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Comparative Well-being of Immigrant and Non-Immigrant Entrepreneurs: A Global
Perspective¹

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1. Introduction

Scholars in the field of entrepreneurship are increasingly recognizing the importance of well-being in their research (Lerman et al., 2020; Nikolaev et al., 2022; Stephan, 2018a). Recent research, primarily conducted within Western economies such as the United States, indicates that entrepreneurship offers significant potential in meeting individuals' psychological needs for autonomy, skill mastery, purpose, and social connection. This, in turn, is associated with enhanced levels of personal happiness and subjective well-being (Binder & Blankenberg, 2021; Nikolova et al., 2022; Stephan et al., 2020). On the other hand, entrepreneurs can face higher well-being costs due to exposure to more substantial stressors. These stressors include uncertainty and high workloads, which may lead to increased instances of burnout and unhappiness (Stephan et al., 2022; Wood et al., 2016).

While previous studies offer valuable insights into the correlation between entrepreneurship and well-being, they also highlight the importance of examining variations in well-being among different entrepreneurial groups (Nikolaev, Shir, et al., 2019; Stephan, 2018b). This approach will enhance our understanding of the correlation and its implications for specific groups. Consequently, my research will focus on a particular group of entrepreneurs: immigrant entrepreneurs. I have chosen to focus my study on this group for the following reasons.

First, Haltiwanger et al. (2017) highlight that immigrant entrepreneurs generate positive spillover effects in local economies, particularly enhancing innovation, and productivity. Similarly, Desiderio & Mestres-Domènech (2011) emphasize their significant contributions to employment creation and overall economic growth. In addition to founding 51% of U.S. start-up companies valued at \$1 billion or more (Anderson, 2016), immigrant-founded firms contribute significantly to job creation, with immigrant job creation being at least 49% higher than that of native-born individuals and, by some definitions, over 100% higher (Azoulay et al., 2022). Furthermore, immigrants have made substantial contributions to innovation, with 23% of all patents from 1990 to 2016 being filed by immigrant inventors (Bernstein et al., 2018).

If, despite their economic contributions, these entrepreneurs experience lower well-being compared to their non-immigrant counterparts, it could pose a significant concern. Lower well-being is associated with lower productivity (Dimaria et al., 2019). Oswald et al. (2015) found that in a controlled setting, happier individuals were approximately 12% more productive

compared to their less happy counterparts. This suggests that reducing well-being disparities could enhance contributions to the host economy even further.

Another reason to examine well-being differences is the historically high self-employment rates among immigrants (Borjas, 1986). This trend continues today; the number of self-employed immigrants in the United States increased by approximately 1.66 million between 2000 and 2017 (Lofstrom & Wang, 2019).

Furthermore, immigrant groups frequently encounter discrimination in their host countries, pushing them toward self-employment as they are unable to secure employment (Dana, 1997). Besides that, education obtained in immigrants' origin country is less valued in the labor markets of host countries, especially when it originates from non-Western countries (Chiswick & Miller, 2009; Hardoy & Schøne, 2011; Kaushal, 2011). Azoulay et al. (2022) suggest that this undervaluation could be another factor driving immigrants toward entrepreneurship. Self-employment out of necessity is associated with lower levels of job and life satisfaction (Binder & Coad, 2012; Block & Koellinger, 2008). Therefore, the research question for this study will be the following: Is there a difference in well-being between immigrant and non-immigrant entrepreneurs?

Another crucial factor affecting the well-being of immigrant entrepreneurs is the regional attitudes towards immigrants (Azoulay et al., 2022). Different countries, and even specific regions within them, hold varied views on immigration (Dempster et al., 2020). These prevailing attitudes can significantly affect the well-being of immigrant entrepreneurs (Suárez-Orozco et al., 2012). Regions with generally positive views on immigrants are associated with more favorable outcomes for immigrant well-being (McGuire et al., 2020). In contrast, regions with negative attitudes towards immigrants can have a detrimental impact on immigrant well-being (Alesina & Tabellini, 2021), potentially more so for entrepreneurs. This is the case because societal racism may force immigrants to engage in necessity-driven self-employment (Dana, 1997), which tends to correlate with lower levels of subjective well-being (Binder & Coad, 2012; Block & Koellinger, 2008). Therefore, this study also aims to investigate whether immigrant entrepreneurs in regions with negative attitudes towards immigrants experience lower well-being levels than their non-immigrant counterparts.

Finally, the distribution of human capital among immigrant entrepreneurs varies (Urban et al., 2022). Higher human capital is linked to better well-being outcomes (Amit & Litwin,

2009; Urban et al., 2022), while lower levels may impede entrepreneurship due to barriers such as interpreting the host country's business environment and limited networking opportunities (Ganguli et al., 2020; Gomez et al., 2015; Mrożewski & Hering, 2022). Recognizing these differences is vital for addressing specific needs in the entrepreneurial ecosystem. Therefore, this study examines how education influences well-being disparities between immigrant and non-immigrant entrepreneurs, considering immigrants' varied educational backgrounds and post-immigration opportunities (Baum & Flores, 2011).

This research is crucial for various stakeholders, providing insights into well-being disparities between immigrant and non-immigrant entrepreneurs and uncovering underlying factors affecting their productivity, aligning with Stephan's (2018b) emphasis on considering mental health and well-being in entrepreneurship.

This work adds to existing literature on entrepreneurship and well-being (e.g., Lerman et al., 2020; Stephan, 2018), immigrant entrepreneurship (e.g., Dana, 1997; Haltiwanger et al., 2017), societal attitudes towards entrepreneurship (e.g., González & Bretones, 2013), and the impact of education on well-being (e.g., Nikolaev & Rusakov, 2015; Oreopoulos & Salvanes, 2011).

Policymakers and social planners can utilize these findings to develop targeted interventions and support systems, such as financial aid, educational initiatives, and mentorship, to promote equal entrepreneurial opportunities and address the specific challenges faced by immigrant entrepreneurs, as suggested by Dabić et al. (2020).

Moreover, this research offers valuable insights for immigrant entrepreneurs themselves, aiding in their understanding and navigation of unique challenges and advantages. By identifying and analyzing well-being differences, this study contributes to fostering a more inclusive and supportive entrepreneurial ecosystem, benefiting both entrepreneurs and the broader communities they serve.

Following the introduction, the paper will review existing literature to provide context, underline the study's relevance, and develop the hypotheses for this study. I will then describe the chosen dataset and analytical methods, the data analysis that follows will offer evidence to assess the hypotheses. Afterward, a detailed discussion will explore the results' theoretical and policy implications, emphasizing the study's importance and suggesting applications. Lastly, acknowledging the study's limitations will prepare the ground for further research.

2. Literature review and hypotheses building

In this literature review, I will first examine the definition of well-being as presented in the literature. Following that, I will explore how differences in well-being between immigrant and non-immigrant entrepreneurs are portrayed and consider how attitudes toward immigrants and education may influence these disparities. From this analysis, I will derive the hypotheses for my research.

2.1 Well-being

The definition of well-being can vary for everyone; however, the literature identifies two primary theoretical perspectives: the eudaimonic perspective and the hedonic perspective. The eudaimonic perspective defines well-being in terms of the extent to which an individual is functioning at their full potential, emphasizing self-realization and the pursuit of meaning, as used by Ryff (1989) for example. This perspective is associated with intrinsic goals and values, such as personal growth, purpose, and autonomy. On the other hand, the hedonic perspective, as used by Diener et al. (1985) for example, defines well-being through the presence of positive emotions, favorable life evaluations, and the absence of negative emotions, focusing on attaining happiness and avoiding pain. It is important to acknowledge that these perspectives, while different, can intersect and contribute to an individual's overall sense of well-being.

2.2 Well-being differences between immigrant and non-immigrant entrepreneurs

There are multiple reasons why we might observe differences in well-being between immigrant and non-immigrant entrepreneurs. First, a substantial body of research indicates that economic performance is positively correlated with subjective well-being, both within and across countries (e.g., Killingsworth, 2021; Stevenson & Wolfers, 2013). Business performance in immigrant-owned businesses can vary. For instance, businesses run by immigrants tend to be smaller in size (Rezaei, 2007; Wang & Liu, 2014) and often operate in industries characterized by limited value-adding activities and growth prospects (Arrighetti et al., 2022; Desiderio, 2014).

However, immigrant-owned firms are significantly more likely to engage in transnational activities, such as exporting, establishing overseas branches, and outsourcing, compared to firms owned by non-immigrants (Kerr & Kerr, 2020). These transnational activities are generally associated with enhanced business performance (Arrighetti et al., 2022;

Wang & Liu, 2014). Morgan et al. (2018) also discovered in their study that immigrant-owned firms are more inclined toward exporting. Yet, they identified a negative moderation by immigrant ownership on the relationship between export intensity and financial performance. There are mixed findings regarding the growth rates of immigrant-run businesses as well. For example, second-generation immigrant firms, especially those with parents from OECD countries, tend to exhibit higher growth rates than native firms. Conversely, second-generation immigrant firms with parents from non-OECD countries show lower growth rates (Efendic et al., 2016).

Given the evidence, business performance varies among immigrant-owned firms, reflecting the diversity among immigrant entrepreneurs and the different regional treatments they may receive. Nonetheless, the literature discussed above predominantly suggests that immigrant-owned businesses are more likely to exhibit lower performance compared to their non-immigrant counterparts. Consequently, given the generally weaker performance observed among immigrant entrepreneurs, entrepreneurship may be less psychologically rewarding for immigrants compared to non-immigrants.

Secondly, immigrant entrepreneurs are more likely to face financing barriers, which could also partly explain the generally weaker economic performance of their businesses. For example, Van Hulten and Ahmed (2013) suggest that immigrant entrepreneurs may face difficulties due to low social integration with the host community. This barrier can lead to mistrust between immigrant entrepreneurs and potential financiers, hindering their access to financing (Malki et al., 2020). Consequently, immigrant entrepreneurs often rely on informal sources of finance, such as family and friends, due to the obstacles in accessing formal financial systems (Van Hulten & Ahmed, 2013).

Furthermore, the lack of targeted support and assistance programs for immigrant entrepreneurs increases the challenges they face in navigating the financing landscape and securing necessary funds (Van Delft et al., 2000). Immigrant entrepreneurs might also face discrimination based on their ethnicity or race in the formal credit market, which can result in higher loan denial rates and less favorable loan terms (Aldén & Hammarstedt, 2016). Finally, due to their position and potential lack of familiarity with the host country's financial environment, immigrant entrepreneurs might encounter information asymmetry issues (Malki et al., 2020). This barrier involves a lack of access to crucial information regarding available financing options and their requirements, which can impede informed decision-making and access to capital. These financing barriers may further increase the subjective well-being gap

between immigrant and non-immigrant entrepreneurs, due to the economic constraints associated with them.

Thirdly, Immigrant entrepreneurs tend to have unique cross-cultural capabilities (Vandor & Franke, 2024) that could offer them well-being advantages. Immigrant entrepreneurs often develop strong emotional management and a positive mindset, which help them manage acculturative stress and adapt to new cultures effectively (Agbim, 2018). This psychological adaptation aids in maintaining their mental health amidst the challenges of operating in a foreign business environment (Pergelova et al., 2023; Xu et al., 2019).

According to Dabić et al. (2020), immigrant entrepreneurs often possess the capability to adapt their behavior and communication styles to align with the cultural expectations of their new environments. They state that this adaptability is crucial for mastering socio-cultural cues and effectively integrating into local business communities. Pergelova et al. (2023) link such skills not only to facilitating the building of networks and strengthening of business relationships but also to enhancing the entrepreneurs' social well-being. They state that by feeling connected and accepted within the community, these entrepreneurs experience a heightened sense of belonging and support, which are vital for their overall well-being.

Lastly, immigrant entrepreneurs are more likely to enter entrepreneurship out of necessity, such as being unable to secure employment due to discrimination (Dana, 1997). As a result, they are more often 'pushed' into entrepreneurship rather than being 'pulled' by its opportunities, such as seeking independence or a creative outlet. This distinction between necessity and opportunity entrepreneurship significantly impacts well-being, with numerous studies indicating that necessity-driven entrepreneurs report lower levels of well-being compared to their opportunity-driven counterparts (e.g., Binder & Blankenberg, 2021; Binder & Coad, 2012; Block & Koellinger, 2008). Consequently, if immigrant entrepreneurs are more likely to be necessity-driven, it can be concluded that they may experience less satisfaction from their entrepreneurial activities, adversely affecting their overall well-being.

While the findings are mixed regarding whether the well-being of immigrant entrepreneurs compared to non-immigrant entrepreneurs is higher or lower, most of the literature suggests a negative relationship. According to the literature, this negative relation is caused by weaker business performance, financial barriers, and discrimination. Therefore, the following is hypothesized:

Hypothesis 1: There is a significant difference in well-being between immigrant entrepreneurs and non-immigrant entrepreneurs, with immigrant entrepreneurs typically reporting lower levels of well-being.

2.3 Host countries' attitudes towards immigrants

Recent studies have shown that changes in political climates significantly influence regional attitudes toward immigrants. For instance, periods of increased political tension regarding immigration can lead to more negative attitudes, resulting in higher levels of discrimination and social exclusion (Hopkins, 2010). Conversely, when political climates favor diversity and inclusion, regional attitudes tend to improve (Hainmueller & Hopkins, 2014), fostering a more supportive environment for immigrant entrepreneurs (Karlsson et al., 2019).

In addition to political factors influencing attitudes toward immigrants, economic factors also play a crucial role. Regions with higher unemployment rates and economic insecurity often exhibit more hostility toward immigrants, driven by the perception that immigrants compete for scarce jobs and resources (Mayda, 2006). Furthermore, areas with more generous welfare provisions might display greater hostility if natives believe that immigrants are exploiting these benefits without contributing sufficiently (Dustmann & Preston, 2007).

Differences in cultural and national identity perceptions also play a crucial role. Societies with strong, homogenous cultural identities might view immigrants as a threat to their cultural fabric, leading to higher levels of hostility (Yang, 2018). This is particularly evident in countries like Japan, where the absence of narratives on the positive roles of immigrants and a lack of integration policies can result in more negative attitudes (Igarashi & Laurence, 2021).

Research indicates that regional attitudes toward immigrants significantly influence the well-being of immigrant entrepreneurs (Azoulay et al., 2022). Dempster et al. (2020) highlight the importance of these attitudes, noting that different countries and even specific regions within them exhibit varied stances on immigration. This variation affects how immigrant entrepreneurs are perceived and treated, influencing their psychological and economic well-being (Suárez-Orozco et al., 2012).

In regions with positive attitudes towards immigrants, the environment is likely more supportive, leading to better outcomes for immigrant well-being (McGuire et al., 2020). Conversely, in regions with negative attitudes, the impact is detrimental (Alesina & Tabellini,

2021). Discrimination and labor exclusion are significant factors that push many immigrants into entrepreneurship, not merely as an economic choice but as a strategy to cope with negative social identities (Dana, 1997; González & Bretones, 2013). Entrepreneurship out of necessity is typically associated with lower subjective well-being due to its reactive nature and often limited economic return (Binder & Blankenberg, 2021; Binder & Coad, 2012; Block & Koellinger, 2008).

Immigrant entrepreneurs face ongoing discrimination even while running their businesses. Local populations may perceive immigrant entrepreneurs as competitors, leading to resistance and hostility (Griffin-El & Olabisi, 2017), which could potentially undermine business success and further impair well-being (Killingsworth, 2021; Stevenson & Wolfers, 2013). Therefore, it is hypothesized that:

Hypothesis 2: The difference in well-being between immigrant entrepreneurs and their non-immigrant counterparts is larger in regions with a negative attitude toward immigrants, with immigrant entrepreneurs experiencing significantly lower well-being in these areas.

2.4 The role of education

Education is considered a fundamental investment in human capital, influencing various life outcomes significantly. Educated individuals often secure better job positions, enjoy enhanced labor force flexibility, earn higher incomes, and experience longer, healthier lives (Hanushek & Woessmann, 2020). Moreover, education is positively correlated with subjective well-being, as more educated individuals tend to perceive their lives as more meaningful, experience more positive emotions, and exhibit higher satisfaction across different life domains such as finances, family, and job satisfaction (Card, 1999; Nikolaev & Rusakov, 2015; Oreopoulos & Salvanes, 2011).

However, Stephan (2018a) argues that the broader skill set, and competencies developed through higher education can also introduce significant opportunity costs. For entrepreneurs, this may result in comparisons between potential earnings from entrepreneurial activities and salaried employment, possibly diminishing work satisfaction and subjective well-being (Dawson, 2017). In Indonesia, for example, highly skilled self-employed individuals reported

the lowest levels of life satisfaction, highlighting that higher education might sometimes reduce subjective well-being due to these opportunity cost considerations (Kwon & Sohn, 2017).

The entrepreneurial landscape also reflects the uneven distribution of human capital among immigrant entrepreneurs, who often bring diverse educational and professional backgrounds from their home countries (Urban et al., 2022). The quality of education, which varies significantly across different regions and institutions (Pfeffer, 2015), also plays a crucial role in shaping entrepreneurial outcomes. High-quality education typically provides stronger foundational skills, better critical thinking, and more effective professional networks, all of which can significantly benefit immigrant entrepreneurs (Wadhwa et al., 2008).

Empirical evidence shows that immigrants with higher human capital and quality education navigate the entrepreneurial landscape more efficiently, leveraging advanced skills to achieve better well-being outcomes (Urban et al., 2022). For example, a study by Wadhwa et al. (2007) found that highly educated immigrants in the United States were more likely to engage in entrepreneurial activities. Similarly, a study by Hendriks (2018) found that highly educated immigrants in Germany reported higher levels of life satisfaction. Literature also suggests that education not only enhances personal competencies and social networks but also fosters more substantial and formal entrepreneurial ventures (Davidsson & Honig, 2003).

Conversely, immigrants with less human capital may encounter barriers such as limited understanding of the host country's business environment and fewer networking opportunities, impacting their entrepreneurial opportunities (Ganguli et al., 2020; Gomez et al., 2015; Mrożewski & Hering, 2022) and potentially their well-being.

Given the disparity in educational backgrounds among immigrants and their post-immigration educational opportunities, it is crucial to understand how these differences impact the well-being outcomes of immigrant entrepreneurs compared to non-immigrant entrepreneurs. Considering the broad and diverse impacts of education on both entrepreneurial success and subjective well-being, and acknowledging the specific challenges faced by immigrant entrepreneurs, this study hypothesizes:

Hypothesis 3: The difference in well-being between immigrant entrepreneurs and non-immigrant entrepreneurs is smaller among those with higher educational attainment,

indicating that higher education reduces the negative impact of immigrant status on well-being.

3. Data and methods

In this section, I will start by discussing the dataset I plan to use and the relevant variables within this dataset. Afterwards, I will discuss my empirical methodology.

3.1 Dataset and variables

3.1.1 Data description

To perform my research, I will use data from the World Values Survey (WVS). The WVS is a global research project that explores people's values and beliefs, how they change over time, and what social and political impacts they have across diverse cultures. For my analysis, I will pool data from the three most recent World Values Survey (WVS) waves: wave 5 (2005-2009), wave 6 (2010-2014) and wave 7 (2017-2022). This approach will enable me to incorporate time-fixed effects into my models. I have specifically chosen to use these three waves because they are the first ones to incorporate questions regarding whether the respondent or the respondent's parents are immigrants in their current country of residence. This aspect is crucial for my research. The WVS interviews nationally representative individuals with a minimum sample size of 1,000 respondents per country. Data were collected using face-to-face interviews at the respondents' residences to ensure that respondents without access to the Internet were also represented within the survey.

The WVS is particularly useful for my analysis for several key reasons. Firstly, its extensive application in well-being research demonstrates its validity and relevance (Del Mar Salinas-Jiménez et al., 2012; Flèche et al., 2012; Hammond et al., 2011). Secondly, the WVS provides detailed information on individuals' employment status, including self-employment, which will be proxied to identify entrepreneurial individuals. Thirdly, the dataset offers a wide array of questions regarding individuals' values and preferences, education, attitudes towards immigrants, personality, and demographics, which I need for my research. Finally, the WVS's broad geographic and temporal scope, covering 64 countries with longitudinal data for approximately 129,000 individuals, allows for a robust cross-country analysis. This comprehensive coverage, including multiple surveys across various income levels, underpins the dataset's utility for examining the dynamics of well-being and entrepreneurial activity globally.

3.1.2 Dependent variable

Previous research on entrepreneurship has primarily focused on subjective well-being, incorporating aspects from both the hedonic and eudaimonic perspectives described in the literature review. A notable recent example is the study by Nikolaev et al. (2019), which presents empirical evidence demonstrating a significant correlation between entrepreneurship and higher levels of subjective well-being, primarily mediated through psychological functioning. In entrepreneurship literature, overall life satisfaction is commonly used as a proxy for well-being (Binder & Coad, 2015; Hundley, 2001). According to Layard & Oparina (2021), overall life satisfaction provides a better indication of human well-being than measures of income, health, or education, as it captures the overall quality of life. This thesis will follow prior research and therefore focus on subjective well-being, the terms life satisfaction, well-being, and happiness will be used interchangeably.

Life satisfaction is often used as a measure of subjective well-being and refers to an individual's overall evaluation of their life (Diener et al., 1985). It represents the degree of satisfaction with the life aspects that an individual considers most important. Life satisfaction is globally recognized as a measure of well-being because it can be easily applied across diverse cultures and countries, making it an ideal tool for cross-country research (Diener et al., 2012). A key motivation for using life satisfaction as a measure of well-being in cross-country research is its widespread data availability. Furthermore, life satisfaction is a reliable and robust measure of well-being, demonstrating a prominent level of consistency in responses across different populations (Diener et al., 2013).

In this research, well-being will be measured with a measure of overall life satisfaction, which will function as the dependent variable. In the WVS questionnaire, respondents were asked the following question: “All things considered, how satisfied are you with your life as a whole these days? Using this card on which 1 means you are ‘completely dissatisfied’ and 10 means you are ‘completely satisfied’, where would you put your satisfaction with your life as a whole?”.

3.1.3 Explanatory variables

The main explanatory variables I will use are immigrant status and self-employment status. Self-employment is used as a proxy for entrepreneurship, in line with relevant literature (e.g., Audretsch et al., 2015). The respondent's self-employment status can be determined based on their response to the employment question, which includes an option to indicate if they are self-employed.

The immigrant status of a respondent can be determined from their response to the question regarding whether they were born in their current country of residence or immigrated. Those who answer affirmatively to immigration are considered first-generation immigrants. Additionally, there are inquiries about whether their mother or father immigrated to the country they currently reside in, classifying them as second-generation immigrants. For my research, I will combine first and second-generation immigrants, identifying them both as immigrants. This approach is justified by their shared experiences related to cultural adjustment (Suárez-Orozco et al., 2012), dual identities (Verkuyten et al., 2019), and discrimination (Suárez-Orozco et al., 2012). It also enhances the statistical power and robustness of the analysis by increasing the sample size, as preliminary regressions including only first-generation immigrants yielded no significant results. Additionally, it provides insights into the intergenerational impacts of immigration.

3.1.4 Moderators

Education is explored as a potential moderator. Respondents were asked, “What is the highest educational level that you, your spouse, your mother, and your father have attained?” Supervisors provided interviewers with a nationally adapted list of codes representing various levels of education. These would later have to be converted to the International Standard Classification of Education used by the UN and UNESCO. The ISCED codes range from 0 to 8, with 0 indicating no education or early childhood education and 8 indicating a doctoral or equivalent level of education.

The other moderating variable will concern a region’s attitude towards immigrants. In my research, I will evaluate these attitudes at a regional level rather than a national level. This approach is justified because entrepreneurs are primarily embedded in local communities (Parwez, 2017), which suggests that a closer examination of their immediate environment is more appropriate.

This vector, reflecting attitudes towards immigrants, is derived from responses to two specific questions in the WVS. The first statement used for this variable is: “When jobs are scarce, employers should give priority to people of this country over immigrants.” Respondents had the option to answer with ‘agree strongly’, ‘agree’, ‘neither agree nor disagree’, ‘disagree’, or ‘disagree strongly’. The responses to this question capture the extent to which people believe natives deserve jobs over immigrants. This variable also relates to immigrants being pushed

into entrepreneurship out of necessity because they cannot find a job due to their immigration status.

Respondents were also asked whom they would rather not have as neighbors: “On this list are various groups of people. Could you please mention any that you would not like to have as neighbors?” One of the options on the list was ‘Immigrants/foreign workers’. This question helps assess a region’s attitude towards immigrants by identifying whether natives mention immigrants as people they would rather not have as neighbors.

Using these two measures, a vector can be created to gauge the overall attitude of a region towards immigrants. The first question was coded by the WVS where 1 meant people agreed with the statement (either strongly or regularly), 2 meant they disagreed (either strongly or regularly), and 3 meant they neither agreed nor disagreed. I recoded this so that 0 meant they disagreed (indicating the least negative attitude towards immigrants), 0.5 meant they neither agreed nor disagreed, and 1 meant they agreed. I chose this range because the second question was coded with a dummy variable that equaled 1 if immigrants were mentioned as a group of people that someone would not like to have as neighbors, meaning both variables would now have the same range of values.

To create the vector representing the attitude towards immigrants, I combined both variables derived from the questions and rescaled the vector to range from 1 to 10 for easier interpretation. The weight of each underlying variable remained the same.

3.1.5 Control variables

Personal characteristics commonly included in well-being regressions, such as gender, age, number of children, income level, and marital status, will be used as control variables (e.g., Headey, 2006; Pollner, 1989). When adding a region’s average attitude toward immigrants into the model, I will also control for regional average income. According to the literature review, average income might directly impact a region’s average attitude toward immigrants. By controlling for average income, we can better isolate the specific impact of attitudes toward immigrants on the well-being of immigrant entrepreneurs. As the data is pooled from multiple waves of the WVS, I will incorporate both year-fixed effects and regional or country-fixed effects into the model to control for temporal and regional variations.

3.2 Empirical methodology

My empirical methodology will rely on a standard well-being equation, like that used by Di Tella et al. (2003) for example, where individuals' reported well-being score is regressed on various individual characteristics. A detailed description of the variables used in this study is provided in Appendix Table 2. The initial model to be analyzed is as follows:

$$WB_{ict} = \beta_0 + \beta_1 I_{irt} + \beta_2 SE_{irt} + \beta_3 I_{irt} * SE_{irt} + \beta_4 X_{irt} + \alpha_{rt} + e_{irt} \quad (1)$$

where WB denotes well-being, i denotes individuals, r denotes regions, t denotes time, I is a dummy variable equal to one for immigrants, SE is a dummy variable equal to one for self-employed, X is a vector of control variables, α_{rt} are region-year fixed effects, and e_{ict} is an idiosyncratic error.

The first model can be used to evaluate whether there is a well-being difference between self-employed immigrants and self-employed non-immigrants. Formally, the test examines whether β_3 is significantly different from zero, focusing on the interaction term between the immigrant and self-employed dummies.

The second model is an extension of the first model, which includes the moderating variables of education and the attitude of a region towards immigrants.

$$WB_{ict} = \beta_0 + \beta_1 I_{irt} + \beta_2 SE_{irt} + \beta_3 E_{ict} + \beta_4 I_{irt} * SE_{irt} + \beta_5 A_{irt} * I_{irt} + \beta_6 E_{irt} * I_{irt} + \beta_7 E_{irt} * SE_{irt} + \beta_8 A_{irt} * SE_{irt} * I_{irt} + \beta_9 E_{irt} * SE_{irt} * I_{irt} + \beta_{10} X_{irt} + \alpha_{rt} + e_{irt} \quad (2)$$

This model is an extension of model 1; therefore, I will only explain the modifications introduced. The first new variable, denoted as E, represents the individual-level moderating factor of education. The second new variable, A, reflects the attitude of regions towards immigrants. The interactions observed in the model are based on the literature review and are of importance for evaluating the hypotheses.

4. Results

In this section, I will first discuss the descriptive statistics of my data, followed by the analysis of the hypotheses. For all the coefficients discussed in this section, the interpretations hold only if all other variables are kept constant (*ceteris paribus*).

4.1 Descriptive statistics

Table 1 presents the average level of well-being disaggregated by various individual-level variables, such as self-employment status, gender, immigrant status, marital status, etcetera. Table 2 presents summary statistics for all individual-level variables. Appendix Table 1 displays pairwise correlations among all variables included in the analysis.

Table 1 – Well-being by Group

Variables	Mean	SD	Median	N
Well-being	6.7	2.4	7	249,689
Immigrant status				
Immigrant	7	2.1	7	21,027
Native	6.7	2.4	7	228,662
Gender				
Female	6.8	2.4	7	128,716
Male	6.7	2.4	7	120,973
Employment status				
Self-employed	6.7	2.4	7	32,453
Other	6.7	2.4	7	217,236
Education level				
Lower	6.5	2.6	7	67,771
Middle	6.7	2.4	7	108,490
Upper	7	2.2	7	73,428
Marital status				
Married	6.8	2.3	7	159,959
Other	6.6	2.4	7	89,730
Number of children				
None	6.7	2.3	7	71,887
One	6.7	2.3	7	41,611
Two	6.7	2.3	7	63,180
Three or More	6.8	2.5	7	73,011
Income				
Lower	6	2.7	6	76,248
Middle	7	2.1	7	145,770

Upper	7.7	2	8	27,671
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Note: Each cell displays the mean life satisfaction, along with the standard deviation and median. 'N' denotes the number of observations for each category. Each category's subgroups add up to 249,689, the total number of observations.

Table 2 – Descriptive Statistics (N = 249,689)

Variable	Mean	SD	Min	Max
Life satisfaction	6.739	2.370	1	10
Immigrant status	0.084	.278	0	1
Female	.516	.500	0	1
Self-employed	.130	.336	0	1
Age	41.530	16.212	16	99
Married	.641	.480	0	1
Number of children	1.782	1.556	0	5
Education level	2.023	.752	1	3
Income level	4.736	2.217	1	10
Year survey	2010.092	8.19	1990	2022
Attitude index	5.440	2.673	1	10

The sample's average well-being is 6.7, with a standard deviation of 2.4. Immigrants make up 8.4% of the sample, while most respondents are married (64%). Self-employed individuals constitute 13% of the sample, with an average well-being of 6.7. Those with higher education represent 29% of the sample and report higher well-being (7) compared to individuals with medium (6.7) or basic (6.5) education levels.

The WVS data does not include the actual income of individuals, but rather their position within the income distribution, divided into deciles. These deciles are also recategorized into three groups: the lowest three deciles are classified as low income, the middle four deciles as middle income, and the highest three deciles as high income. The absence of data on absolute income does not significantly impact the analysis since relative income has been shown to influence an individual's life satisfaction similarly to absolute income (Del Mar Salinas-Jiménez et al., 2012). Within the sample, most individuals (58%) fall into the middle-

income category, while only 11% are categorized as high-income. Those in high-income households report the highest well-being, with an average score of 7.7. This score decreases to 7 for middle-income households and 6 for those in low-income households.

4.2 The well-being gap

Table 3 presents the results evaluating the main hypothesis (H1), with further discussion of control variables provided in the Appendix. We are primarily interested in the variables "Immigrant" and "Self-employed," along with their interaction. The immigrant variable yielded no meaningful results, indicating that there is no evidence of whether being an immigrant has a positive or negative effect on the well-being of non-self-employed individuals.

Table 3 – Results model 1 (N= 221,553; R² = 0.22)

	Well-being (1)	Well-being (2)	Well-being (3)
Immigrant	0.10 (0.07)		0.13 (0.08)
Self-employed		0.09** (0.04)	0.10** (0.04)
Immigrant * self-employed			-0.23* (0.12)
Age	-0.03** (0.01)	-0.03** (0.01)	-0.03** (0.01)
Age squared	0.0003** (0.0002)	0.0004** (0.0001)	0.0004** (0.0001)
Female	0.04 (0.02)	0.05** (0.02)	0.05** (0.02)
Married	0.35*** (0.05)	0.35*** (0.05)	0.35*** (0.05)
Number of children	0.0009 (0.01)	0.0009 (0.01)	0.0009 (0.01)
Income level	0.22*** (0.02)	0.22*** (0.02)	0.22*** (0.02)
Education level (base = lower)			

Middle	0.21** (0.10)	0.21** (0.10)	0.21** (0.10)
Upper	0.31** (0.14)	0.31** (0.14)	0.31** (0.14)
Constant	5.70*** (0.27)	5.70*** (0.27)	5.70*** (0.27)

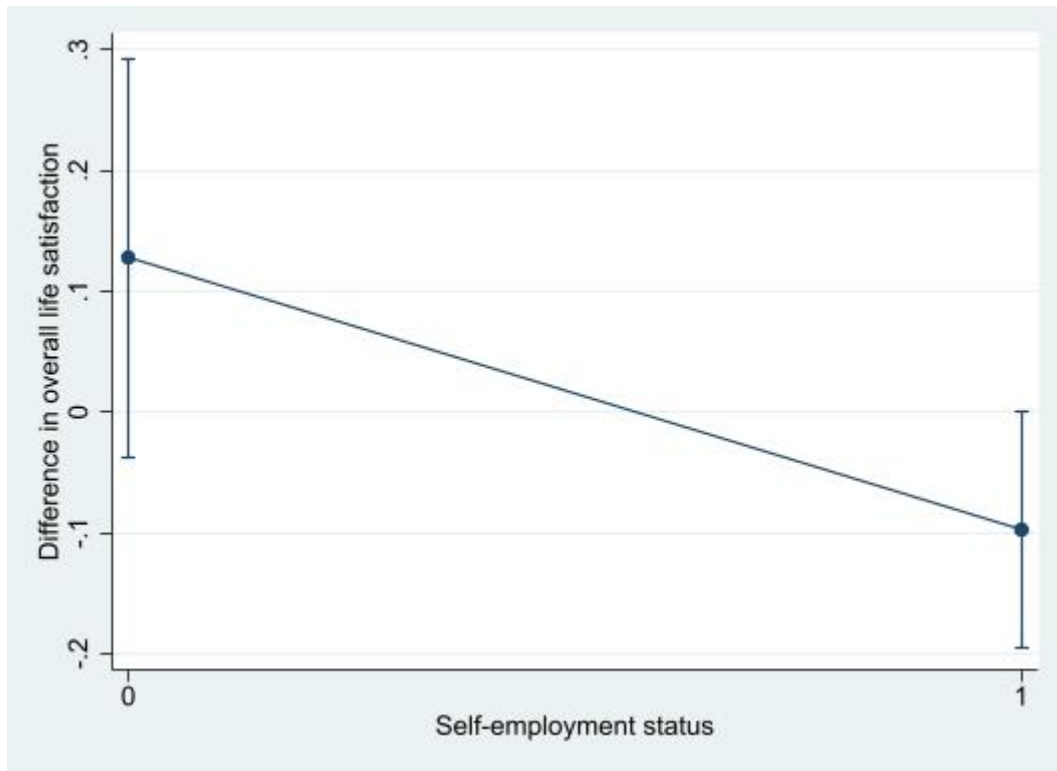
*Note: The dependent variable is well-being. All regressions incorporate region-year fixed effects. Standard errors, clustered by country, are reported in parentheses. Significance levels are denoted as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. All regressions were performed using a population-based weight.*

The self-employment coefficient is significant at the 5% level in both the second and last regression models, indicating a positive effect (0.10) on the well-being of self-employed non-immigrants. The coefficient for the interaction term between immigrant and self-employment status (-0.23) is statistically significant at the 10% level, suggesting that the positive effect of self-employment on well-being is significantly less for immigrants than for non-immigrants. This means that self-employed immigrants experience approximately 0.10 (0.13 – 0.23) units lower well-being compared to their self-employed non-immigrant counterparts.

It is important to note that the coefficient on immigrant status by itself did not yield significant results. Thus, the significance of this decrease in well-being needs to be further examined. To test this, I calculated the predictive margins of the difference in overall life satisfaction for immigrants compared to non-immigrants, based on self-employment status, as shown in Figure 1. The calculated difference in overall life satisfaction for self-employed immigrants compared to self-employed non-immigrants is -0.10, which can also be seen in the figure. The 95% confidence interval just barely includes zero, indicating that this difference is statistically significant at the 5% level, with a p-value of exactly 0.050. The figure also shows that there is no significant difference in overall life satisfaction between non-self-employed immigrants and non-self-employed non-immigrants.

Based on my results, I find support for my hypothesis that there is a significant difference in well-being between immigrant entrepreneurs and non-immigrant entrepreneurs, with immigrant entrepreneurs typically reporting lower levels of well-being.

Figure 1 – Difference in overall life satisfaction for immigrants compared to non-immigrants based on self-employment status with 95% confidence intervals



4.3 The role of regional attitudes toward immigrants

In the second model (Table 4), we include the variable 'regional attitude toward immigrants'. This variable helps us evaluate whether a more negative attitude toward immigrants in a region affects the well-being of immigrants, particularly immigrant entrepreneurs. The interaction coefficients between immigrant status and the regional attitude toward immigrants are insignificant, suggesting no effect of a region's attitude toward immigrants on the well-being of either non-self-employed immigrants or non-immigrants. Figure 2 shows the difference in overall life satisfaction for immigrants based on the region's average attitude toward immigrants. Although we already confirmed this interaction to be insignificant, the visualization provides useful confirmation, as all confidence intervals include both positive and negative differences.

Table 4 – Results model 2 (N = 221,553)

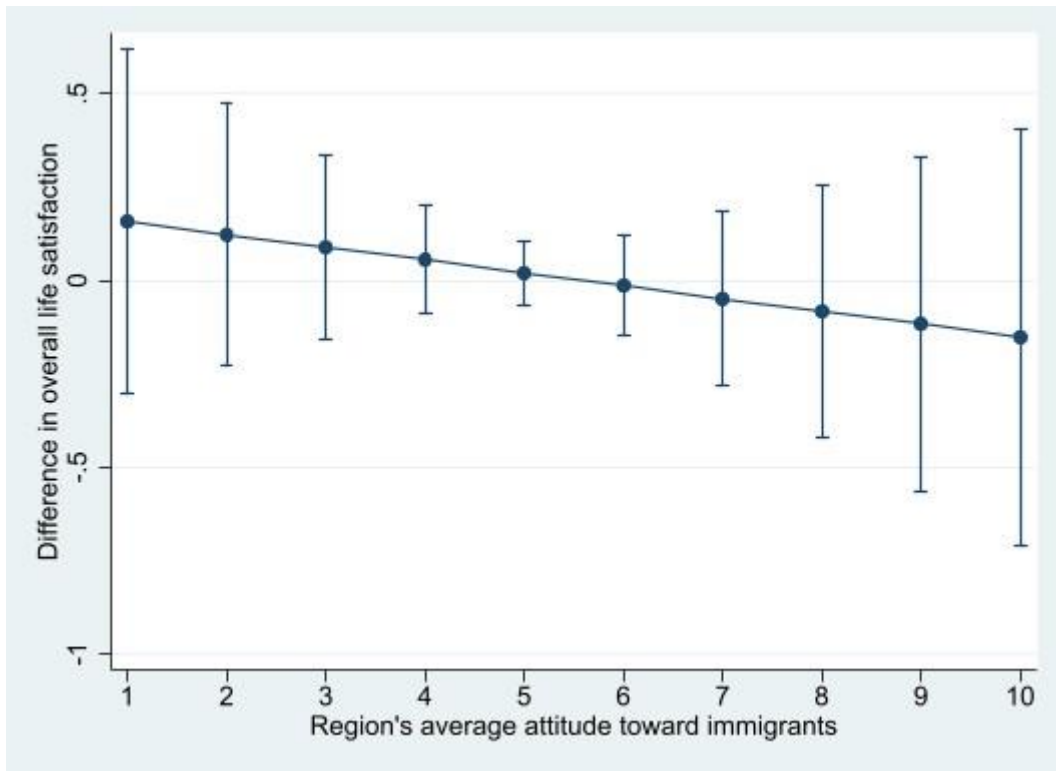
	Well-being (1)	Well-being (2)	Well-being (3)
Immigrant	0.10	0.21	0.22
	(0.22)	(0.15)	(0.41)

Immigrant *	-0.01		-0.02
regional	(0.04)		(0.06)
attitude			
Regional	0.03		0.03
attitude	(0.07)		(0.07)
Self-employed	0.05		0.05
* regional	(0.04)		(0.04)
attitude			
Self-employed	-0.19	0.11	-0.21
	(0.21)	(0.08)	(0.16)
Self-employed	0.51	-0.64**	-0.20
* immigrant	(0.35)	(0.28)	(0.34)
Self-employed	-0.12**		-0.07*
* immigrant *	(0.06)		(0.04)
regional			
attitude			
Education level			
(base = lower)			
Middle	0.18**	0.20*	0.17*
	(0.08)	(0.12)	(0.10)
Upper	0.26**	0.33**	0.27*
	(0.12)	(0.15)	(0.14)
Education level			
* immigrant			
Middle		-0.03	-0.004
		(0.16)	(0.22)
Upper		-0.22	-0.16
		(0.15)	(0.19)
Education level			
* self-			
employed			
Middle		-0.002	0.06
		(0.13)	(0.12)

Upper		-0.04 (0.08)	-0.06 (0.11)
Education level			
* self-employed *			
immigrant			
Middle		0.59* (0.34)	0.50* (0.30)
Upper		0.55** (0.24)	0.75* (0.43)
Age	-0.03*** (0.01)	-0.03** (0.01)	-0.03*** (0.01)
Age squared	0.0004** (0.0001)	0.0003** (0.0002)	0.0004** (0.0001)
Number of children	0.001 (0.009)	0.0009 (0.02)	0.0007 (0.009)
Income	0.22*** (0.02)	0.22*** (0.02)	0.22*** (0.02)
Region's average income	0.04 (0.05)		0.04 (0.05)
Female	0.07*** (0.01)	0.05*** (0.02)	0.07*** (0.01)
Married	0.38*** (0.04)	0.35*** (0.05)	0.38*** (0.04)
Constant	5.51 (0.28)	5.82 (0.23)	5.52 (0.27)
R²	0.15	0.22	0.15

*Note: The dependent variable is well-being. The second regression incorporates region-year fixed effects, the first and third regressions incorporate country-year fixed effects to prevent collinearity. Standard errors, clustered by country, are reported in parentheses. Significance levels are denoted as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. All regressions were performed using a population-based weight.*

Figure 2 – Difference in overall life satisfaction for immigrants compared to non-immigrants based on a region's attitude with 95% confidence intervals



When we include self-employment in the interaction term, we can examine whether the effect of regional attitudes toward immigrants extends to self-employed individuals. The interaction coefficient for self-employed non-immigrants is not significant, indicating that regional attitudes toward immigrants do not affect the well-being of self-employed non-immigrants, or at least this data does not provide evidence for such an effect.

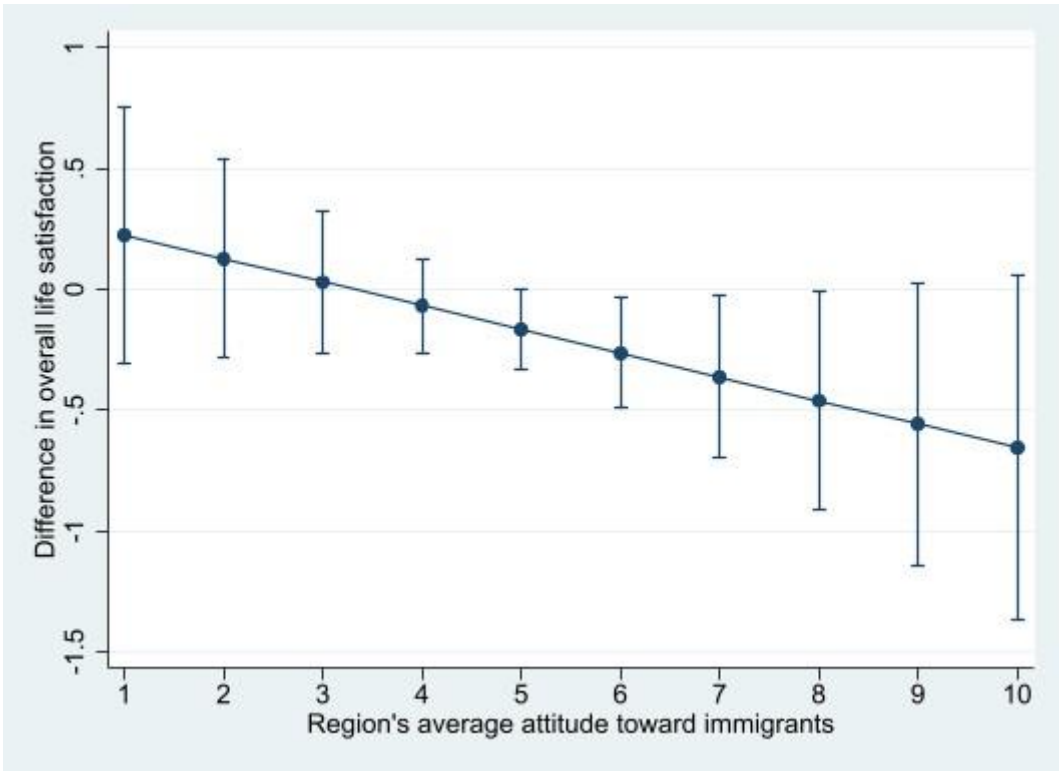
However, we find a meaningful relationship between regional attitudes toward immigrants and the well-being of self-employed immigrants. The negative coefficient of -0.07 is significant at the 5% level, suggesting that more negative regional attitudes are associated with a decrease in well-being for self-employed immigrants compared to self-employed non-immigrants. Specifically, a 1-point increase in the regional attitude index is associated with a 0.07 decrease in well-being for self-employed immigrants, relative to self-employed non-immigrants, through this interaction.

It is important to note that this interaction term is not the only factor affecting the well-being of either self-employed immigrants or self-employed non-immigrants. However, we can conclude that the interaction between self-employment status, immigrant status, and regional

attitudes toward immigrants leads to a well-being penalty for immigrant entrepreneurs compared to native entrepreneurs.

Figure 3 illustrates the effect of a region’s average attitude toward immigrants on the difference in overall life satisfaction between self-employed immigrants and self-employed non-immigrants. Our focus is to determine whether the difference in well-being between these two groups is statistically significant across various levels of regional attitudes toward immigrants. From Figure 3, we observe that this difference is statistically significant when the region’s attitude index is 5 or higher. Specifically, levels 5 to 8 are significant at the 5% level, and levels 9 and 10 are significant at the 10% level. It is important to note that a higher score on the region’s attitude index indicates a more negative attitude toward immigrants.

Figure 3 – Difference in overall life satisfaction for self-employed immigrants compared to self-employed non-immigrants based on a region’s attitude with 95% confidence intervals



In conclusion, we found that more negative regional attitudes toward immigrants negatively impact the well-being of self-employed immigrants compared to self-employed non-immigrants. Additionally, the difference in well-being between these groups is statistically significant in regions with an average attitude index of at least 5, indicating a slightly below-

average negative attitude toward immigrants, where immigrant entrepreneurs have lower well-being compared to their non-immigrant counterparts.

Therefore, the findings provide convincing evidence supporting Hypothesis 2, which suggests that the difference in well-being between immigrant entrepreneurs and their non-immigrant counterparts is larger in regions with negative attitudes toward immigrants. The data indicate that immigrant entrepreneurs indeed experience significantly lower well-being in these regions.

4.4 The role of education

In Table 3, we identified significant relationships (at the 5% level) between education and well-being. Individuals with medium-level education report an average increase in well-being of 0.21 units compared to those with lower-level education. Similarly, individuals with higher education report an average increase in well-being of 0.31 units compared to those with lower education. The second regression in the second model (Table 4) indicates that non-self-employed non-immigrants experience an average increase in well-being of 0.20 units with medium-level education compared to lower education, and an increase of 0.33 units with higher education compared to lower education. These coefficients are significant at the 10% and 5% levels, respectively.

For the remainder of the analysis, we continue to use the second regression within the second model. This model demonstrates a better fit and can incorporate region-year fixed effects, unlike country-year fixed effects. The reason for this is that the regression does not include coefficients related to a region's attitude toward immigrants, which would lead to collinearity if included with region-year fixed effects. Therefore, using the second regression is more theoretically sound for the subsequent analysis.

The interaction terms between education and self-employment, and between education and immigrant status, are not significant. This suggests no significant difference in the well-being benefits of education for immigrants or self-employed individuals. However, this still needs to be confirmed by calculating the predictive margins specifically for immigrants and self-employed individuals concerning education, as the margins provide a more detailed breakdown and can reveal specific differences within subgroups that the overall interaction term might miss.

Figure 4 displays the predictive margins of the difference in overall life satisfaction for immigrants compared to non-immigrants, based on education. The figure shows that the effect of education on well-being is not statistically significantly different for lower or higher levels of education. However, for medium-level education, the 95% confidence interval does not cross the zero-difference line. This indicates that immigrants enjoy higher well-being benefits compared to non-immigrants if they have obtained medium-level education. This benefit is, on average, 0.18 points higher compared to non-immigrants.

Figure 4 – Difference in overall life satisfaction for immigrants based on education with 95% confidence intervals

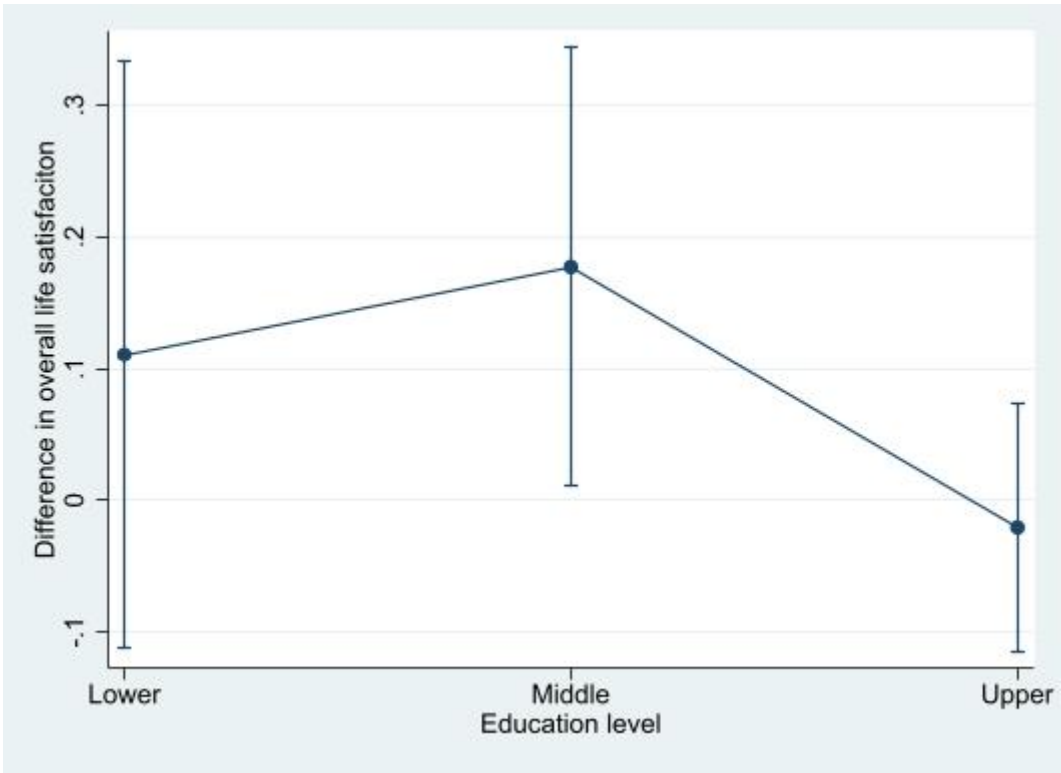
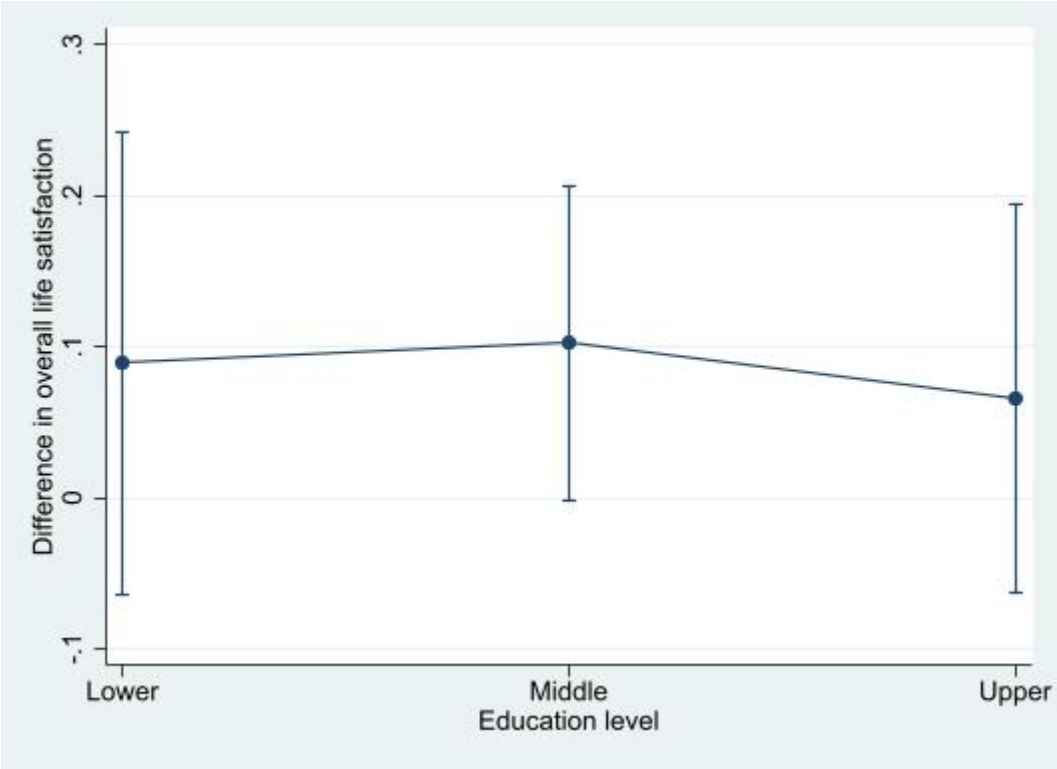


Figure 5 illustrates the predictive margins of overall life satisfaction differences between self-employed and non-self-employed individuals, based on education levels. The figure shows that the effect of education on well-being is not significantly different between self-employed and non-self-employed individuals for both lower and higher education levels. However, medium-level education has a different impact on self-employed individuals compared to non-self-employed individuals, with significance at the 10% level, as the 95% confidence interval slightly crosses the 0-difference line. This indicates that self-employed individuals experience

higher well-being benefits from medium-level education compared to non-self-employed individuals, with an average benefit of 0.10 points higher.

Figure 5 – Difference in overall life satisfaction for entrepreneurs based on education with 95% confidence intervals

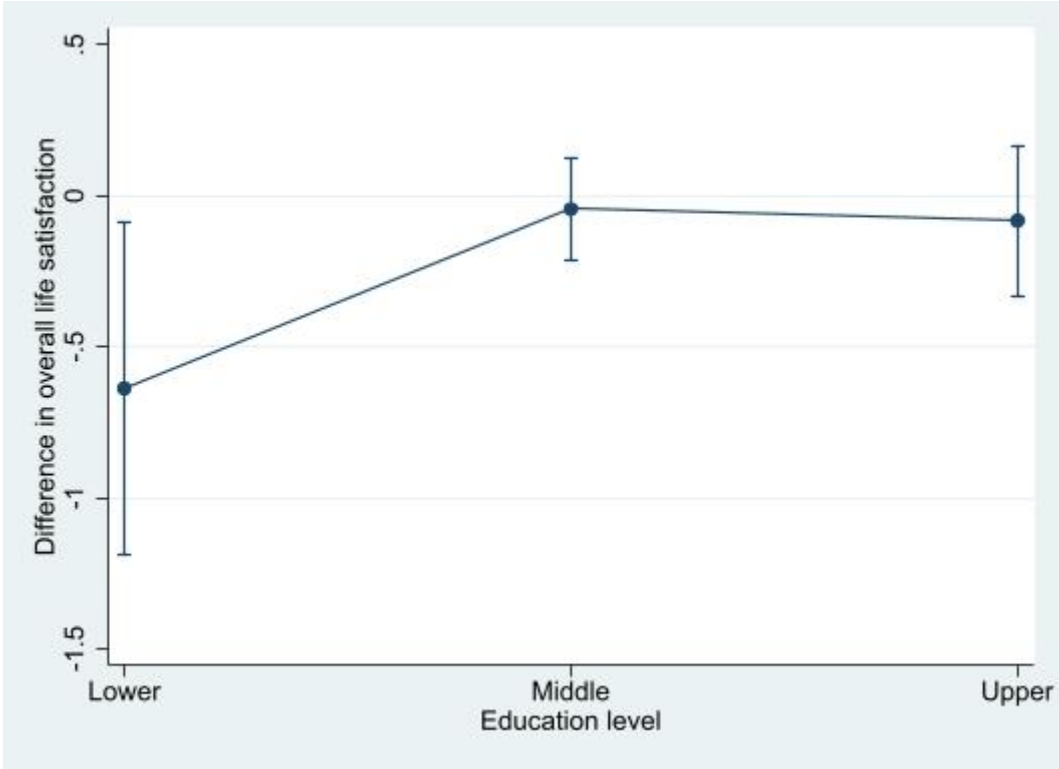


Finally, Figure 6 shows the predictive margins of the difference in overall life satisfaction between immigrant entrepreneurs and non-immigrant entrepreneurs. The figure indicates that the effect of education on well-being is not significantly different between self-employed immigrants and self-employed non-immigrants for either medium or higher levels of education. However, lower-level education has a significantly different impact on self-employed immigrants compared to self-employed non-immigrants. Specifically, self-employed immigrants suffer a significant well-being penalty, averaging 0.64 points lower, compared to self-employed non-immigrants when they both have only achieved lower levels of education.

In conclusion, both self-employed individuals and immigrant individuals are more likely to benefit from medium-level education compared to non-self-employed and non-immigrant individuals, respectively. If we specifically look at self-employed immigrants, compared to non-self-employed immigrants, which directly answers our hypothesis, we find that self-

employed immigrants suffer a well-being penalty compared to non-self-employed individuals when they have both only achieved a lower level of education. This means we do not find support for Hypothesis 3, as higher levels of education do not seem to impact the well-being of immigrant entrepreneurs differently compared to non-immigrant entrepreneurs.

Figure 6 – Difference in overall life satisfaction for immigrant entrepreneurs compared to non-immigrant entrepreneurs based on education with 95% confidence intervals



5. Discussion

This study provides new insights into the comparative well-being of immigrant and non-immigrant entrepreneurs, investigating how educational attainment and regional attitudes toward immigrants influence differences in well-being by immigrant status. The findings reveal that immigrant entrepreneurs generally report lower well-being compared to their non-immigrant counterparts, especially in regions where negative attitudes toward immigrants prevail. Moreover, immigrant entrepreneurs appear to face a well-being penalty relative to non-immigrant entrepreneurs when both groups have lower levels of education. The subsequent discussion will delve into the theoretical implications of these results, their policy implications, and the study's limitations.

5.1 Theoretical implications

A growing body of research has shown that engaging in entrepreneurship can enhance subjective well-being by meeting essential psychological needs for autonomy, competence, and relatedness (e.g., Binder & Blankenberg, 2021; Nikolova et al., 2022; Stephan et al., 2020). Despite this growing body of literature, there is still a lack of systematic analysis exploring well-being differences between immigrant and non-immigrant entrepreneurs. Nikolaev, Shir, et al. (2019) and Stephan (2018b) have highlighted the importance of examining variations in well-being among different entrepreneurial groups to enhance our understanding of the entrepreneurship well-being correlation. This study advances the literature by answering the call to examine the heterogeneity of well-being among different entrepreneurial groups, specifically focusing on the well-being of immigrant entrepreneurs in different regions.

Consistent with previous studies (e.g. Binder & Blankenberg, 2021; Nikolova et al., 2022; Stephan et al., 2020), the results of the first model suggest that entrepreneurship can lead to higher well-being, but this is highly dependent on numerous factors, as this direct relationship became unclear for example, when adding interactions with education or regions attitudes toward immigrants into the model. However, this study is the first to show that immigrant entrepreneurs tend to experience significant well-being disadvantages, especially in regions with negative attitudes toward immigrants.

These results are consistent with the idea that in regions with negative attitudes toward immigrants, their well-being is adversely affected. Discrimination and labor exclusion may be significant factors that drive many immigrants into entrepreneurship, not merely as an economic choice but as a strategy to cope with negative social identities (Dana, 1997; González & Bretones, 2013). It is important to note that while this study found that immigrant entrepreneurs experience significantly lower well-being than their non-immigrant counterparts in regions with more negative attitudes toward immigrants, it cannot confirm why this is the case. The dataset, unfortunately, did not contain information on why people opted for self-employment. Linking the reasons people choose self-employment to their well-being outcomes, especially for immigrant entrepreneurs, could be a promising avenue for further research.

Finally, we were unable to confirm whether education could reduce the negative well-being gap between immigrant and non-immigrant entrepreneurs. The literature on this topic

remains limited, and it is unclear whether such a reduction is possible or if medium or higher levels of education affect the well-being of immigrant and non-immigrant entrepreneurs similarly. However, we found a significant difference in the well-being of immigrant and non-immigrant entrepreneurs with lower levels of education. This suggests that lower education levels have a more negative impact on the well-being of immigrant entrepreneurs compared to their non-immigrant counterparts.

5.2 Policy implications

The results have several policy implications. First, a region's attitude toward immigrants plays a critical role in the well-being equality of immigrant and non-immigrant entrepreneurs. In regions with more negative attitudes toward immigrants, immigrant entrepreneurs experience significantly lower well-being than their non-immigrant counterparts. Conversely, in regions with relatively less negative attitudes toward immigrants, this well-being difference is not observed. Therefore, policies that aim to equalize the playing field by reducing negative attitudes toward immigrants within regions hold significant promise in reducing well-being inequalities among immigrant entrepreneurs.

Although this study found no positive difference in the effect of education on the well-being of immigrant entrepreneurs compared to non-immigrant entrepreneurs, we did find that higher education overall, on average, leads to an increase in well-being. Additionally, we observed that immigrant entrepreneurs with lower levels of education suffer a well-being penalty compared to their non-immigrant counterparts with similar educational backgrounds.

Dustmann et al. (2012) suggest that children of immigrants (second-generation immigrants) experience educational disadvantages compared to their native counterparts. For instance, they find that test score gaps between children of immigrants and natives are generally larger when there are significant differences in parental education levels. When controlling for parental characteristics, the achievement gap is substantially reduced but still present in many cases. This information, together with my results, suggests that addressing educational disparities could be a powerful tool for empowering immigrant entrepreneurs worldwide. Thus, promoting equal opportunities and providing extra support to second-generation immigrants in obtaining education within the host country may significantly reduce the well-being gap for immigrant entrepreneurs.

More generally, immigrants have a lot of adapting to do when coming to another country (Suárez-Orozco et al., 2012). Upon migrating, they may experience a shift in their values due to exposure to diverse cultures and lifestyles (Williams et al., 2013). This process can lead to internal conflicts and stress as they navigate between the expectations of their original culture and the demands of the destination culture. Immigrants also often experience a significant shift in their lifestyle, leaving behind their home community and familiar routines, which can lead to feelings of alienation, confusion, nostalgia, or loneliness (Suárez-Orozco et al., 2012). This shift can result in immigrants placing greater emphasis on family relationships and religion as sources of support (Cadge & Ecklund, 2007).

In this respect, policies related to cultural integration programs, community-building initiatives, mental health support, social inclusion programs, and strengthening legislation that promotes immigrant equality will likely continue to reduce the well-being gap for immigrant entrepreneurs.

It is also important to emphasize that the data are consistent with the notion that immigrants prefer wage employment (Somerville & Sumption, 2009). Our sample shows that only 8.3% of immigrants are self-employed, compared to 13.4% of non-immigrants. While no direct test for this effect can be done, this could indicate that immigrants who do choose self-employment are more likely to be pushed into it than their non-immigrant counterparts. If this is the case, it could partially explain why immigrant entrepreneurs suffer a well-being penalty compared to their non-immigrant counterparts. In that case, policies aimed at improving the well-being of immigrant entrepreneurs might be less necessary. Instead, the focus should be on improving policies that prevent immigrants from being pushed into entrepreneurship. However, my results do not confirm this, so this recommendation only holds if future research confirms that this well-being disparity is (partially) due to immigrants being more often pushed into entrepreneurship than their non-immigrant counterparts, which theory suggests as discussed earlier.

In conclusion, the policies derived from the results should focus on reducing negative attitudes toward immigrants, promoting equality in educational outcomes, supporting cultural integration programs, strengthening legislation that promotes immigrant equality, and preventing immigrants from being pushed into entrepreneurship. These policies can directly and positively affect the well-being of immigrant entrepreneurs, encouraging them to enter entrepreneurship out of choice rather than necessity. This shift could result in positive societal

gains through their additional contributions to the host country. However, the results primarily call for a focus on the non-economic outcomes of entrepreneurship, such as well-being, rather than emphasizing profits and growth as the main metrics of success.

Finally, I would like to discuss the effect sizes to determine whether these policies are absolutely necessary and could potentially benefit immigrant entrepreneurs. This study found that immigrant entrepreneurs tend to suffer a significant well-being penalty compared to non-immigrant entrepreneurs. Without specifically considering a region's attitude toward immigrants or education levels, the difference in well-being is only 0.10 for immigrant entrepreneurs compared to non-immigrant entrepreneurs. Given that the overall life satisfaction scale ranges from 1 to 10, this represents a difference in well-being of approximately 1.1%. This raises the question of whether this difference is substantial enough to warrant concern.

However, this difference in well-being becomes more pronounced when we account for a region's attitude toward immigrants. In regions with the most negative attitudes, well-being penalties average up to 0.66 (7.4%). Additionally, immigrant entrepreneurs with lower education levels experience significantly lower well-being compared to non-immigrant entrepreneurs with similar education levels, with an average well-being penalty of 0.64 (7.1%).

These findings indicate that while the overall difference in well-being between immigrant and non-immigrant entrepreneurs might not be large, it becomes significantly more concerning in regions with negative attitudes toward immigrants and for immigrant entrepreneurs with lower education levels. Therefore, the suggested policy implications are particularly crucial in regions with negative attitudes toward immigrants. Furthermore, the recommendations for supporting equal educational opportunities for immigrants are important universally.

5.3 Limitations

The WVS provides a large sample size and includes many countries and individuals with diverse backgrounds, levels of income, and values. However, there are a few limitations to the WVS data and this study in general. First, the time difference between different waves is four to five years, and each wave covers a separate set of countries surveyed in different years. While some countries appear in all three waves, others only appear in two or even one.

Second, the data is not a panel data set, meaning there is no possibility for longitudinal analysis or the inclusion of individual fixed effects. Without such data, the results should be interpreted as correlational rather than causal. Nevertheless, the focus of this paper is on the well-being gap between immigrant and non-immigrant entrepreneurs and the interaction effects, which are unlikely to suffer from serious endogeneity.

Finally, well-being is assessed using a single-item life satisfaction measure. Previous studies suggest that single-item life satisfaction measures perform very similarly to multi-item measures, providing nearly identical answers to substantive questions (Cheung & Lucas, 2014). While this validates the use of a single-item life satisfaction measure, the variable for regional attitudes toward immigrants was created manually using two terms and cannot be validated by existing literature. Therefore, readers should interpret these results with caution.

6. Appendix

The appendix includes tables of pairwise correlations and variable definitions, followed by a very brief discussion of the results of the control variables used in the models.

6.1 Tables

Appendix Table 1 – Pairwise Correlations

Variables	1	2	3	4	5	6	7
Life satisfaction (1)	1.000						
Immigrant status (2)	0.037*	1.000					
Female (3)	0.009*	0.013*	1.000				
Self-employed (4)	-0.006*	-0.043*	-0.118*	1.000			
Age (5)	0.006*	0.076*	-0.006*	-0.016*	1.000		
Married (6)	0.054*	-0.017*	-0.026*	0.066*	0.215*	1.000	
Number of children (7)	-0.001	-0.026*	0.055*	0.073*	0.460*	0.432*	1.000

Education level (8)	0.083*	0.058*	-0.042*	-0.114*	-0.177*	-0.080*	-0.252*
Income level (9)	0.250*	0.058*	-0.030*	-0.021*	-0.081*	0.049*	-0.095*
Attitude index (10)	-0.065*	-0.092*	-0.027*	0.038*	-0.019*	0.038*	0.067*
Variables	8	9	10				
Education level (8)	1.000						
Income level (9)	0.279*	1.000					
Attitude index (10)	-0.010*	-0.061*	1.000				

Note: * Indicates significance at the 0.01 level.

Appendix Table 2 – Variable definitions

Variable	Definition	Survey question/source
Well-being	Self-declared life satisfaction level, ranging from 1 (not at all satisfied) to 10 (very satisfied).	All things considered, how satisfied are you with your life as a whole these days? Using this card on which 1 means you are “completely dissatisfied” and 10 means you are “completely satisfied” where would you put your satisfaction with your life as a whole?
Age	Age of respondent	Can tell me your year of birth, please?
Immigrant status	The dummy variable takes the value 1 if the respondent is either a first or second-generation immigrant, and 0 otherwise.	Were you born in this country or are you an immigrant to this country?

Education level	A categorical variable representing education levels, where '1' indicates lower-level education, '2' denotes middle-level education, and '3' represents higher-level education.	What is the highest educational level that you have attained?
Self-employed	The dummy variable takes the value 1 if the respondent is self-employed and 0 otherwise.	Are you employed now or not? If yes, about how many hours a week? If more than one job: only for the main job.
Female	The dummy variable takes the value 1 if the respondent is female, 0 otherwise	Respondent's sex by interviewer observation
Married	The dummy variable is equal to 1 if a person is married or living like they are married, 0 otherwise	Are you currently married, living together as married, divorced, separated, widowed or single?
Number of children	A categorical variable that takes the value of 0, 1, 2, 3, 4, or 5 for no child, one child, two children, three children, four children, and five or more children respectively.	Do you have any children? (Code 0 if no, and respective number if yes)
Income level	Categorical variable which can take the values 1-10, representing the decile an individual's household income is in. Where 1 is the lowest decile and 10 is the highest.	On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. We would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in.
Attitude index	A categorical variable representing the degree of negative attitude toward immigrants, with possible	How would you feel about the following statements? Do you agree or disagree with them? When

<p>values of 1, 3.25, 5.5, 7.75, and 10. Here, '1' indicates no negative attitude, and '10' denotes the highest level of negative attitude toward immigrants. The mean of these attitude indexes for each region is used in the regressions to represent the region's attitude toward immigrants.</p>	<p>jobs are scarce, employers should give priority to people of this country over immigrants</p> <p>On this list are various groups of people. Could you please mention any that you would not like to have as neighbors?</p>
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6.2 Discussion control variables

We found predictable patterns for all the control variables. Age has a non-linear U-shaped relationship with overall life satisfaction. Females exhibit slightly higher well-being levels compared to males. Married individuals or those living as married are happier, and income positively affects well-being. However, a region's average income does not appear to impact well-being directly. Additionally, the number of children an individual has does not significantly affect well-being.

7. References

- Agbim, K. C. (2018). Emotional Intelligence and Immigrant entrepreneurship Development: A correlation analysis of the Lebanese family entrepreneurships in Nigeria. *International Journal of Small and Medium Enterprises*, 1(2), 26–42. <https://doi.org/10.46281/ijsmes.v1i2.68>
- Aldén, L., & Hammarstedt, M. (2016). Discrimination in the Credit Market? Access to Financial Capital among Self-employed Immigrants. *Kyklos*, 69(1), 3–31. <https://doi.org/10.1111/kykl.12101>
- Alesina, A., & Tabellini, M. (2021). The political effects of immigration: culture or economics? *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3846698>
- Amit, K., & Litwin, H. (2009). The Subjective Well-Being of Immigrants aged 50 and Older in Israel. *Social Indicators Research*, 98(1), 89–104. <https://doi.org/10.1007/s11205-009-9519-5>

- Anderson, S. (2016). Immigrants and billion dollar startups. In *National Foundation for American Policy*. <https://nfap.com/wp-content/uploads/2016/03/Immigrants-and-Billion-Dollar-Startups.NFAP-Policy-Brief.March-2016.pdf>
- Angrist, N., Djankov, S., Goldberg, P. K., Patrinos, H. A., Education Global Practice, & Development Economics. (2019). Measuring human capital. In *Policy Research Working Paper*. <https://documents1.worldbank.org/curated/en/540801550153933986/pdf/Measuring-Human-Capital.pdf>
- Arrighetti, A., Foresti, G., Fumagalli, S., & Lasagni, A. (2022). Are migrant-owned firms different from native-owned ones? *The International Journal of Entrepreneurship and Innovation*, 146575032211006. <https://doi.org/10.1177/14657503221100689>
- Audretsch, D. B., Kuratko, D. F., & Link, A. N. (2015). Making sense of the elusive paradigm of entrepreneurship. *Small Business Economics*, 45(4), 703–712. <https://doi.org/10.1007/s11187-015-9663-z>
- Azoulay, P., Jones, B. F., Kim, J. D., & Miranda, J. (2022). Immigration and entrepreneurship in the United States. *The American Economic Review*, 4(1), 71–88. <https://doi.org/10.1257/aeri.20200588>
- Baum, S., & Flores, S. M. (2011). Higher education and children in immigrant families. *The Future of Children*, 21(1), 171–193. <https://doi.org/10.1353/foc.2011.0000>
- Bernstein, S. B., Diamond, R., McQuade, T., & Pousada, B. (2018). The contribution of High-Skilled Immigrants to innovation in the United States. *Research Papers*. <https://ideas.repec.org/p/ecl/stabus/3748.html>
- Binder, M., & Blankenberg, A. (2021). Self-Employment and Subjective Well-Being. In *Handbook of Labor, Human Resources and Population Economics* (pp. 1–25). https://doi.org/10.1007/978-3-319-57365-6_191-1
- Binder, M., & Coad, A. (2012). Life satisfaction and self-employment: a matching approach. *Small Business Economics*, 40(4), 1009–1033. <https://doi.org/10.1007/s11187-011-9413-9>
- Binder, M., & Coad, A. (2015). How Satisfied are the Self-Employed? A Life Domain View. *Journal of Happiness Studies*, 17(4), 1409–1433. <https://doi.org/10.1007/s10902-015-9650-8>
- Block, J., & Koellinger, P. (2008). I can't get no satisfaction - Necessity entrepreneurship and procedural utility. *RePEc: Research Papers in Economics*. <https://econpapers.repec.org/RePEc:ems:eureri:13221>

- Borjas, G. J. (1986). The Self-Employment experience of immigrants. *Journal of Human Resources*, 21(4), 485. <https://doi.org/10.2307/145764>
- Cadge, W., & Ecklund, E. H. (2007). Immigration and religion. *Annual Review of Sociology*, 33(1), 359–379. <https://doi.org/10.1146/annurev.soc.33.040406.131707>
- Card, D. (1999). The causal effect of education on earnings. In *Handbook of Labor Economics* (pp. 1801–1863). [https://doi.org/10.1016/s1573-4463\(99\)03011-4](https://doi.org/10.1016/s1573-4463(99)03011-4)
- Cheung, F., & Lucas, R. E. (2014). Assessing the validity of single-item life satisfaction measures: results from three large samples. *Quality of Life Research*, 23(10), 2809–2818. <https://doi.org/10.1007/s11136-014-0726-4>
- Chiswick, B. R., & Miller, P. W. (2009). The international transferability of immigrants' human capital. *Economics of Education Review*, 28(2), 162–169. <https://doi.org/10.1016/j.econedurev.2008.07.002>
- Dabić, M., Vlačić, B., Paul, J., Dana, L., Sahasranamam, S., & Glinka, B. (2020). Immigrant entrepreneurship: A review and research agenda. *Journal of Business Research*, 113, 25–38. <https://doi.org/10.1016/j.jbusres.2020.03.013>
- Dana, L. (1997). The Origins of Self-Employment in Ethno-cultural Communities: Distinguishing between Orthodox entrepreneurship and reactionary enterprise. *Canadian Journal of Administrative Sciences / Revue Canadienne Des Sciences De L'Administration*, 14(1), 52–68. <https://doi.org/10.1111/j.1936-4490.1997.tb00118.x>
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331. [https://doi.org/10.1016/s0883-9026\(02\)00097-6](https://doi.org/10.1016/s0883-9026(02)00097-6)
- Dawson, C. (2017). Financial optimism and entrepreneurial satisfaction. *Strategic Entrepreneurship Journal*, 11(2), 171–194. <https://doi.org/10.1002/sej.1244>
- Del Mar Salinas-Jiménez, M., Artés, J., & Salinas-Jiménez, J. (2012). How do educational attainment and occupational and Wage-Earner statuses affect life satisfaction? A Gender Perspective study. *Journal of Happiness Studies*, 14(2), 367–388. <https://doi.org/10.1007/s10902-012-9334-6>
- Dempster, H., Leach, A., & Hargrave, K. (2020). Public attitudes towards immigration and immigrants. In *Overseas Development Institute* (Working Paper No. 588). https://odi.cdn.ngo/media/documents/Public_attitudes_towards_immigration_and_immigrants_what_people_think_why_and_how.pdf
- Desiderio, M. V. (2014). *Policies to support immigrant entrepreneurship*. Migration Policy Institute.

- https://www.migrationpolicy.org/sites/default/files/publications/TCM_Cities_Entrepreneurship-FINALWEB.pdf
- Desiderio, M. V., & Mestres-Domènech, J. (2011). Migrant Entrepreneurship in OECD Countries. In *International Migration Outlook*. https://doi.org/10.1787/migr_outlook-2011-en
- Di Tella, R., MacCulloch, R., & Oswald, A. J. (2003). The macroeconomics of happiness. *The Review of Economics and Statistics*, 85(4), 809–827. <https://doi.org/10.1162/003465303772815745>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Diener, E., Inglehart, R., & Tay, L. (2012). Theory and Validity of life Satisfaction scales. *Social Indicators Research*, 112(3), 497–527. <https://doi.org/10.1007/s11205-012-0076-y>
- Dimaria, C., Peroni, C., & Sarracino, F. (2019). Happiness Matters: Productivity Gains from Subjective Well-Being. *Journal of Happiness Studies (Print)*, 21(1), 139–160. <https://doi.org/10.1007/s10902-019-00074-1>
- Dustmann, C., Frattini, T., & Lanzara, G. (2012). Educational achievement of second-generation immigrants: an international comparison. *Economic Policy*, 27(69), 143–185. <https://doi.org/10.1111/j.1468-0327.2011.00275.x>
- Dustmann, C., & Preston, I. P. (2007). Racial and economic factors in attitudes to immigration. *The B.E. Journal of Economic Analysis & Policy*, 7(1). <https://doi.org/10.2202/1935-1682.1655>
- Efendic, N., Andersson, F., & Wennberg, K. (2016). Growth in first- and second-generation immigrant firms in Sweden. *International Small Business Journal*, 34(8), 1028–1052. <https://doi.org/10.1177/0266242615612533>
- Flèche, S., Smith, C., & Sorsa, P. (2012). Exploring determinants of subjective wellbeing in OECD countries. *OECD Statistics Working Papers*. <https://doi.org/10.1787/5k9ffc6p1rvb-en>
- Ganguli, I., Kahn, S., & MacGarvie, M. (2020). Introduction to “The Roles of Immigrants and Foreign Students in US Science, Innovation, and Entrepreneurship.” In *The Roles of Immigrants and Foreign Students in US Science, Innovation, and Entrepreneurship* (pp. 1–14). <https://www.nber.org/system/files/chapters/c14100/c14100.pdf>

- Gomez, C., Perera, B. Y., Weisinger, J. Y., Tobey, D. H., & Zinsmeister-Teeters, T. (2015). The impact of immigrant entrepreneurs' social capital related motivations. *New England Journal of Entrepreneurship*, 18(2), 19–30. <https://doi.org/10.1108/neje-18-02-2015-b002>
- González, J. M. G., & Bretones, F. D. (2013). Pushed or pulled? Entrepreneurial behaviour among immigrants as a strategy to cope with negative social identity. *Identities: Global Studies in Culture and Power*, 20(5), 633–648. <https://doi.org/10.1080/1070289x.2013.832680>
- Griffin-El, E., & Olabisi, J. (2017). Breaking Boundaries: Exploring the process of interjective market activity of immigrant entrepreneurship in the context of high economic inequality. *Journal of Management Studies*, 55(3), 457–485. <https://doi.org/10.1111/joms.12327>
- Hainmueller, J., & Hopkins, D. J. (2014). Public attitudes toward immigration. *Annual Review of Political Science*, 17(1), 225–249. <https://doi.org/10.1146/annurev-polisci-102512-194818>
- Haltiwanger, J., Hurst, E., Miranda, J., & Schoar, A. (2017). *Measuring entrepreneurial businesses: Current Knowledge and Challenges*. University of Chicago Press.
- Hammond, P. J., Liberini, F., & Proto, E. (2011). Individual welfare and subjective well-being : commentary inspired by Sacks, Stevenson and Wolfers. *RePEc: Research Papers in Economics*. <https://doi.org/10.22004/ag.econ.270767>
- Hanushek, E. A., & Woessmann, L. (2020). Education, knowledge capital, and economic growth. In *Elsevier eBooks* (pp. 171–182). <https://doi.org/10.1016/b978-0-12-815391-8.00014-8>
- Hardoy, I., & Schøne, P. (2011). Returns to pre-immigration education for non-western immigrants: why so low? *Education Economics (Print)*, 22(1), 48–72. <https://doi.org/10.1080/09645292.2010.511846>
- Hart, D. M. (2011). Immigrant entrepreneurship and internationalization and globalization of successful U.S. High-Tech Start-Ups. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.1823263>
- Headey, B. (2006). Subjective Well-Being: Revisions to Dynamic Equilibrium Theory using National Panel Data and Panel Regression Methods. *Social Indicators Research*, 79(3), 369–403. <https://doi.org/10.1007/s11205-005-5381-2>

- Hendriks, M. (2018, July). *Does migration increase happiness? It depends*. Immigration Research Library. <https://www.immigrationresearch.org/report/migration-policy-institute/does-migration-increase-happiness-it-depends>
- Hopkins, D. J. (2010). Politicized Places: Explaining where and when immigrants provoke local opposition. *The American Political Science Review*, *104*(1), 40–60. <https://doi.org/10.1017/s0003055409990360>
- Hundley, G. (2001). Why and When Are the Self-Employed More Satisfied with Their Work? *Industrial Relations*, *40*(2), 293–316. <https://doi.org/10.1111/0019-8676.00209>
- Igarashi, A., & Laurence, J. (2021). How does immigration affect anti-immigrant sentiment, and who is affected most? A longitudinal analysis of the UK and Japan cases. *Comparative Migration Studies*, *9*(1). <https://doi.org/10.1186/s40878-021-00231-7>
- Karlsson, C., Rickardsson, J., & Wincent, J. (2019). Diversity, innovation and entrepreneurship: where are we and where should we go in future studies? *Small Business Economics*, *56*(2), 759–772. <https://doi.org/10.1007/s11187-019-00267-1>
- Kaushal, N. (2011). Earning trajectories of highly educated immigrants: Does place of education matter? *Industrial & Labor Relations Review*, *64*(2), 323–340. <https://doi.org/10.1177/001979391106400206>
- Kerr, S. P., & Kerr, W. R. (2020). Immigrant entrepreneurship in America: Evidence from the survey of business owners 2007 & 2012. *Research Policy*, *49*(3), 103918. <https://doi.org/10.1016/j.respol.2019.103918>
- Killingsworth, M. R. (2021). Experienced well-being rises with income, even above \$75,000 per year. *Proceedings of the National Academy of Sciences of the United States of America*, *118*(4). <https://doi.org/10.1073/pnas.2016976118>
- Kwon, I., & Sohn, K. (2017). Job dissatisfaction of the self-employed in Indonesia. *Small Business Economics*, *49*(1), 233–249. <https://doi.org/10.1007/s11187-016-9820-z>
- Lerman, M., Munyon, T. P., & Williams, D. W. (2020). The (not so) dark side of entrepreneurship: A meta-analysis of the well-being and performance consequences of entrepreneurial stress. *Strategic Entrepreneurship Journal*, *15*(3), 377–402. <https://doi.org/10.1002/sej.1370>
- Lofstrom, M., & Wang, C. (2019). Immigrants and entrepreneurship. *IZA World of Labor*. <https://doi.org/10.15185/izawol.85>
- Malki, B., Umans, T., & Pittino, D. (2020). The entrepreneurial financing of the immigrant entrepreneurs: a literature review. *Small Business Economics*, *58*(3), 1337–1365. <https://doi.org/10.1007/s11187-020-00444-7>

- Mayda, A. M. (2006). Who Is Against Immigration? A Cross-Country Investigation of Individual Attitudes toward Immigrants. *The Review of Economics and Statistics*, 88(3), 510–530. <https://doi.org/10.1162/rest.88.3.510>
- McGuire, J., Dupret, S., Plant, M., & Ryan Dwyer. (2020). International immigration and subjective wellbeing. In *Shallow Cause Area Report*. https://www.happierlivesinstitute.org/wp-content/uploads/2023/02/Immigration-reform_-a-shallow-cause-exploration-MASTER-1.pdf
- Morgan, H. M., Sui, S., & Baum, M. (2018). Are SMEs with immigrant owners exceptional exporters? *Journal of Business Venturing*, 33(3), 241–260. <https://doi.org/10.1016/j.jbusvent.2017.12.003>
- Mrożewski, M., & Hering, D. (2022). What makes migrants more entrepreneurial? Investigating the role of cultural distance and human capital. *International Entrepreneurship and Management Journal*, 19(1), 151–176. <https://doi.org/10.1007/s11365-022-00813-6>
- Nikolaev, B., Boudreaux, C. J., & Wood, M. (2019). Entrepreneurship and Subjective Well-Being: The mediating role of psychological functioning. *Entrepreneurship Theory and Practice*, 44(3), 557–586. <https://doi.org/10.1177/1042258719830314>
- Nikolaev, B., Lerman, M., Boudreaux, C. J., & Mueller, B. (2022). Self-Employment and Eudaimonic Well-Being: The Mediating role of Problem- and Emotion-Focused Coping. *Entrepreneurship Theory and Practice*, 47(6), 2121–2154. <https://doi.org/10.1177/10422587221126486>
- Nikolaev, B., & Rusakov, P. (2015). Education and happiness: an alternative hypothesis. *Applied Economics Letters*, 23(12), 827–830. <https://doi.org/10.1080/13504851.2015.1111982>
- Nikolaev, B., Shir, N., & Wiklund, J. (2019). Dispositional positive and negative affect and Self-Employment transitions: the mediating role of job satisfaction. *Entrepreneurship Theory and Practice*, 44(3), 451–474. <https://doi.org/10.1177/1042258718818357>
- Nikolova, M., Bennett, D., & Boudreaux, C. J. (2022). Being your own boss and bossing others: The moderating effect of managing others on work meaning and autonomy for the Self-Employed and employees. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.4114413>
- Oreopoulos, P., & Salvanes, K. G. (2011). Priceless: The nonpecuniary benefits of schooling. *Journal of Economic Perspectives*, 25(1), 159–184. <https://doi.org/10.1257/jep.25.1.159>

- Oswald, A. J., Proto, E., & Sgroi, D. (2015). Happiness and productivity. *Journal of Labor Economics*, 33(4), 789–822. <https://doi.org/10.1086/681096>
- Parwez, S. (2017). Community-based entrepreneurship: evidences from a retail case study. *Journal of Innovation and Entrepreneurship*, 6(1). <https://doi.org/10.1186/s13731-017-0074-z>
- Pergelova, A., Zwiendelaar, J., & Beck, S. B. (2023). The Promise and Limits of Self-Employment as a path to Fulfillment and Well-Being at work. In *The Palgrave Handbook of Fulfillment, Wellness, and Personal Growth at Work* (pp. 113–140). https://doi.org/10.1007/978-3-031-35494-6_7
- Pfeffer, F. T. (2015). Equality and quality in education. A comparative study of 19 countries. *Social Science Research*, 51, 350–368. <https://doi.org/10.1016/j.ssresearch.2014.09.004>
- Pollner, M. (1989). Divine Relations, social Relations, and Well-Being. *Journal of Health and Social Behavior*, 30(1), 92. <https://doi.org/10.2307/2136915>
- Rezaei, S. (2007). Breaking out: The Dynamics of Immigrant Owned Businesses. *Journal of Social Sciences*, 3(2), 94–105. <https://doi.org/10.3844/jssp.2007.94.105>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Somerville, W., & Sumption, M. (2009). Immigration and the labour market: Theory, evidence and policy. In *Equality and Human Rights Commission*. <https://www.migrationpolicy.org/sites/default/files/publications/Immigration-and-the-Labour-Market.pdf>
- Stephan, U. (2018a). Entrepreneurs' Mental Health and Well-Being: A Review and Research agenda. *Academy of Management Perspectives*, 32(3), 290–322. <https://doi.org/10.5465/amp.2017.0001>
- Stephan, U. (2018b). Entrepreneurs' Mental Health and Well-Being: A Review and Research agenda. *the Academy of Management Perspectives*, 32(3), 290–322. <https://doi.org/10.5465/amp.2017.0001>
- Stephan, U., Rauch, A., & Hatak, I. (2022). Happy Entrepreneurs? everywhere? A Meta-Analysis of Entrepreneurship and Wellbeing. *Entrepreneurship Theory and Practice*, 47(2), 553–593. <https://doi.org/10.1177/10422587211072799>
- Stephan, U., Tavares, S. M., Carvalho, H., Ramalho, J. J., Santos, S. C., & Van Veldhoven, M. (2020). Self-employment and eudaimonic well-being: Energized by meaning,

- enabled by societal legitimacy. *Journal of Business Venturing*, 35(6), 106047.
<https://doi.org/10.1016/j.jbusvent.2020.106047>
- Stevenson, B., & Wolfers, J. (2013). Subjective Well-Being and Income: Is there any evidence of satiation? *The American Economic Review*, 103(3), 598–604.
<https://doi.org/10.1257/aer.103.3.598>
- Suárez-Orozco, C., Birman, D., Casas, J. M., Nakamura, N., Tummala-Narra, P., Zárate, M., Vasquez, M., Campbell, M., Agiliga, A., Andoh, E., Chatman, A., Swafford, F., & Varner, K. (2012). Report of the APA Presidential Task Force on Immigration. In *Crossroads*. American Psychological Association.
<https://www.apa.org/topics/immigration-refugees/executive-summary.pdf>
- Urban, B., Murimbika, M., & Mhangami, D. (2022). Immigrant entrepreneurship with a focus on human and social capital as determinants of success: evidence from South Africa. *Journal of Entrepreneurship in Emerging Economies*. <https://doi.org/10.1108/jeee-08-2021-0306>
- Van Delft, H., Gorter, C., & Nijkamp, P. (2000). In search of Ethnic Entrepreneurship Opportunities in the City: A Comparative Policy study. *Environment and Planning C-government and Policy*, 18(4), 429–451. <https://doi.org/10.1068/c9873>
- Van Hulten, A., & Ahmed, A. D. (2013). MIGRANT ENTREPRENEURS' ACCESS TO BUSINESS FINANCE IN AUSTRALIA. *Journal of Developmental Entrepreneurship*, 18(01), 1350003. <https://doi.org/10.1142/s1084946713500039>
- Vandor, P., & Franke, N. (2024, March 27). *Why are immigrants more entrepreneurial?* Harvard Business Review. <https://hbr.org/2016/10/why-are-immigrants-more-entrepreneurial>
- Verkuyten, M., Wiley, S., Deaux, K., & Fleischmann, F. (2019). To be both (and more): immigration and identity multiplicity. *Journal of Social Issues*, 75(2), 390–413.
<https://doi.org/10.1111/josi.12324>
- Wadhwa, V., Rissing, B. A., Saxenian, A., & Gereffi, G. (2007). Education, Entrepreneurship and Immigration: America's New Immigrant Entrepreneurs, Part II. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.991327>
- Wadhwa, V., Saxenian, A., Rissing, B. A., & Gereffi, G. (2008). Skilled immigration and economic growth. *Social Science Research Network*.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1141190

- Wang, Q., & Liu, C. Y. (2014). Transnational activities of immigrant-owned firms and their performances in the USA. *Small Business Economics*, 44(2), 345–359.
<https://doi.org/10.1007/s11187-014-9595-z>
- Wiklund, J., Nikolaev, B., Shir, N., Foo, M., & Bradley, S. (2019). Entrepreneurship and well-being: Past, present, and future. *Journal of Business Venturing*, 34(4), 579–588.
<https://doi.org/10.1016/j.jbusvent.2019.01.002>
- Williams, N. E., Thornton, A., & Young-DeMarco, L. C. (2013). Migrant values and beliefs: How are they different and how do they change? *Journal of Ethnic and Migration Studies*, 40(5), 796–813. <https://doi.org/10.1080/1369183x.2013.830501>
- Wood, M., Bylund, P. L., & Bradley, S. W. (2016). The influence of tax and regulatory policies on entrepreneurs' opportunity evaluation decisions. *Management Decision*, 54(5), 1160–1182. <https://doi.org/10.1108/md-10-2015-0446>
- World Values Survey Association. (n.d.). <https://www.worldvaluessurvey.org/wvs.jsp>
- Xu, K., Drennan, J., & Mathews, S. (2019). Immigrant entrepreneurs and their cross-cultural capabilities: A study of Chinese immigrant entrepreneurs in Australia. *Journal of International Entrepreneurship*, 17(4), 520–557. <https://doi.org/10.1007/s10843-019-00261-4>
- Yang, M. (2018). Why are Some People More Hostile to Immigrants than Others. *The Park Place Economist*, 26(1), 19.
<https://digitalcommons.iwu.edu/cgi/viewcontent.cgi?article=1490&context=parkplace>