a potential endogeneity problem in the standard
analysis of this issue. As stated by Disney and Gathergood (2009), the mere fact that self-employed households have greater financial assets before entering self-employment does not necessarily imply the existence of financial constraints, as admitted in the literature. For example, we may argue that lower risk aversion and greater financial sophistication make an individual wealthier and more willing to enter self-employment (Nykvist, 2008).

Given the importance of this problem, a new strand of research has started to analyze the impact of financial windfalls on the probability of self-employment entry. This new strand boasts numerous empirical studies, with many nuances and specificities, far beyond the focus of this survey. Since the pioneering contribution by Holtz-Eakin et al. (1994), the logic behind the use of these financial windfalls resides in the fact that they can be seen as an exogenous shock in the household/individual wealth, thereby overcoming the endogeneity problem. If households that receive a financial windfall have a greater probability of moving into self-employment, then limited access to finance can be interpreted as a factor deterring entry. Many alternative indicators are used to proxy these windfall gains, including lottery winnings or other gambling prizes, gifts, inheritances, bonus from employment, personal accident claims, redundancy payments, life-insurance policies, pension cash-outs, or changes in housing wealth (Lindh and Ohlsson, 1996; Blanchflower and Oswald, 1998; Taylor, 2001; Disney and Gathergood, 2009; Fairlie and Krashinsky, 2012).

Putting all the above evidence together, the message seems to be in favor of the existence of liquidity constraints. However, Hurst and Lusardi (2004), in an important milestone in this research path, have advanced some arguments questioning the validity of this assessment. They find a very weak relationship between household wealth and the subsequent movement toward a self-employed condition: “the estimated probability of starting a business for someone with $20,000 in wealth is nearly identical to the estimated probability of starting a business for someone with $200,000 in wealth (the estimates are 0.029 and 0.031 ( . . . ) respectively)” (Hurst and Lusardi, 2004, p. 326). Moreover, this relationship only becomes stronger for the fifth highest percentile of the wealth distribution (above $300,000). However, some authors have questioned these results, highlighting some methodological weaknesses of the study and returning to the idea of the existence of liquidity constraints. For instance, Fairlie and Krashinsky (2012) advocate separate evaluations for situations in which self-employment emerges as an opportunity and those in which it occurs by necessity. In a similar fashion, Zissimopoulos et al. (2009) argue that because different age groups have different propensities for self-employment (see Section 2.2), separate analysis is also needed in this case.

Finally, in an interesting study on this topic, Disney and Gathergood (2009) provide two additional inputs for the overall evaluation of the relevance of this determinant factor. First, they consider a more disaggregated measure of unexplained house price movements, obtaining, in opposition to Hurst and Lusardi (2004), evidence suggesting the influence of that proxy of wealth on self-employment entry. Second, no evidence is found for the impact of other forms of windfall gains.

9. Taking Stock

We have provided a systematic review of the impact of several individual factors on the probability of transition to self-employment. For each of the factors considered, we centered our evaluation on both the mechanisms through which they influence this transition and on the evidence that predominantly emerges from the empirical studies conducted to date. Table 1 summarizes the fundamental mechanisms that can be considered and the dominant evidence.

10. Final Remarks

The literature review produced in this study makes it clear that the research effort developed not only by economists but also by other social scientists gives us a reasonable stock of information regarding the
| Variable          | Theoretical links                                                                 | Expected impact: The Propensity to enter self-employment | Evidence |
|-------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------|----------|
| Gender            |                                                                                   |                                                          |          |
| Men are:          | 1. Less risk averse.                                                             | Is greater for men                                        | ✓        |
|                   | 2. More engaged in sectors with higher self-employment rates.                      |                                                          |          |
|                   | 3. Less satisfied with their jobs.                                                |                                                          |          |
|                   | 4. More prone to seek external finance.                                           |                                                          |          |
|                   | 5. Less discriminated against in the credit market.                               |                                                          |          |
|                   | 6. More likely to have more social capital.                                       |                                                          |          |
|                   | 7. Driven by higher potential returns.                                            |                                                          |          |
| Women have:       | 1. Higher likelihood of suffering employer discrimination.                        | Is greater for women                                     |          |
|                   | 2. More desire for flexibility.                                                   |                                                          |          |
| Age               | Older individuals might have:                                                     |                                                          |          |
|                   | 1. More human, financial, and social capital.                                     | Increases with age                                        | ✓        |
|                   | 2. Additional desire for flexibility                                              |                                                          |          |
|                   | 3. Desire to postpone retirement age.                                             |                                                          |          |
| Older individuals have: | 1. Higher risk aversion.                       | Decreases after a given threshold                         | ✓        |
|                   | 2. Lower physical and mental availability.                                        |                                                          |          |
|                   | 3. Less time to recover the initial investment.                                   |                                                          |          |
| Marital status    | Married individuals have:                                                         |                                                          |          |
|                   | 1. Additional wealth.                                                             | Is greater for married individuals                        | ✓        |
|                   | 2. The possibility to work together.                                              |                                                          |          |
|                   | 3. Stronger emotional support.                                                    |                                                          |          |
| Children          | Childless individuals have:                                                       |                                                          |          |
|                   | 1. More time due to fewer family responsibilities.                               | Is greater for individuals without children               |          |
|                   | 2. Lower risk aversion.                                                           |                                                          |          |
| Individuals with children have: | 1. More desire for flexibility.                        | Is greater for individuals with children                 | ✓        |
|                   | 2. Increased drive for financial earnings.                                        |                                                          |          |
|                   | 3. More help from teenage children in the business.                               |                                                          |          |
| Variable                     | Theoretical links                                                                                                                                                                                                 | Expected impact: The Propensity to enter self-employment . . . | Evidence |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|----------|
| **Family background – Parents** | Parents with self-employment history may:  
1. Give access to human and financial capital.  
2. Influence children through their role model.                                                                                                           | Is greater for individuals with at least one parent with self-employment experience | ✓        |
| **Family background – Spouse** | Individuals with a self-employed spouse have:  
1. A higher probability of sharing the spouse’s preference for self-employment.  
2. Access to more resources.  
3. The possibility to join the spouse’s activity.                                                                                                         | Is greater for individuals with a self-employed spouse        | ✓        |
|                              | Individuals with a self-employed spouse may want to diversify risks                                                                                                                                                   |                                                               |          |
| **Personality characteristics** | Psychological traits such as risk tolerance, overconfidence, overoptimism, need for achievement and autonomy, self-efficacy, and internal locus of control increase the capacity to take risks and be successful in self-employment. | Increases with these psychological traits                     | ✓        |
| **Human capital – Education** | Education develops:  
1. The capacity to identify business opportunities.  
2. Managerial ability.                                                                                                                                   | Increases with education                                     | ?        |
|                              | Lower qualifications limit the opportunities in the wage sector                                                                                                                                                       | Decreases with education                                     | ?        |
| **Human capital – Experience** | Experience allows individuals to accumulate:  
1. Managerial experience.  
2. Industry-specific experience.  
3. Self-employment experience.                                                                                                                               | Increases with experience                                     | ✓        |
|                              | Individuals with less experience have a lower opportunity cost in switching from paid employment to self-employment                                                                                               | Decreases with experience                                     |          |
|                              | A diversified background creates better conditions for success in self-employment                                                                                                                                   | Increases with the diversity of experience                    | ✓        |
Table 1. Continued.

| Variable                        | Theoretical links                                                                 | Expected impact: The Propensity to enter self-employment... | Evidence |
|--------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------|----------|
| Health condition               | Individuals with poor health:                                                      |                                                              |          |
|                                | 1. Want more flexibility.                                                          |                                                              |          |
|                                | 2. Are more likely to suffer employer discrimination.                             |                                                              |          |
|                                | Self-employment usually implies higher levels of stress and working hours          |                                                              |          |
|                                | Is greater for individuals with poor health                                       |                                                              | ?        |
|                                | Is lower for individuals with poor health                                          |                                                              | ?        |
| Nationality and ethnicity      | Compared to natives, immigrants:                                                   |                                                              |          |
|                                | 1. Are more likely to seek rapid wealth accumulation.                             |                                                              |          |
|                                | 2. Have higher likelihood of suffering employer discrimination.                   |                                                              |          |
|                                | 3. Living in enclaves can exploit ethnic businesses.                               |                                                              |          |
|                                | 4. Often come from countries with self-employment tradition.                      |                                                              |          |
|                                | 5. Are influenced by the sociocultural background.                                |                                                              |          |
|                                | 6. Possess values and attitudes favorable to self-employment.                     |                                                              |          |
|                                | 7. Have lower wage employment opportunities due to their home-country human capital.|                                                              |          |
|                                | Compared to natives, immigrants are more likely to suffer credit market and consumer discrimination |                                                              |          |
|                                | Is greater for natives than for immigrants                                          |                                                              | √        |
| Financial resources            | More wealth means more:                                                             |                                                              |          |
|                                | 1. Own capital for self-employment.                                               |                                                              |          |
|                                | 2. Collateral and access to external finance.                                     |                                                              |          |
|                                | Is greater for individuals with lower financial constraints                        |                                                              | √        |

Note: √ – The expected impact is predominantly confirmed. ? – The empirical evidence is insufficient, nonconclusive, or mixed.
mechanisms that induce or deter self-employment entry. This is valuable knowledge, as it constitutes a solid background for the definition of more focused, correct, and efficient policy measures. In fact, as stated by the Global Entrepreneurship Monitor – 2012 Women’s Report (Kelley et al., 2013), there is a large volume of underutilized resources in national economies. These resources include women who continue to have lower attachment levels to the labor market and lower self-employment rates than males, young people that face high unemployment rates in several economies, disabled persons, people with health issues, or individuals aged over 50 that choose to continue working after their career jobs and that face adverse employment opportunities. Effective policies and programs that stimulate self-employment among these groups are a possible solution to allow these people to work and explore their potential.

Concerning the state-of-the-art surveyed in this paper, some tendencies are observed. We see on the one hand, at least in the last decade, the replacement of general analyses common in early stages of knowledge by a more focused interest on the impact of each specific factor. This has allowed a more detailed understanding of the relevant channels in each case. On the other hand, given that a certain degree of consensus has been obtained for some crucial individual-level determinants, one of the most promising research avenues today involves the study of the way two or more factors interact.

Is this the same as saying that research on self-employment is reaching a steady-state equilibrium in which additional research does not deserve high priority? The answer to this question is definitely “no” for two main reasons. First, only this effort will allow the clarification of some of the puzzles that remain on this subject, such as those related to the impact of education and health condition. Second, and perhaps even more important, we should bear in mind that as time goes by, societies and economies change. Scientific research needs to stay abreast, encompassing the new trends and providing the answers they seek. Regarding these changes, let us highlight some critical aspects related to recent sociodemographic and economic transformations with potential impacts on self-employment.

At the sociodemographic level, ageing is one of the most remarkable facts of the last decades, namely in the most developed countries. As mentioned by OECD (2013, p. 22), “due to higher life expectancy and low fertility rates, the elderly population (those aged 65 years and over), accounts for almost 15% of OECD population in 2010, up from just over 12% 15 years earlier. The proportion of elderly population is remarkably lower in the emerging economies (India, South Africa, Brazil, and China) and Mexico, Turkey and Chile.” This tendency creates new challenges regarding, for instance, a delayed withdrawal from the labor market or the need to provide assistance not only for children but also for elderly parents. The advantage of flexibility seems therefore increasingly important, reinforcing the appeal of self-employment activities.

Another crucial transformation has to do with the role of women in society and in the household (albeit with strong differences depending on cultural aspects), including increased access to education, higher female participation rates, lower discrimination in the labor market, and greater control over fertility. These features may help to challenge what is commonly accepted as being the predominant link between gender and self-employment propensity. In recent years, researchers have already started to follow this route. Nevertheless, a much more systematic analysis is still needed.

The world’s current economic dynamic also poses new questions to research. Three things deserve special consideration. First, the dominant literature on self-employment refers to the context of the developed countries of Europe, North America, and Australia, while the emerging countries and less developed ones are the focus of a far lower number of studies (see for instance, Djankov et al., 2006; Han and Hare, 2013; Gindling and Newhouse, 2014). However, as a new economic geography arises, for example, with the emergence of new centrality poles in highly populated countries such as China, India, Russia, and Brazil, this bias is increasingly unacceptable. Moreover, the cultural diversity associated with this vast group of countries highlights the interest in a rigorous analysis of self-employment nuances among countries with different development levels and distinct social, cultural, and political contexts. Second, economic globalization increasingly eliminates the barriers to international labor mobility, including highly specialized workers (Bhagwati and Hanson, 2009), which brings questions that are different.
from those commonly addressed by the theoretical perspective on immigrant self-employment. Third, the international economic crisis has led to a significant upturn in unemployment rates in several countries. For example, in the US economy, the unemployment rate grew 2.3 p.p. between 2002 and 2012. Similarly, in the European Union, the analogous growth was 1.6 p.p. (from 8.9% to 10.5%). This moderate increase for the whole European area nevertheless hides significant differences across countries and strong increases for some of the southern economies, such as Greece (10.3–24.3%), Spain (11.4–25%), and Portugal (5.7–15.9%). This problem is especially dramatic for the young generation since youth unemployment rates are at very high levels (above 23% in the EU28). As mentioned in the “Conclusions on promoting youth entrepreneurship to foster social inclusion of young people” from the Council of the European Union (2014, p. 3), “entrepreneurship can constitute an important element with regard to the autonomy, personal development and wellbeing of young people” emerging as a possible solution to be pursued by policymakers through a set of adequate incentives.

Acknowledgments

We acknowledge the financial support from FCT PEst-OE/EGE/UI0315/2011. We are also grateful to the three anonymous referees for their very useful comments. The usual disclaimer applies.

Notes

1. The definition of self-employment that the OECD adopts is the following: ‘self-employed persons include employers, own-account workers, members of producers’ co-operatives, and unpaid family workers’ (OECD, 2014, p. 138).
2. Using data from the Global Entrepreneurship Monitor, covering 17 countries, Koellinger et al. (2013) find that 43% of men personally know someone who started a business while the corresponding figure for women is only 31%.
3. There is an extensive literature about whether ‘the popular view that entrepreneurs enjoy living standards far in excess of those typically observed among the majority of employees’ (Carter, 2011, p. 40) is actually supported by empirical evidence. The results are mixed. For example, Hamilton (2000), Blanchflower and Shadforth (2007), and Shane (2008) find that the income differential between self-employment and paid employment is negative. More recently, studies focusing on income underreporting by entrepreneurs (Åstebro and Chen, 2014) or wealth (Quadrini, 2000; Cagetti and De Nardi, 2006; Carter, 2011) point in the opposite direction.

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