



# Historical Institutional Differences and Entrepreneurship: Socialist Legacy in Vietnam

**Christian Fisch**

*University of Luxembourg, Luxembourg & Erasmus University Rotterdam, The Netherlands*

**Michael Wyrwich**

*University of Groningen, The Netherlands & Friedrich Schiller University Jena, Germany*

**Thi Lanh Nguyen**

*Dalat University, Vietnam*

**Jörn H. Block<sup>1</sup>**

*University of Trier, Germany & Erasmus University Rotterdam, The Netherlands*

**Abstract.** We study the case of Vietnam to assess the long-lasting role of institutional and historical legacy on entrepreneurial outcomes. In particular, we investigate the detrimental effect of socialist institutions on entrepreneurship. Vietnam offers a unique quasi-experimental setting because the country was divided into the socialist North and the nonsocialist South for a relatively short period of two decades. After reunification, the South adopted the institutional framework conditions of the North. To assess the relationship between socialist history and entrepreneurship in this unique setting, we survey more than 3,000 North and South Vietnamese individuals more than four decades after the reunification of the country. We find that North Vietnamese respondents have lower entrepreneurship intentions, are less likely to select into entrepreneurship education programs, and are less willing to engage in a business takeover. These patterns indicate the persistence of historical differences in institutional framework conditions on entrepreneurship. We conclude by outlining the implications of a socialist legacy for entrepreneurship theory and policymakers.

**Keywords:** socialism, Vietnam, institutions, entrepreneurship intention, entrepreneurship education, takeover vs. new venture startup.

**JEL-codes:** D02; L26; M13; P30.

## 1. Introduction

Institutions influence entrepreneurship intentions and activity (e.g., Welter, 2011). Therefore, many countries create policy initiatives to establish

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1. Corresponding author: Jörn H. Block, University of Trier, Faculty of Management, 54296 Trier, Germany. Email: [block@uni-trier.de](mailto:block@uni-trier.de)

entrepreneurship-facilitating institutional framework conditions (e.g., Fritsch et al., 2019a). A large body of research studies the role of institutions in entrepreneurship (e.g., Baumol, 1990; Sobel, 2008; Kara and Peterson, 2019). Many studies focus on the impact of *formal* conditions on entrepreneurship, which describe the formal “rules of the game” such as laws, regulations, and constitutions (e.g., North, 1990; 1994). Another stream of research investigates societal approval of entrepreneurship (e.g., Fritsch et al., 2019b; Glaeser et al., 2015; Stuetzer et al., 2016). The societal approval of entrepreneurship is a typical example of an *informal* (“soft”) institution, which comprise norms, conventions, codes of behavior, and the conduct of society (e.g., North, 1990, 1994).

The finding that formal institutional changes do not reverse or cancel out the influence of historically determined informal institutions on entrepreneurship has created an increased research interest in the latter (e.g., Boettke and Coyne, 2009). The available evidence suggests that there are long-lasting place-based differences in the approval of entrepreneurship or the “social legitimacy of entrepreneurship” (Etzioni, 1987). Hence, while it is relatively easy to influence factors such as barriers to entry in an entrepreneurship-friendly way (e.g., reducing the number of steps necessary to launch a venture), changing “soft” factors, such as the mentality, values, and attitudes toward entrepreneurship, is more challenging.

We study the case of Vietnam to test the role of institutional legacy on entrepreneurial outcomes. Vietnam offers a unique quasi-experimental setting because the country was divided into the North and the South in 1955 and reunified in 1976. While the North turned into a socialist regime, the South trended toward the Western world. After the devastating Vietnam War (1955–1975), the country was reunited, and the South adopted the socialist institutional framework conditions of the North. Hence, the people in North Vietnam endured socialist treatment for approximately 20 years longer than did those in South Vietnam. In recent decades, the regime has promoted market-oriented reforms that increase the scope for entrepreneurial activity. The changes in the formal institutional conditions have been the same in North and South Vietnam (e.g., Tran, 2019). Before these changes, Vietnam’s economic and social policy was severely anti-entrepreneurial (e.g., Tran, 2019; Walder and Nguyen, 2008) and comparable to those of other socialist regimes (e.g., Earle and Sakova, 2000; Wyrwich, 2013).

Socialism typically includes the establishment of anti-entrepreneurial formal institutions that trigger low informal approval of entrepreneurship over time. Schwartz and Bardi (1997) describe how socialism crowds out a value orientation for autonomy, which is crucial for entrepreneurship (e.g., Taylor, 1996; Van Gelderen and Jansen, 2006). Additionally, socialism is associated with negative informal values toward private business, a lack of property rights enforcement, exploiting government inference, and corruption with negative consequences for the development of the private sector (e.g., Aidis et al., 2008; Puffer and

McCarthy, 2001). As a result, a negative link between socialist heritage and entrepreneurship is well documented in a variety of countries (e.g., Adam-Müller et al., 2015; Aidis et al., 2008; Alesina and Fuchs-Schuendeln, 2007; Runst, 2013; Wyrwich, 2013).

Drawing on prior research on institutional framework conditions and entrepreneurship, we hypothesize that the approximately 20-year-longer socialist treatment among North Vietnamese people implies a less pro-entrepreneurial attitude relative to that of South Vietnamese people. To assess the relationship between socialist history and entrepreneurship in the unique setting of Vietnam, we collect primary data on the effect of socialist legacy on entrepreneurial outcomes in Vietnam via a paper-based survey. We survey Vietnamese students because we are primarily interested in the entrepreneurship intentions of younger individuals who have not been directly exposed to socialism. This allows us to provide novel insights into the long-lasting influences of socialism on entrepreneurial intentions. Our final sample comprises 3,010 responses from students at 21 universities from both South and North Vietnam.

If formal institutional conditions rather than informal institutions drive entrepreneurship, then North-South differences regarding entrepreneurship should have vanished soon after reunification and should not persist today (i.e., more than 40 years after reunification). However, we find that the difference in socialist treatment is still visible in a variety of entrepreneurial outcomes, even more than 40 years after the reunification of Vietnam in 1976 and the subsequent similarity in the institutional conditions of the North and South. In summary, North Vietnamese respondents are less likely to start a new venture in the next five years. Additionally, they are less likely to enroll in entrepreneurship education programs. Another interesting finding is that North Vietnamese respondents are also less willing to engage in business succession and take over an existing business. Overall, these findings highlight the long-lasting influence of historical differences in institutional conditions on entrepreneurship.

Our study proceeds as follows. In Section 2, we first provide an overview of the unique particularities of the Vietnamese context that make it an interesting setting for studying the effect of socialist heritage on entrepreneurship. We then derive our hypotheses. Section 3 describes our survey design, data collection strategy, and variables. Section 4 outlines our results. We conclude in Section 5, which outlines the main contributions of our study along with implications for policymakers.

## **2. Context and Hypotheses**

### **2.1. The Case of Vietnam**

Following Vietnam's initial division after the First Indochina War in 1954, two socio-economic systems began operating side by side. In the North, the 'Democratic Republic of Vietnam' was under socialist rule and followed the models of the Soviet Union and China. In the South, the nonsocialist 'Republic of Vietnam' was supported by the US and influenced by prior French colonial rule. After the socialist North won the devastating Vietnam War (1955–1975), Vietnam was reunified under socialist rule in 1976. The newly established 'Socialist Republic of Vietnam', which persists today, is ruled by the Communist Party of Vietnam (CPV) and initially utilized a central planning system. Hence, the formerly nonsocialist South adopted the institutional conditions of the socialist North in 1976.

From 1976 to 1986, the now socialist Vietnam was characterized by a governmental focus on the development of heavy industry and agriculture. Vietnam was dominated by state-owned enterprises (SOEs), and the private sector was almost nonexistent (Han and Baumgarte, 2000). In 1986, Vietnam began to transition from a planned economy to a market economy with the introduction of the Doi Moi ("renovation") reforms. In contrast to other planned economies, Vietnam's transition process was gradual and characterized by a wait-and-see approach (e.g., Tran, 2019; Walder and Nguyen, 2008). Instead of abruptly privatizing SOEs, Vietnam prompted SOEs to begin operating under market conditions to increase their efficiency and ensure their survival (Tran, 2019). In the following years, Vietnam gradually reduced the privileged treatment of SOEs and began to dissolve them. As part of this transition, private ownership was allowed. The introduction of an "Enterprise Law" in 2000 was a crucial enabler of entrepreneurship in Vietnam, which had previously been prohibited. Since then, the number of private enterprises has increased significantly, from 400 in the year 2000 to more than 250,000 in the year 2010 (Tran, 2019).

Today, the Communist Party of Vietnam (CPV) labels Vietnam as a "socialist-oriented market economy". Economically, Vietnam has almost fully transitioned to a market economy. Foreign trade and the labor market are fully liberalized, SOEs are partly privatized, private enterprises are an important contributor to the Vietnamese economy, and Vietnam is a member of the WTO (Tran, 2019). Politically, however, Vietnam is still socialist. The CPV is the sole political actor and maintains a unitary government with centralized control, and socialism is the official political ideology. This is also reflected in the education system, where political subjects are compulsory courses (e.g., Marxist-Leninist philosophy and Marxist political economics) that students have to pass before graduating.

## 2.2. Why Study Vietnam?

Various studies reveal a legacy of socialism on entrepreneurship across Europe (e.g., Adam-Müller et al., 2015; Wyrwich, 2013). However, the Vietnamese setting allows for a completely different perspective on the effect of socialism on entrepreneurship and provides insights that neither a comparison between Eastern and Western Europe nor the famous case of East and West Germany can provide. Germany reunited after four decades of separation, with Eastern Germany having been exposed to socialism during this separation but adopting the institutional framework of a market economy at the moment of reunification. The Vietnamese setting reflects a reverse situation. Here, the North and South reunited with the socialist institutional conditions being introduced in the South. The difference between North and South Vietnam is that the former part of the country was exposed somewhat longer to socialism.

Also, the period of differential exposure to different institutional frameworks is much shorter in Vietnam (two decades) compared to that in East versus West Germany (four decades) and that in Western versus Eastern Europe (seven decades when considering former Soviet Union countries). Hence, the case of Vietnam allows for testing whether a relatively short difference in socialist exposure can have a long-run impact on entrepreneurship. Since the reunification was 15 years earlier than that of Germany and the breakdown of socialism in Eastern Europe in 1989/90, we can also investigate whether socialist legacy can endure longer than we know from previous research, despite a shorter treatment.

Another feature of our setting is that we focus on individuals who were born long after reunification and have not been exposed themselves to the period with different institutional treatment in the past. Thus, our experimental setting allows us to isolate the intergenerational transmission effect of mentality and attitudes.

## 2.3. Hypotheses: Socialist Heritage and Entrepreneurship in Vietnam

### 2.3.1. Socialist Heritage and Entrepreneurship Intentions

Various conceptual approaches explain how the informal societal approval of entrepreneurship shapes individuals' entrepreneurship intentions and, ultimately, their entrepreneurial activity. The role model approach (e.g., Minniti, 2005; Nanda and Sorenson, 2010) argues that entrepreneurship intentions emerge via social interaction with entrepreneurs at the local or micro level. Social interaction with entrepreneurs implies learning about entrepreneurial tasks through demonstration and peer effects. Consequently, if there are only a few entrepreneurs in the local environment because of low institutional approval, the capacity of entrepreneurial role models to unfold and promote entrepreneurship

intentions is also low. Additionally, low institutional approval may also decrease the “willingness” of individuals to socially interact with or learn from existing entrepreneurs. Low approval may also reduce demonstration and peer effects. In this regard, Wyrwich et al. (2016) show that knowing an entrepreneur has a lower impact on promoting entrepreneurial attitudes among respondents who have been exposed to socialism, one of the most entrepreneurship-hostile economic systems in history (Earle and Sakova, 2000).

North Vietnam has been under socialist rule since 1955, while South Vietnam became socialist in 1976. In essence, the socialist treatment in North Vietnam lasted 21 years longer than that in the South. Since exposure to socialist ideology negatively affects entrepreneurship intentions, people from South Vietnam should have higher entrepreneurship intentions relative to people from the North. We expect these differences to persist beyond the generation of people who directly experienced the period before 1976. If this is true, people born after 1976 but who were raised and socialized in either North or South Vietnam should differ in their perception of entrepreneurship and entrepreneurship intentions.

**H1:** *Individuals from North Vietnam have lower entrepreneurship intentions than individuals from South Vietnam.*

### 2.3.2. Socialist Heritage and Entrepreneurship Education

Another crucial pillar of entrepreneurship is entrepreneurship education. In the hopes of fostering entrepreneurship, policymakers frequently invest in entrepreneurship education at the university level (e.g., Brush et al., 2003; Katz, 2003). Studies indeed have suggested that entrepreneurship education can foster entrepreneurial activity (e.g., Kautonen et al., 2015; Rauch and Hulsink, 2015). Walter and Block (2016) find that the positive relationship between entrepreneurship education and the subsequent entrepreneurial activity of entrepreneurship education participants is particularly pronounced in entrepreneurship-hostile institutional environments.

While these studies focus on the effect of entrepreneurship education on entrepreneurship, we argue that there is a selection effect involved. If people from North Vietnam have lower entrepreneurial intentions due to their socialization as hypothesized in the previous section, they should also have a lower willingness to learn about entrepreneurship. Therefore, we expect individuals in North Vietnam to engage less often in entrepreneurship courses than their South Vietnam counterparts.

**H2:** *Individuals from North Vietnam are less likely to participate in entrepreneurship education programs than are individuals from South Vietnam.*

### 2.3.3. Socialist Heritage and the Intergenerational Transmission of Entrepreneurship

There is vast evidence on the intergenerational transmission of entrepreneurship (e.g., Laspita et al., 2012; Wyrwich, 2015). Parents can influence their children via certain parenting practices and by transmitting their value orientation (e.g., Aldrich and Kim, 2007; Dohmen et al., 2012). The parental transmission of values is part of the socialization process. This idea is also guided by approaches that demonstrate the important role of family socialization in the transmission of norms and values while part of the socialization also takes place out-of-the-family (e.g., Bisin and Verdier, 2000).

Prior research shows that environmental context can moderate intergenerational value transmission depending on cultural context (Laspita et al., 2012). Institutional approval is likely to affect the transmission process as well. A low approval may imply that the parents' emphasis on transmitting entrepreneurial values is lower. For example, if they experience resistance toward their own activity, then this may discourage their effort to instill entrepreneurial preference among their children to spare them the same experience in the future. Even if this is not taking place, a low institutional approval of entrepreneurship in the local environment may offset parental efforts to instill entrepreneurial experiences in their children. As mentioned above, not only parents but also other local role models influence the entrepreneurial decision-making of individuals (Abbasianchavari and Moritz, 2021). If the social acceptance of entrepreneurship and the number of entrepreneurial peers in the local environment are low, then parental efforts might be thwarted. In such areas, the local environment is not complementary to parents' efforts but rather in conflict because the social standards regarding entrepreneurship do not match with the parents' standards. Hence, we expect that people in regions with a low institutional approval of entrepreneurship also reveal a lower willingness to run and take over a venture when their parents are self-employed compared to people with entrepreneurial role models in their environment in areas with higher institutional approval. We hypothesize:

**H3a:** *Individuals from North Vietnam who are exposed to the entrepreneurial experiences of their parents or close family members have a lower willingness to start new ventures than individuals from South Vietnam with such experience.*

**H3b:** *Individuals from North Vietnam who are exposed to the entrepreneurial experiences of their parents or close family members have a lower willingness to engage in business succession than individuals from South Vietnam with such experience.*

### **3. Data and Variables**

#### **3.1. Survey Design and Data Collection**

We developed a paper-based survey to collect primary data. Since we are primarily interested in younger individuals who have not been directly exposed to the pre-1976 separation period, students serve as our target population. Prior research has indicated that student samples are particularly useful and adequate when studying entrepreneurship intentions (e.g., Hsu et al., 2019; Krueger et al., 2000). Experienced entrepreneurs have already transformed their entrepreneurship intention to actual behavior, which makes it difficult to assess the impact on intentions in retrospect (Liñán and Chen, 2009). In addition, starting or taking over a business is a realistic and relevant option for students, which is crucial for the validity of the results (Zellweger et al., 2011).

We conducted the survey at Vietnamese universities in September and October 2018. A total of 3,385 students from 21 universities throughout Vietnam participated in the survey. We selected the universities to ensure a similar representation of individuals from North and South Vietnam. Our final sample comprises 3,010 respondent<sup>2</sup>s. A detailed breakdown of the universities and the respondents per university and further details on the sampling are provided in Appendix A (Table A1). We asked respondents to separately indicate (1) where they were born and (2) where they grew up. All of the respondents that were born in the North (South) also grew up in the North (South).

#### **3.2. Variables**

##### **3.2.1. Dependent Variables**

To capture respondents' career choice intentions, we follow Zellweger et al. (2011) and use the intention scale employed in the "global university entrepreneurial spirits students' survey" (GUESSS). This established scale was specifically developed to capture the career choice intentions of students in a nuanced way. Based on the question "Which career path do you intend to pursue five years after the completion of studies?", respondents can choose among the responses of (1) employee, (2) founder entrepreneur, (3) successor, and (4) others (e.g., "no professional career" and "do not know"). In line with the prior research, we exclude individuals who answered (4) 'others' because they do not have a

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2. Amongst others, we excluded participants who were not Vietnamese, participants with missing values for variables of interest, and participants who did not indicate clear career choice intentions (e.g., Walter and Block, 2016; Zellweger et al., 2011).



clear career intention (e.g., Walter and Block, 2016; Zellweger et al., 2011). Similar to Zellweger et al. (2011), we use a time lag of five years because entrepreneurs often work in a different company before starting or taking over their own business.

We derive two dependent variables from this question. First, we create a dummy variable (*'entrepreneurship intention'*) that takes a value of 1 if the respondent intends to pursue a career as a (2) founder entrepreneur or (3) successor and 0 if the respondent intends to pursue a career as an (1) employee. Second, among the individuals with entrepreneurship intentions, we capture respondents' preference to take over an existing business vs. creating a new startup (*'new venture startup vs. business takeover'*). The dummy variable takes a value of 1 if the respondent intends to pursue a career as a (3) business successor and 0 if the respondent intends to pursue a career as a (2) founder entrepreneur.

As a third dependent variable, we capture whether respondents received some form of entrepreneurship education. The dummy variable *'entrepreneurship course'* is coded 1 for yes and 0 for no. The question is derived from the European Commission's Flash Eurobarometer (No. 354), "Entrepreneurship in the EU and Beyond", which has frequently been used in prior entrepreneurship research (e.g., Block et al., 2019).

Overall, the North-South differences in the dependent variables (*entrepreneurship intention, entrepreneurship course, and startup vs. business takeover*) are statistically significant ( $p < 0.05$ ). The results indicate a higher interest in entrepreneurship among respondents from South Vietnam than among those from North Vietnam and simultaneously provide the first evidence of a negative impact of a more pronounced socialist history (for details, see Table 1).

### 3.2.2. Independent and Control Variables

To capture the impact of socialist legacy on entrepreneurial outcomes, we asked respondents to indicate whether they were born and grew up in North Vietnam (socialist) or South Vietnam (nonsocialist). The dummy variable *'Origin: North Vietnam'* takes a value of 1 for respondents from North Vietnam and a value of 0 for respondents from South Vietnam. Our North-South distribution of respondents is balanced: out of the 3,010 individuals in our sample, 1,466 were born and raised in North Vietnam (49%) and 1,544 were born and raised in South Vietnam (51%) (see Table 1). We control for a standard range of characteristics that shape entrepreneurial outcomes (for details on definition and results, see Table 1).

**Table 1.** Description of variables and descriptive statistics

Variable	Definition	N	Mean	SD	Min.	Max	North (socialist) (N = 1,466)	South (formerly nonsocialist) (N = 1,544)	Diff (t-test)
<i>Independent variable</i>									
Origin: North Vietnam	Dummy, 1 if the respondent was born and grew up in North Vietnam, 0 otherwise (South Vietnam).	3,010	0.49	-	0	1	-	-	-
<i>Dependent variables</i>									
Entrepreneurship intention	Dummy, 1 if the respondent intends to pursue a career as an entrepreneur (founder or successor) five years after the completion of studies, 0 otherwise (employee).	3,010	0.55	-	0	1	0.51	0.59	-0.08***
Entrepreneurship course	Dummy, 1 if the respondent has ever taken a course or workshop related to entrepreneurship during their studies, and 0 otherwise.	3,010	0.60	-	0	1	0.55	0.64	-0.09***
Startup vs. takeover	Dummy, 1 if the respondent intends to take over an existing business, and 0 if the respondent intends to found a new venture startup.	1,656	0.07	-	0	1	0.05	0.08	-0.03**
<i>Controls</i>									
Age	Respondent's age.	3,010	20.40	1.15	18	25	20.44	20.34	0.09**
Gender (male)	Dummy, 1 if the respondent is male, 0 otherwise.	3,010	0.44	-	0	1	0.42	0.45	-0.03
Ethnicity (Kinh)	Dummy, 1 if the respondent is of Kinh ethnicity, 0 otherwise.	3,010	0.95	-	0	1	0.94	0.97	-0.03***
Religion: Buddhist	Dummy, 1 if the respondent is Buddhist, 0 otherwise.	3,010	0.18	-	0	1	0.11	0.24	-0.13***
Religion: Christian	Dummy, 1 if the respondent is Christian, 0 otherwise.	3,010	0.06	-	0	1	0.02	0.09	-0.07***
Religion: None	Dummy, 1 if the respondent has no religious affiliation, 0 otherwise.	3,010	0.76	-	0	1	0.87	0.65	0.22***
Religion: Other	Dummy, 1 if the respondent has another religious affiliation, 0 otherwise.	3,010	0.01	-	0	1	0.00	0.02	-0.01***
Study: Computer sciences	Dummy, 1 if the respondent's current field of studies is computer science, 0 otherwise.	3,010	0.21	-	0	1	0.15	0.26	-0.11***
Study: Agriculture	Dummy, 1 if the respondent's current field of studies is agriculture, 0 otherwise.	3,010	0.07	-	0	1	0.12	0.02	0.10***
Study: Law/economics	Dummy, 1 if the respondent's current field of studies is law/economics, 0 otherwise.	3,010	0.46	-	0	1	0.46	0.45	0.02
Study: Engineering	Dummy, 1 if the respondent's current field of studies is engineering, 0 otherwise.	3,010	0.11	-	0	1	0.13	0.08	0.05***
Study: Others	Dummy, 1 if the respondent has another field of studies.	3,010	0.17	-	0	1	0.13	0.20	-0.07***

Years of study	Respondent's total years of study.	3,010	14.25	1.00	12	18	14.32	14.19	0.13***
Close family self-employed	Dummy, 1 if a parent or close family member of the respondent is self-employed, 0 otherwise.	3,010	0.49	-	0	1	0.49	0.50	-0.01
Risk-taking	Respondent's willingness to take risk on a ten-point-scale ranging from 0 ("highly risk-averse") to 10 ("fully prepared to take risk")	3,010	6.49	2.25	0	10	6.49	6.49	-0.01

Notes: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10. Values do not always add up to 1.00 due to rounding.

#### 4. Results: Regression Analysis

We perform multiple regression analyses to assess the impact of a North Vietnamese origin on different entrepreneurial outcomes. The main results regarding our hypotheses are displayed in Table 2, which shows logit coefficients with robust standard errors in parentheses. Table A2 in the appendix provides a correlation matrix and variance inflation factors, which indicate that our main results do not suffer from multicollinearity problems.<sup>3</sup> We also present robustness checks and further analyses in Appendix B (Table B1).

Model (1) of Table 2 focuses on H1 and uses ‘*entrepreneurship intention*’ as the dependent variable. The analysis compares individuals with entrepreneurship intentions (i.e., as a founder entrepreneur or successor) to individuals who intend to pursue a career as an employee. Since the dependent variable is dichotomous, we employ a logistic regression. The analysis considers the full sample of 3,010 individuals. Model (1a) only includes the independent variable ‘*Origin: North Vietnam*’ and shows a negative and highly significant (p < 0.01) effect of a North Vietnamese origin on entrepreneurship intentions. The highly significant effect persists when the control variables are entered into Model (1b) (p < 0.01). This finding supports H1 and shows that entrepreneurship intentions in North Vietnam continue to be significantly lower than those in the formerly nonsocialist South Vietnam. Regarding the control variables, Model (1b) shows that being male (p < 0.1), having close family members that are self-employed (p < 0.01), and a higher risk-taking propensity (p < 0.01) are positively associated with entrepreneurship intention.

3. While the VIFs for the religion dummies exceed 10, the significance of our main results remains unchanged when only including ‘*Religion: None*’, which captures the majority of our respondents (76%). In this setting, no VIF exceeds the threshold of 10.

**Table 2.** Main analysis on the influence of socialist heritage on entrepreneurship outcomes

Model	(1a)	(1b)	(2a)	(2b)	(3a)	(3b)
Hypothesis	H1	H1	H2	H2	H3	
Method	Logistic regression	Logistic regression	Logistic regression	Logistic regression	Multinomial logistic regression	
Dependent variable	Entrepreneurship intention	Entrepreneurship intention	Entrepreneurship course at university	Entrepreneurship course at university	(1) Employee vs. (2) new venture startup	(1) Employee vs. (3) business takeover
Sample	Full sample	Full sample	Full sample	Full sample	Individuals with close family member SE	
<b>Origin: North Vietnam</b>	<b>-0.337</b> <b>(0.074)***</b>	<b>-0.311</b> <b>(0.080)***</b>	<b>-0.389</b> <b>(0.075)***</b>	<b>-0.399</b> <b>(0.081)***</b>	<b>-0.403</b> <b>(0.118)***</b>	<b>-0.920</b> <b>(0.251)***</b>
Age		0.049 (0.082)		0.059 (0.081)	-0.057 (0.130)	0.188 (0.196)
Gender (male)		0.172 (0.095)*		-0.202 (0.094)**	0.089 (0.140)	0.911 (0.252)***
Ethnicity: Kinh		0.048 (0.185)		0.073 (0.186)	-0.214 (0.340)	0.106 (0.787)
Religion: Buddhist		-0.116 (0.410)		0.178 (0.403)	0.189 (0.749)	0.018 (1.129)
Religion: Christian		0.231 (0.429)		0.185 (0.422)	1.003 (0.788)	1.051 (1.186)
Religion: None		-0.202 (0.403)		-0.112 (0.395)	0.218 (0.741)	0.023 (1.109)
Study: Computer sciences		0.038 (0.144)		-0.123 (0.139)	-0.037 (0.215)	-1.199 (0.420)***
Study: Agriculture		0.253 (0.181)		0.452 (0.181)**	0.267 (0.258)	-0.387 (0.596)
Study: Law/economics		-0.106 (0.111)		0.355 (0.111)***	-0.130 (0.167)	-0.124 (0.327)
Study: Engineering		0.027 (0.166)		-0.257 (0.164)	-0.184 (0.247)	-1.147 (0.540)**
Years of study		-0.098 (0.096)		-0.022 (0.095)	0.080 (0.150)	-0.184 (0.236)
Close family self-employed		0.389 (0.076)***		0.259 (0.076)***	- -	- -
Risk-taking		0.144 (0.017)***		0.047 (0.017)***	0.155 (0.026)***	0.054 (0.055)
Pseudo R2	0.005	0.037	0.007	0.030	0.037	
Log Likelihood	-2060.678	-1995.131	-2014.932	-1968.220	-1,248.225	
Obs.	3,010	3,010	3,010	3,010	1,489	

Notes: Logit coefficients are displayed with robust standard errors in parentheses. Reference categories: Religion: Other; Study: Other. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10.

Model (2) of Table 2 focuses on an individual's selection into entrepreneurship education (H2) and uses '*entrepreneurship course*' as the dependent variable. Since the dependent variable is dichotomous, we use a logistic regression. Model (2) considers the full sample of 3,010 individuals. Model (2a) only includes the independent variable '*Origin: North Vietnam*' and shows a negative and highly significant ( $p < 0.01$ ) effect of a North Vietnamese origin on the likelihood of participating in an entrepreneurship-related course at university. The effect persists when the control variables are entered into Model (2b). This finding supports H2, which argues that respondents from North Vietnam are less likely to enroll in entrepreneurship-related activities, such as entrepreneurship education. Model (2b) also shows that being a student in agriculture ( $p < 0.05$ ) or law/economics ( $p < 0.01$ ), having close family members that are self-employed ( $p < 0.01$ ), and a higher risk-taking propensity ( $p < 0.01$ ) are positively correlated with taking entrepreneurship-related courses at university. In contrast, being male ( $p < 0.05$ ) is negatively associated with participating in entrepreneurship-related courses.

Finally, Model (3) of Table 2 focuses on H3 and uses '*new venture startup vs. business takeover*' as the dependent variable. Research on an individual's mode of entry into entrepreneurship (e.g., new venture startup vs. business succession) often distinguishes individuals from business-owning families and individuals from non-business-owning families since the possibility of engaging in business succession depends on the availability of a business in the family environment (e.g., Parker and Van Praag, 2012). In this analysis, we therefore only consider those respondents who have a close family member that is self-employed. This reduces our sample from 3,010 to 1,489 respondents. For testing H3, the sample restriction is not critical because we refer to a comparison between North and South Vietnamese individuals with entrepreneurship experience among family members.

We estimate a multinomial logit model with three career choice outcomes: (1) employee (baseline), (2) new venture startup, and (3) business takeover. In line with our hypotheses, the results show that the North Vietnamese respondents have a significantly lower intention to start a new venture (Model 3a,  $p < 0.01$ ) and to engage in business succession taking over an existing venture (Model 3b,  $p < 0.01$ ) than do South Vietnamese respondents. Further, the results indicate that the aversion towards business succession seems to be more pronounced than the aversion towards new venture startup. As such, business takeover seems to be particularly unattractive to respondents from North Vietnam. Finally, the results pertaining to the control variables show that males are significantly more likely to take over a business ( $p < 0.01$ ). In contrast, the intention for business takeover is lower for individuals studying computer sciences ( $p < 0.01$ ) or engineering ( $p < 0.05$ ).

## **5. Contributions and Implications**

### **5.1. Contributions**

We contribute to the literature in several ways. First, we show that differences in exposure to socialism affect entrepreneurship beyond the cultural context of Germany and Eastern Europe, and we show that even small differences in socialist treatment intensity can have long-run effects on entrepreneurial outcomes. These insights enhance our understanding of the role of institutions in explaining entrepreneurship in post-socialist countries (e.g., Adam-Müller et al., 2015; Aidis et al., 2008; Alesina and Fuchs-Schuendeln, 2007; Wyrwich, 2013) and emerging economies in general (e.g., Sun et al., 2020).

Second, we contribute to the entrepreneurship education literature by highlighting the role of external framework conditions on enrollment in entrepreneurship programs. Thus, our results suggest that entrepreneurship education is influenced by institutions not only regarding its effectiveness (e.g., Walter and Block, 2016) but also regarding the question of who participates in entrepreneurship education in the first place.

Third, we contribute to the literature on entrepreneurship in emerging economies (e.g., Chang and Wu, 2014; Santarelli and Tran, 2013; Tran, 2019). More precisely, we show how history and socioeconomic legacies still impact entrepreneurial development. This finding also contributes to the emerging literature that focuses on the past to understand current entrepreneurial phenomena (e.g., Wadhvani and Lubinski, 2017).

Fourth, our paper contributes to the literature on the determinants of new venture start-up versus business takeover as entrepreneurship entry modes. Socio-demographic as well as financial, social, and human capital factors have been identified as determinants (Parker and Van Praag, 2012; Xi et al., 2018, 2020). Our research finds that informal institutions and exposure to socialist history also play an important role in this regard.

Finally, our paper also contributes to the literature on the emergence and persistence of entrepreneurial culture via intergenerational transmission. This transmission is assumed to be a main mechanism for the self-perpetuation of entrepreneurship (e.g., Fritsch and Wyrwich, 2017). However, our results obtained from the subsample of individuals with self-employed parents or close family members show that the North Vietnamese respondents have a significantly lower intention to start a new venture and to engage in business succession taking over an existing venture than do South Vietnamese respondents. This indicates that start-up and business takeover intentions are lower if the individuals' families are exposed to anti-entrepreneurial institutions for a longer time. Thus, the emergence of an entrepreneurial culture is hampered by such historical legacies.

## 5.2. Implications for Policy Makers

We find that students from North Vietnam enroll in entrepreneurship courses less often than students from South Vietnam, which we attribute to North Vietnam's entrepreneurship-hostile environment. This finding has an important practical implication since prior research shows that entrepreneurship education (e.g., participation in entrepreneurship-related courses) has a particularly strong effect in entrepreneurship-hostile environments (Walter and Block, 2016). Hence, if students do not sign up for an entrepreneurship course in entrepreneurship-hostile environments, the positive effect of entrepreneurship education cannot unfold. Thus, university administrators or policymakers from formerly socialist countries interested in fostering entrepreneurial activity should consider making entrepreneurship education a compulsory element of university education. At the same time, individuals who participate in entrepreneurship courses, especially in hostile environments where they face resistance for their decision to engage in entrepreneurship education and activity, may be characterized by a high interest in entrepreneurship, which is then manifested in higher entrepreneurial activity.

Another practical implication stems from our finding on business takeover or family succession as a career option. We find that students in North Vietnam are less interested in taking over an established business than founding a new venture, which can lead to a situation in which successful businesses do not find a successor. This has negative implications for the development of a healthy family business sector and the country's economic development. Prior research has shown that family firms constitute an important part of many economies around the world (e.g., Andersson et al., 2018; Carney et al., 2017) and can contribute positively to job stability (e.g., Bjuggren, 2015; Neckebrouck et al., 2018) and national competitiveness (Carney et al., 2017). Policymakers and higher education administrators in (formerly) socialist countries should consider improving the image of family businesses and setting up specific courses to motivate and prepare potential family business successors.

In conclusion, our paper documents a long-lasting impact of institutional differences on entrepreneurship. Short-term-oriented policies for promoting entrepreneurship seem to be unable to reverse long-term historical and institutional legacies. Instead, it seems that a long-term-oriented policy is required to overcome the long shadow of history.

## 5.3. Limitations and Future Research

Our study is not without limitations. For example, while student samples can be appropriate to study entrepreneurship intentions (e.g., Hsu et al., 2019; Krueger et al., 2000), our study does not shed light on how these intentions turn into entrepreneurial action. As such, a natural avenue for future research would be to

investigate how socialist heritage in Vietnam translates to actual entrepreneurship to assess whether the North-South differences that we identify, persist. Also, we do not know with certainty that all individuals had access to entrepreneurship-related courses at their universities. If some universities in the North do not offer such courses, this might bias our findings. Future research could assess which types and forms of entrepreneurship-related courses are offered in North versus South Vietnam and how they are and should be contextualized to stimulate entrepreneurship given the unique historical setup of Vietnam.



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## Appendices

### Appendix A: Descriptive Tables

**Table A1.** Universities included in our study (incl. details on study design)

No.	University	Obs.	Region	City	Approx. number of students (2018)
1	Academy of Finance	141	North	Hanoi	20,000
2	Academy of Journalism and Communication	120	North	Hanoi	10,000
3	Foreign Trade University (Hanoi)	97	North	Hanoi	12,000
4	Hanoi University of Science and Technology	128	North	Hanoi	30,000
5	National Economics University	80	North	Hanoi	45,000
6	University of Transport Technology	396	North	Hanoi	21,000
7	Vietnam National University (Hanoi)	35	North	Hanoi	37,403
8	Vietnam National University of Forestry	244	North	Hanoi	10,445
9	Vietnam National University of Agriculture	195	North	Hanoi	30,360
10	Banking Academy	58	North	Hanoi	15,700
11	Dalat University	526	South	Dalat	12,500
12	Duytan University	265	South	Danang	19,600
13	University of Economics HCMC	32	South	HCMC	46,000
14	HCMC University of Food Industry	107	South	HCMC	14,000
15	University of Finance and Marketing	195	South	HCMC	20,000
16	HCMC University of Technology and Education	206	South	HCMC	20,396
17	HCMC University of Transport	147	South	HCMC	18,000
18	Hutech University	161	South	HCMC	12,000
19	University of Economics and Law	139	South	HCMC	9,000
20	HCMC Medicine and Pharmacy University	69	South	HCMC	8,500
21	Ton Duc Thang University	44	South	HCMC	23,286

*Notes:* N = 3,385. All surveys were collected in September and October 2018. HCMC = Ho Chi Minh City. The questionnaire was developed in English and then professionally translated into Vietnamese. Before entering the field, we conducted a pretest with 24 Vietnamese students (including 12 Ph.D. students) and a Vietnamese entrepreneurship scholar. In the pretest, we collected and incorporated an extensive amount of feedback on all aspects of the survey. The 21 universities include some of the country's largest institutions, such as the University of Economics Ho Chi Minh City, Vietnam National University (Hanoi), and Hanoi University of Science and Technology. Ten universities were located in the North, and 11 universities were located in the South of Vietnam. The surveyed students originate from different regions and provinces across the country.

**Table A2.** Correlations

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	VIF
<i>Independent variable</i>																	
(1)Origin: North Vietnam																	1.15 <sup>b</sup>
<i>Dependent variables</i>																	
(2) Entrepreneurship intention	-0.08***																1.05 <sup>b</sup>
(3) Entrepreneurship course	-0.10***	0.04															1.04 <sup>c</sup>
(4)Startup vs. takeover	-0.05	<sup>a</sup>	-0.01														1.06 <sup>d</sup>
<i>Controls</i>																	
(5)Age	0.04	0.00	0.00	0.01													5.84 <sup>b</sup>
(6)Gender (male)	-0.03	0.07***	-0.09***	0.02	0.14***												1.53 <sup>b</sup>
(7)Ethnicity (Kinh)	-0.06***	0.01	0.01	0.01	-0.03	0.04											1.08 <sup>b</sup>
(8)Religion: Buddhist	-0.17***	0.03	0.06***	0.01	-0.05***	0.02	0.07***										16.29 <sup>b</sup>
(9)Religion: Christian	-0.15***	0.05***	0.04	0.01	0.01	-0.03	-0.06***	-0.11***									6.70 <sup>b</sup>
(10)Religion: None	0.25***	-0.06***	-0.08***	-0.02	0.04	0.00	0.00	-0.81***	-0.44***								19.97 <sup>b</sup>
(11)Study: Computer sciences	-0.13***	0.05***	-0.07***	-0.04	-0.10***	0.41***	0.10***	0.05	0.02	-0.04							2.24 <sup>b</sup>
(12)Study: Agriculture	0.21***	0.02	0.02	-0.01	0.13***	-0.02	-0.06***	-0.01	-0.03	0.03	-0.14***						1.40 <sup>b</sup>
(13)Study: Law/economics	0.02	-0.06***	0.10***	0.04	-0.18***	-0.38***	0.03	-0.01	-0.02	0.02	-0.46***	-0.24***					2.13 <sup>b</sup>
(14)Study: Engineering	0.08***	0.01	-0.09***	-0.04	0.25***	0.31***	0.06***	-0.06***	-0.03	0.07***	-0.18***	-0.09***	-0.32***				1.83 <sup>b</sup>
(15)Years of study	0.06***	-0.01	-0.01	0.00	0.91***	0.11***	0.01	-0.04	0.01	0.03	-0.12***	0.14***	-0.17***	0.28***			5.93 <sup>b</sup>
(16)Close family self-employed	-0.01	0.10***	0.07***	0.16***	0.01	-0.02	0.08***	0.05***	-0.02	-0.03	-0.01	0.03	0.03	-0.04	0.04		1.03 <sup>b</sup>
(17)Risk-taking	0.00	0.17***	0.04	-0.04	0.01	0.12***	-0.04	0.01	0.00	0.00	0.05***	0.01	-0.07***	0.04	0.00	0.04	1.05 <sup>b</sup>

Notes: <sup>a</sup> = the takeover vs. new venture startup group only consists of individuals with entrepreneurship intention = 1. <sup>b</sup> = VIFs calculated based on the variables included in model (1b) (Table 2). <sup>c</sup> = VIFs calculated based on the variables included in model (2b) (Table 2). <sup>d</sup> = VIFs calculated based on the variables included in model (3b) (Table 2). \*\*\* p < 0.01

## Appendix B: Robustness Checks

Our main analysis suggests that business takeover seems to be more unattractive to our North Vietnamese respondents than new venture start-up. To assess this finding in more detail, we perform a subsample analysis that only considers individuals with entrepreneurship intentions and excludes individuals who intend to pursue a career in wage employment ( $N = 1,656$ ). Hence, the dependent variable ‘*new venture startup vs. business takeover*’ takes a value of 1 if the respondent intends to take over an existing business and 0 if the respondent intends to start a new venture startup. The results are reported in Model 1 of Table B1. Model (1a) shows a negative relationship for the North Vietnam dummy ( $p < 0.05$ ). The negative effect persists when the control variables are entered into Model (1b) but slightly loses significance ( $p < 0.10$ ). Overall, these results suggest that North Vietnamese respondents have a particular aversion to business succession.

The possibility of succeeding in a business usually depends on whether close family members own a business. Extending Model (1), we thus reduce our sample to individuals (a) with entrepreneurship intentions and (b) with close family members who are self-employed ( $N = 688$ ). The results show that the negative association between a North Vietnamese origin and business takeover persists even when only individuals with close family members in self-employment are considered. The effect is significant (Model 2a,  $p < 0.05$ ) and persists when all control variables are entered (Model 2b,  $p < 0.05$ ). This result further underlines the pronounced aversion to business succession among respondents from North Vietnam.

Our main analysis also uses a subsample of individuals who have close family members who are self-employed (see Table 2; Model 3). As a further robustness check, we re-estimate Model (3) of Table 2 using the full sample (i.e., including respondents who have no self-employed members in their close family). The results reported in Model (3a) and (3b) of Table B1 underline the robustness of the main results. The negative associations between a North Vietnamese origin and new venture startup as well as business takeover persist. Again, the negative effect is more pronounced in the case of business takeover.

**Table B1.** Robustness checks

Model	(1a)	(1b)	(2a)	(2b)	(3a)	(3b)
Method	Logistic regression	Logistic regression	Logistic regression	Logistic regression	Multinomial logistic regression	
Dependent variable	New venture vs. business takeover	New venture vs. business takeover	New venture vs. business takeover	New venture vs. business takeover	(1) Employee vs. (2) new venture	(1) Employee vs. (3) business takeover
Sample	<i>Individuals with EI</i>	<i>Individuals with EI</i>	<i>Individuals with EI + close family member SE</i>	<i>Individuals with EI + close family member SE</i>	<i>Full sample</i>	
<b>Origin: North Vietnam</b>	<b>-0.407</b> <b>(0.206)**</b>	<b>-0.393</b> <b>(0.221)*</b>	<b>-0.567</b> <b>(0.236)**</b>	<b>-0.523</b> <b>(0.247)**</b>	<b>-0.288</b> <b>(0.081)***</b>	<b>-0.701</b> <b>(0.222)***</b>
Age		0.185 (0.181)		0.355 (0.244)	0.038 (0.084)	0.165 (0.161)
Gender (male)		0.680 (0.226)***		0.864 (0.249)***	0.128 (0.097)	0.777 (0.224)***
Ethnicity: Kinh		-0.029 (0.547)		0.231 (0.781)	0.042 (0.187)	0.016 (0.551)
Religion: Buddhist		0.386 (0.959)		0.273 (0.995)	-0.128 (0.412)	0.120 (1.061)
Religion: Christian		0.527 (0.996)		0.458 (1.040)	0.204 (0.431)	0.695 (1.091)
Religion: None		0.367 (0.941)		0.225 (0.972)	-0.217 (0.404)	0.055 (1.045)
Study: Comp. sciences		-0.955 (0.367)***		-1.212 (0.420)***	0.098 (0.146)	-0.858 (0.362)**
Study: Agriculture		-0.316 (0.463)		-0.722 (0.562)	0.273 (0.183)	-0.015 (0.472)
Study: Law/economics		-0.117 (0.281)		-0.020 (0.326)	-0.099 (0.113)	-0.190 (0.281)
Study: Engineering		-1.009 (0.473)**		-0.969 (0.544)*	0.088 (0.168)	-0.964 (0.470)**
Years of study		1.561 (0.272)***		-0.390 (0.286)	-0.085 (0.098)	-0.208 (0.194)
Close family SE		-0.204 (0.214)		- -	0.304 (0.077)***	1.874 (0.269)***
Risk-taking		-0.079 (0.047)*		-0.099 (0.051)*	0.149 (0.018)***	0.065 (0.050)
Pseudo R2	0.005	0.082	0.032	0.074	0.044	
Log Likelihood	-399.892	-369.025	-260.110	-248.771	-2,363.622	
Obs.	1,656	1,656	688	688	3,010	

Notes: Logistic regression analysis. Logit coefficients are displayed with robust standard errors in parentheses. EI = entrepreneurship intentions, SE = self-employed. Reference categories: Ethnicity: Other; Religion: Other; Study: Other. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10.

