

3-30-2021

Ethnic Women in Sơn La Province, Northern Vietnam: The Entrepreneurial Landscape

Quynh T Nguyen

Dai Nam University, Hanoi, Vietnam, nguyentqbio@gmail.com

Louise Coventry

RMIT University Melbourne, Australia

Scott McDonald

RMIT University Vietnam, Ho Chi Minh

Nthati Rametse

RMIT University Vietnam, Ho Chi Minh

Follow this and additional works at: <https://animorepository.dlsu.edu.ph/apssr>

Recommended Citation

Nguyen, Quynh T; Coventry, Louise; McDonald, Scott; and Rametse, Nthati (2021) "Ethnic Women in Sơn La Province, Northern Vietnam: The Entrepreneurial Landscape," *Asia-Pacific Social Science Review*. Vol. 21: Iss. 1, Article 8.

DOI: <https://doi.org/10.59588/2350-8329.1352>

Available at: <https://animorepository.dlsu.edu.ph/apssr/vol21/iss1/8>

This Research Article is brought to you for free and open access by the DLSU Publications at Animo Repository. It has been accepted for inclusion in Asia-Pacific Social Science Review by an authorized editor of Animo Repository.

RESEARCH ARTICLE

Ethnic Women in Sơn La Province, Northern Vietnam: The Entrepreneurial Landscape

Quynh T Nguyen,^{1*} Louise Coventry², Scott McDonald,³ and Nthathi Rametse²

¹ Dai Nam University, Hanoi, Vietnam

²RMIT University Melbourne, Australia

³RMIT University Vietnam, Ho Chi Minh

*nguyentqbio@gmail.com

Abstract: This article examines differences in the propensity to engage in entrepreneurial activities among ethnically diverse women in Sơn La Province, a disadvantaged and mountainous rural area of Vietnam. Propensity for entrepreneurialism is examined by focusing on (a) women's use of technology, (b) experiences of financial difficulties, and (c) propensity for risk-taking. Analyzing surveys completed by 135 women, we find that plans to start a business are equally apparent among women from diverse ethnic groups. We establish a positive association between levels of entrepreneurialism (practicing entrepreneurs, intending entrepreneurs, and non-entrepreneurs) and the use of technology. However, we find no association between entrepreneurialism and access to finance/financial difficulties or risk-taking. Women from very small ethnic minorities often report never using the Internet, and they seek loans from private lenders who charge relatively high interest rates. Our findings suggest a need for greater government investment in rural areas to increase women's access to and use of technology.

Keywords: ethnic minority women, entrepreneurship, use of technology, access to finance, risk-taking

Entrepreneurs in rural areas, including ethnic minorities, contribute significantly towards the overall development of local economies, especially when their entrepreneurial drive is not stifled by unfavorable or discriminatory socio-economic conditions (Bates et al., 2007; Clark & Drinkwater, 2010). However, there is a limited understanding of why and how ethnic minority women in rural Vietnam become entrepreneurs. No studies have identified or explored the presence or the entrepreneurial characteristics among ethnically diverse women in Vietnam's underserved communities. However, entrepreneurial

performance and development vary depending on the context, as evidenced by a spectrum of studies (Dodd & Hynes, 2012; Fortunato, 2014; García-Rodríguez et al., 2017; Hampel-Milagrosa, 2010). Many Kinh (majority ethnic group) women have opportunities to engage in entrepreneurial activities in regions with a diverse economy and high-density population. Accordingly, they tend to have access to better infrastructure and services than ethnic minority women residing in underserved communities. This raises questions about what happens when women from the ethnic majority and various minorities live in the same environment:

Do women from different ethnic groups engage in entrepreneurial activities at the same rate? What differences in women's experiences account for their participation or otherwise in entrepreneurial activity? These questions guide and animate our research.

This paper explores women's entrepreneurship across ethnic groups in Sơn La Province, a rural region of Vietnam. Recognizing that and when distilled to its essence, entrepreneurialism requires a means of generating ideas and communicating with customers, access to capital, and an attitude conducive to taking risks, we focus on three main elements of entrepreneurialism, namely, (a) the use of technology, (b) access to finance and experiences of financial stress, and (c) risk-taking propensity. Using the results of a questionnaire involving 135 women from 11 ethnic groups in Sơn La Province, our exploratory study fills gaps in empirical knowledge by contributing to a better understanding of what factors are associated with participation in entrepreneurial activities among women from different ethnic groups. The research also sheds light on ways the Vietnamese government might develop a more effective enabling environment for small-scale entrepreneurship in rural areas of Vietnam.

The paper is organized as follows: First, we explain the demographic and socio-economic context of ethnic minority groups in rural Vietnam. Second, we examine the literature on women's entrepreneurship, rural entrepreneurship, and ethnic entrepreneurship in Vietnam. Third, we explain our chosen theoretical constructs of the use of technology, access to finance, and risk-taking propensity, as well as their connection to entrepreneurship. After explaining the methods used, we present our findings and discuss their contribution to the knowledge of entrepreneurship. We conclude with some reflections on the policy implications of our research.

Ethnic Minorities in Rural Vietnam

Vietnam is a culturally diverse society comprising 54 different ethnic sub-divisions with eight different languages (Huong & Fry, 2002; Nguyen & Hamid, 2016). The Kinh ethnic group constitutes about 84% of the total population and dominates the low-lying plain areas, where the connection with the outside world is facilitated by its strategic location (Baulch et al., 2007; Nguyen et al., 2017). The remainder of

the Vietnamese population, including minority ethnic groups, mostly inhabit rural areas, including remote mountainous locations. Minority ethnic groups mainly reside in northern Vietnam, whereas a smaller number reside in the southern Mekong Delta region of the country (Van De Walle & Gunewardena, 2001.) The northwest region, including Sơn La Province—the selected area for this study—accounts for the highest number of ethnic minority households (28.55%) below the poverty line in 2012 (Nguyen, 2013).

Socio-economic opportunities and rights of Vietnamese ethnic minorities are relatively limited, which serves to compound and perpetuate disadvantage and isolation among ethnic groups (Nguyen et al., 2017). Advances in service delivery have been made in rural locations around the country. For example, teledensity (the number of mobile subscriptions per 100 people) was high at 129 in 2016 (CEIC, 2018). Nonetheless, many basic services for minority groups are not in place or lag behind (Thai & Falch, 2018; Vong & Song, 2015). Trieu (2014) argued that, even though many minority groups have been developing and approaching the modern world, others continue living subsistence lifestyles, such as the Thái, H'mong, and Dao. Minority groups often struggle with an unfavorable topography, harsh climate, and an especially long distance from the basic amenities of life, such as education and good roads.

There has been a noticeable decline in poverty in rural Vietnam from 1993 to 2018 (World Bank, 2018), traceable in part to the Đổi Mới policy implemented in 1986. The increasing migration of people from rural to urban areas in developing countries is also a contributing factor in populations moving out of extreme poverty and into better living conditions (Aroui et al., 2017). However, comparatively, the poverty rate of ethnic minority groups is decreasing at a slower pace than for the ethnic majority (Kinh) (Krajan, 2017). Ethnic minorities in Vietnam are consistently poorer than the majority Kinh group. Extreme poverty among ethnic minority groups is responsible for more than 50% of the country's income-poor, yet minority people account for only 15% of the total population (United Nations Development Programme, 2017). Diving deeper, there are yet more stark examples of disadvantage; for example, the multi-dimensional poverty (MDP) rate of H'mong, one ethnic minority group, stands at 82.9%, whereas the MDP rate of average ethnic minorities was 35.7% in 2015.

The Vietnamese government has addressed regional economic disparities by providing resources and financial support for disadvantaged urban and rural areas, especially women. For example, the 1993 Land Law and its amendments in 2003 and 2013 stipulate women's rights to land ownership and land use in an effort to boost women's positions both in households and in the broader society (Menon et al., 2016; the Vietnam Women Entrepreneurs Council, 2007). Despite these efforts, the evidence presented here shows that equality for ethnic minorities, women, and rural dwellers remains a long way from being achieved.

Entrepreneurship – Women, Rurality, and Ethnicity

The definition of entrepreneurship depends on its context. An interpretive approach respects the meanings given to self-employment or business ownership by those who engage in it and takes account of meanings embedded in the social context. In developing countries, informal business activities, including street vendors, small shops, and nascent ventures, are socially accepted as a form of entrepreneurship, notwithstanding their legal status (Siqueira et al., 2016). More specifically, according to Poon et al. (2012), Vietnamese women in distressed regions regularly associate entrepreneurship with self-employment. Because of these associations, this study adopts an interpretive approach to understanding entrepreneurship and thus recognizes that home-based micro-enterprises are examples of entrepreneurship.

From a feminist perspective, researchers endeavor to use a power lens, capturing gender, class, ethnicity, and age, to highlight the economic contributions of women entrepreneurs to societies and to expose the patriarchal and structural challenges that constrain women's entrepreneurialism (Shinnar et al., 2012). One notable gender difference in entrepreneurial behaviors is that women predominantly use their homes as the base for their entrepreneurial activities, regardless of geographical location (Walker & Webster, 2004). Women's entrepreneurial engagements are also often conducted through telephones and the Internet (Patrica et al., 2018).

In Vietnam, a large number of women are informally self-employed, accounting for 70% to 80% of the total number of females engaged in the labor market in 2010 and 66.6% in 2017 (General Statistics Office,

2018; Nguyen & Thi Tran, 2016). Consistent with a feminist analysis, findings from empirical studies confirm that although many individuals are forced into the informal entrepreneurial avenue due to a lack of formal employment opportunities (Perry et al., 2007; Siqueira et al., 2016), many women opt for this route due to the failure of formal institutions to accommodate them. Formal institutions do not develop rules that reflect the priorities of, and are navigable by women entrepreneurs (Williams & Baric, 2014).

Gries and Naudé's (2010) proposed model for growing a low-income country towards a modern economy incorporates a key role for entrepreneurs. When entrepreneurship is considered the engine for economic growth, understanding the factors that enable or prevent women from embarking on the entrepreneurial route is especially important. Failure to understand these factors may lead to under-utilizing women's labor and workforce participation, worsening living standards, and rendering policy settings ineffective (Langowitz & Minniti, 2007).

For rural Vietnam, Le et al. (2016) found that microenterprises are responsible for a large proportion of the employment rate, at 80% of total employment. Thus, self-employment through micro-enterprise is an increasingly important driver of rural growth in Vietnam regardless of farming activities' continuing dominance of rural economies of Vietnam. Individuals who completed middle or lower secondary schools are associated with non-farm self-employment in rural areas (Demombynes & Testaverde, 2018). Many comparatively well-educated individuals from rural areas with a high school education struggle to find jobs compared to their urban counterparts (Bui & Imai, 2018) namely, (i. This phenomenon contributes to making entrepreneurship an esteemed domain of better-educated people in rural communities. In underserved rural communities, many women perceive entrepreneurship as a special route to follow for which sufficient skills are required (Langowitz & Minniti, 2007). Conversely, being disadvantaged by limited education leads to a lack of confidence to start a business.

Faced with underdeveloped infrastructure, reduced opportunities associated with low population density, and limited resources, ethnic women in rural areas are often driven by the necessity to embark on entrepreneurial routes, especially informal home-based entrepreneurial activities. Nguyen et al. (2014)

found that women in rural areas of Vietnam can be characterized as “necessity-driven” or “forced” entrepreneurs, although differences between majority and minority ethnic groups are not detailed in that study. Although many women use their home as their main location for conducting entrepreneurial activities, acquiring financial resources eventually becomes unavoidable, as enterprises scale up. Poon et al. (2012) stated that one constraint to self-employment is the dampening effect of the lack of access to or ability to obtain credit, especially formal sources of credit such as banks, credit unions, or other lending institutions. Women entrepreneurs often face difficulties accessing capital from various sources, including relatives, spouses, and financial institutions, as women are perceived as “not credible” (Khoi et al., 2013). This is despite women’s entrepreneurship in both rural and urban communities progressing due in part to the implementation of the Land Law enabling women to use their property as collateral to obtain loans or other resources through mortgaging, leasing, trading, or even renting parts of their land (Menon et al., 2014).

Based on the above analysis, the use of technology, access to finance, and risk-taking propensity are adopted as key constructs to explore differences in entrepreneurial activities among ethnic women in Son La Province. These constructs are explained further in the next section.

Theoretical Constructs

Use of Technology

Enterprises, especially small businesses, are often quick to take advantage of the opportunities that new technologies bring. Empirical evidence points to the positive impact of using technology on business performance and opportunities for small enterprises (Passerini et al., 2012; Thong & Yap, 1996). Moreover, technology adoption and the use of the Internet are effective ways individuals can enhance their education and knowledge (Ahmed El Hariry, 2015; Rung et al., 2014)

Approximately 40-45% of all households in Vietnam have Internet access, and 90% of the population have mobile coverage (Shillabeer, 2013). Statistically, 90% of the rural population in Vietnam own mobile phones, and 50% of those own smartphones (Nielsen, 2017). Four out of 10 people use the Internet (Christiansen

& Koc, 2017), and this figure is expected to increase in the coming years.

However, access to technology is not equally distributed. Access to the Internet and mobile phones is higher in urban areas than in rural areas. In Vietnam, low population density and a lack of infrastructure and resources disadvantage rural dwellers with respect to using technologies for entrepreneurial activities and educational purposes (Anderson et al., 2005). Rural dwellers in Vietnam often experience reliability issues, either low quality or unavailability of Internet access, hence preventing businesses located in rural areas from growing and competing effectively with other businesses. Nguyen et al. (2015) showed that the rate of technology adoption for small businesses remains low in underserved communities.

Limited technological knowledge is also apparent among rural residents of Vietnam. Rurality serves to compound disadvantages faced by minority women whose gender and ethnicity combine with low completion rates of primary and secondary school to limit exposure to technology (Taş et al., 2014). Even though most women-owned businesses in Vietnam have used technological tools, such as mobile phones and the Internet, the number of users sharply drops when asked about the high frequency of interaction with technologies, including the Internet (Weeks et al., 2005). In this situation, the rate of technology adoption and the use of technology by ethnic women entrepreneurs in rural areas in Vietnam can be expected to be low. That noted, the picture is vague because no studies have explored how rural, ethnically diverse women who are informally self-employed use technology in the context of entrepreneurship.

Access to Finance

In Vietnam, women entrepreneurs, especially those in rural areas, face various financial and liquidity constraints (Nguyen et al., 2014; Tran & Santarelli, 2013). Government authorities and local councils work together to stimulate entrepreneurship using various methods, from lending schemes to tax reductions. However, government support for the private sector seems not to have been very effective because many small and medium enterprises (SMEs) seek loans from informal lenders (Khoi et al., 2013; Nguyen & Mort, 2016); this is especially the case for women in rural and remote areas.

Regarding choices for accessing credit among ethnic majority and minority entrepreneurs, there is a dearth of literature. In Europe, ethnic minority entrepreneurs are the largest borrowers of informal loans, including moneylenders and credit unions (European Union, 2013). This segment of entrepreneurs does not regularly seek financial support from banks and national institutions, seemingly due to a lack of collateral assets or other forms of loan security. In Asia, policymakers, such as Indian government actors, also face a dilemma in providing suitable credit institutions for entrepreneurs with a small-scale business for similar reasons (Kumar, 2016). Faced with higher frequencies of formal loan denials, minority entrepreneurs may face higher risks in their business structure or weakened business projects leading to a “discouragement effect” among minority groups.

Accessing official loans and legal services from banks or other official service providers in Vietnam is also compromised by language barriers. Ethnic minority women may be unable to access official services in the language of the government (Minot et al., 2006). Recent studies have indicated that language barriers contribute to reduced access to funding for minority ethnic groups and that this compromises the effectiveness of government programs and policies designed to assist people in such distressed regions (Nguyen et al., 2017).

Difficulties accessing credit can potentially be avoided by individual landowners who use their property as collateral or for other bargaining opportunities to finance their entrepreneurial operations (Le et al., 2016; Menon et al., 2014). However, the number of women landowners in rural areas remains low (Pham & Talavera, 2018). In terms of inheritance patterns, women have traditionally been excluded from receiving their family lands, although as already noted, contemporary Vietnam law is addressing equal rights of land ownership for women in the case of individual disinvestments (Cam et al., 2013; ISF-UTS, 2016). A study by Pham and Talavera (2018) used a dataset from UNU-WINDER to conduct surveys in nine provinces (none of which are classified as remote or mountainous areas) and discovered that participants regularly sought informal loans from family and friends.

Risk-Taking Propensity

Risk-taking is a critical human trait differentiating entrepreneurs from non-entrepreneurs (Fortunato,

2014; Macko & Tyszka, 2009). According to Kirzner (1999), entrepreneurship is an act of risk-taking because entrepreneurs deal with high uncertainty of profit in an unstable economic environment. Schumpeter (1989) similarly claimed that risk-taking is implicated in entrepreneurial activities because the market demand for unmet products or services is difficult to forecast. A willingness to expose oneself to risk is a condition that must, therefore, be in place before a decision is made to become self-employed (Caliendo et al., 2009). In short, entrepreneurs need skills to calculate, navigate, and take risks.

Willingness to navigate and accept risks varies according to the motive for being an entrepreneur, with opportunity-driven entrepreneurs more likely to accept risk and necessity-driven entrepreneurs less likely to accept risk. For example, Carland et al.’s (1995) study found that entrepreneurs seeking to generate profits and expand their business are more likely to display a greater propensity for risk-taking than small business owners who endeavor to sustain their family needs. No official statistics are available that may help to discern motives for entrepreneurial behaviors in Vietnam (Nguyen, 2016). However, some studies, such as Avin and Linda (2014) and Nguyen et al. (2014), have established that women in rural areas of Vietnam become entrepreneurs primarily due to their need to support their families, that is, they are driven by necessity.

Prevailing attitudes towards risk in developing nations such as Vietnam have a recognized influence on businesses, especially in rural parts of the country where poverty is rife. Shah and Saurabh (2015) suggested that women’s high-risk aversion affects not only their confidence in securing credit but also the profitability of their business. Santarelli and Tran (2013) concluded that the negative relationship between experience and profitability of entrepreneurs’ enterprises is a direct result of their risk preference. Entrepreneurs who are reluctant to assume a higher risk often achieve lower profits.

To date, no evidence is currently available to determine whether ethnically diverse women in rural Vietnam are equally prone to risk-taking. This study measures willingness to take risks by asking about betting, which is an experience distinct from women’s daily activities (Tyszka et al., 2011) self-efficacy, and risk attitudes. We divided the sample of entrepreneurs into two subgroups: opportunity-

driven vs. necessity-driven. In agreement with findings of research performed in countries with developed market economies, we found that the need for independence and the need for achievement were of higher importance to the entrepreneurs than to the non-entrepreneurs. However, this was only true of the opportunity-driven subgroup of entrepreneurs, while not of those categorized as necessity-driven. In contrast, the most important motive in the group of non-entrepreneurs and as well as the necessity-driven subgroup of entrepreneurs was job security. In accordance with Knight's claim, we found that opportunity-driven (but not necessity-driven. However, betting games are an established means of understanding risk-taking and risk aversion (e.g., Gloede et al., 2015). Moreover, some economists use betting games to measure a correlation between risk-taking behavior and self-confidence (Macko & Tyszka, 2009). Furthermore, limited gambling is a common and socially/legally sanctioned activity in Vietnam where the national government and local councils authorize people to play lottery games under the Penal code No. 100/2015/QH13.

Methods

Location of Study

Although ethnic minority households are scattered across the country, Minot and Baulch (2002) and Nguyen et al. (2018) identified that provinces such as Son La, located in northern Vietnam, have especially high levels of poverty and relatively high concentrations of ethnic minorities, making it an appropriate location for this study. With a population of more than 1,240,000 people in 2018, Son La is comprised of 12 different ethnic groups located across scattered hamlets and communes throughout the mountainous areas (Son La Council, 2009). The population density in Son La Province is 79 people/km² in 2011, which is 3.4 times lower than the figure (265 people/km²) for the whole country (General Statistics Office of Vietnam, 2018).

Son La Province was selected for study due to the following criteria: (a) diverse socio-cultural dynamics with at least 12 ethnic groups represented, (b) reasonable economic growth rate, (c) high levels of poverty and entrepreneurialism, and (d) convenience of access for the research team. Table 1 displays the

Table 1

Distribution of Ethnic Groups in Son La Province in 2018

Branch	Group	Distribution in Son La (% of the total population)	Study's Responses (%)
Vietic	(1) Mường	88,671 (7.15)	13 (9.63)
	(2) Lào	3,559 (0.29)	3 (2.22)
	(3) Kinh	204,321 (16.49)	23 (17.04)
Kadai	(4) La Ha	9,139 (0.74)	7 (5.19)
Austroasiatic	(5) Khơ Mú	14,784 (1.19)	4 (2.96)
	(6) Xinh Mun	25,547 (2.06)	4 (2.96)
	(7) Kháng	8,912 (0.72)	4 (2.96)
Tai Kadai	(8) Thái	665,427 (53.69)	60 (44.44)
	(9) Tày	673 (0.05)	5 (3.70)
H'mong Mien	(10) H'mong	195,743 (15.79)	9 (6.67)
	(11) Dao	(11) 21,088 persons (1.7)	3 persons (2.22)
Sinitic	(12) Hoa	(12) Unknown	0 persons (0.00)
Total			135 persons (100)

distribution of all ethnic groups residing in the province as well as the distribution of participants in this study. Table 1 shows that Thai people form the majority in Son La, at 54.7% of the population, followed by the Kinh group at 17.42%.

Microenterprises in rural areas of Vietnam are often linked to local markets (Sohns & Diez, 2018); hence, local markets were selected as the location for conducting interviews. There are approximately 17 distinct markets located in Son La Province, which suggests that many residents live a considerable distance away from major markets. However, local markets are a “hot spot” for economic development, attracting local, national, and international investors (Vietnam Export, 2012).

Survey Instrument and Rationale

Qualitative research is appropriate for conducting research of an exploratory nature (Patton, 2015). However, after due consideration by the research team, we determined to collect data using face-to-face, quantitative survey method. This is because we anticipated a low response rate for lengthier interviews, the potential for language difficulties, and the researchers’ goals and objectives were to include as many ethnic groups as possible within our time and resource constraints.

As highlighted in Table 2, participants completed four parts of a 30-item questionnaire, including (a) socio-demographic characteristics, (b) experience in using technology, (c) monetary risk-taking propensity, and (d) choices in accessing finance. The study’s instrument was adapted and tailored from the instrument designed by Jackson et al. (1972).

The survey was initially designed in English and subsequently translated into the Vietnamese language, which is also the national dialect. To ensure that the semantical, morphological, and lexicological aspects were aligned between the English and Vietnamese versions, and to offer friendly language comprehensible to women who possess varying levels of education, the survey was translated by a linguistic teacher and reviewed and amended by a lecturer in entrepreneurship. The survey instrument was piloted with five rural women from the Mường ethnicity who work as street vendors. The process of piloting the survey enabled validation of the appropriateness of content, wording of the questions, as well as more general linguistic optimization. Problematic questions

were identified and addressed in finalizing the survey instrument.

Sampling Procedure

The final sample included 135 women who were selected from shoppers and vendors in eight (from 17) local markets in Son La Province. To engage diverse women who have not been exposed to urban living environments on a long-term basis, the selection of participants was based on the following requirements:

- Female.
- Aged above 18.
- Adequate literacy skills to complete the survey.
- Resident in Son La Province from birth to the date of the interview.
- Belonging to one of the stated 12 ethnic groups (Table 1).

The sample comprises women aged from 20 to 60, with various levels of education from primary to tertiary, and from 11 ethnic groups. No representative of the Hoa ethnic group participated in the study. Researchers interacted with a limited number of Hoa women, none of whom agreed to be interviewed.

A two-step sampling procedure was employed. The first step was to obtain a stratification of geographical market locations where there was a high density of local residents making trips to and from the market. Two local research assistants were engaged to administer the surveys; they received a full day’s training on the survey process and prevailing ethical issues. For the second step, systematic random sampling was employed whereby every fifth woman from the population of visitors to each selected market was invited to participate in the survey.

Participants were screened to assess their eligibility using a verbal questioning method. Participants’ self-assessments were accepted at face value because (a) participants normally do not carry their identification with them while engaging in activities in their local market, and (b) we could not independently obtain formal documents to verify participants’ status.

Measures

Survey items that measure attitudes towards entrepreneurship, the use of technology, access to finance, and monetary risk-taking propensity are shown in Table 2. Beginning with technology use,

Table 2*Survey Items*

Measures	Items	Min	Max
Attitude towards entrepreneurship	What do you think about being a start-up?		
	Difficult to have a start-up due to a high education	0	1
	Start-up is a way to create a small-scale business		
	Start-up is a way to get out of poverty	0	1
	Other	0	1
		0	1
The use of technology	Do you have a mobile phone or smart phone?	0	1
	Have you ever used a personal computer or a laptop?	0	1
	Have you accessed to the Internet in the last one year?		
		0	1
	How often do you use internet?	1	4
	When accessing the Internet, do you usually do these below activities?		
	Information seeking	0	1
	Communication	0	1
Social networking	0	1	
Financial investment	If you have some money (savings or profits from business), what will you do with that money?	0	1
	Put the money in the bank	0	1
	Keep the money in your own home	0	1
	Lend the money to another person		
	Start a business	0	1
	Other	0	1
	Do you argue often with your partner over the financial issue?	0	1
	Did you inherit land in your family?	0	1
	In the past, did you seek loans from private loan provider?	0	1
	If you sought helps from private loan provider, what was the largest amount?		
	VND 3 million (US\$129) or below	1	
	VND 3 million to VND 10 million		
	VND 3 million to VND 30 million		
	VND 30 million and above		4
	What form of mortgage did you use?		
Land	1		
Asset			
Other		3	
Monetary risk-taking propensity	When flipping a coin, if it is a head, you win VND 10,000 (US\$0.44); if it is a tail, you lose VND 10,000 (US\$0.44). Do you want to play this game?	0	1
	If the amount is increased to VND 1 million (US\$44), will you join the game?	0	1

simple questions were included in the survey to understand women's experiences of interacting with smartphones, personal computers or laptops, and the Internet. Additional nine items were included regarding financial investment and financial challenges related to entrepreneurial creation or expansion. Monetary risk-taking propensity is measured by two questions related to betting games.

Limitations of the Methodology

The representativeness of the sample can be questioned. For example, the study did not include women with low literacy, which may have compromised the representativeness of the sample. Furthermore, many women were likely unable to answer the survey in their first or preferred language. Women who cannot speak Kinh or Thái are thus likely under-represented in the study. Shared identity is potentially another limitation of this study to the extent that participants did not perceive the survey as confidential. Community histories and how these impacted participation are unknown and unknowable to the research team.

In any event, the final sample size of 135 women from 11 ethnic groups is too small to be statistically representative of the broader population of Son La, and generalizations are thus not possible. However, the sample is an adequate size for exploratory research.

Survey items focused on the use of technology and access to finance/financial challenge are more extensive than the (two) questions focused on risk. The research team suggests that more expansive questions about risk would be required for future studies.

Nonetheless, this study has allowed us to undertake preliminary comparisons across several variables and dimensions, including entrepreneurial status and ethnicity, which contribute to building a richer profile of entrepreneurialism among ethnic women in rural communities. These findings can usefully indicate differences and associations for testing in a larger survey.

Results

To recap, two research questions motivate our study:

1. Do women from different ethnic groups engage in entrepreneurial activities at the same rate?

2. What differences in women's experiences account for their participation or otherwise in entrepreneurial activity?

To answer these questions, the structure of the analysis involves first exploring differences between respondents from majority and minority ethnicities in terms of their participation in entrepreneurial activities; second, reviewing the respondents' experiences of technology, access to finance, and risk-taking through the lens of their entrepreneurial status, that is, whether the respondents can be described as practicing entrepreneurs (or self-employed entrepreneurs), intending entrepreneurs, or non-entrepreneur women. We commence with a socio-demographic profile of participants.

Socio-Demographic Profile of Participants

We surveyed 135 ethnically diverse women and learned about their age, marital status, number of children, education, and language preferences. Most of the women respondents were of Thái ethnicity, making 44.4% of total respondents, followed by 17% from the Kinh group, and 38.6% for other ethnic groups, including Mường, H'mong, La Ha, Tày, Kháng, Xinh Mun, Khor Mú, Lào, and Dao. More than one-third of respondents (44.8%) were aged between 20 and 30, 28.6% were aged 31 to 40, and 26.6% were aged from 41 to 60. Half of the participants had one or two children. Almost two-thirds of respondents were married (64.4%), whereas more than one-quarter (28.9%) were single, and only 6.7% were divorced. Single women were mostly aged 20 to 30 years. Kinh women were over-represented among single women (52.2%), whereas Thái and Mường groups were under-represented among the single women. Twelve percent of the respondents never went to school, 2.2% completed primary school, and 26.5% had completed high school education. Only 7.4% of respondents reported having entered higher education institutions, and these women were variously from the Kinh, Thái, La Ha, H'mong, and Khor Mú populations. Noticeably, nearly half of the participants (44.4%) did not give information related to their education level.

In terms of language skills, 87.4% were able to speak at least one local language (Kinh or Thái) for their daily communication, including reading and speaking. Conversely, this means that 12.6% of respondents could not speak with confidence either the national

or Thái language, which makes it unlikely that these respondents could engage with formal government services in a meaningful way. Other languages used by the women respondents were Xinh Mun, Dao, La Ha, Mường, and H'mong. When asked about the languages used in entrepreneurial discussions, most women (85.4%) claimed to have confidence using the Kinh language, but only 35.4% were able to use their ethnic language in business communication.

Engagement in Entrepreneurial Activity

More than one-quarter of respondents were identified as self-employed (29.4%), many of whom were from Kinh, Mường, La Ha, Thái, and Dao ethnicities. Another 54 respondents (42.8%) indicated an interest in starting their own business. We have dubbed them “intending entrepreneurs.” Those not currently engaged in self-employment and with no desire to do so are dubbed “non-entrepreneurs.” This group consists of 35 women (27.8%) none of whom were Kháng, Lào, and Dao. Table 3 shows the distribution of women across three groups: practicing entrepreneurs (or self-employed women), intending entrepreneurs, and non-entrepreneurs.

From the perspective of marital status, most single women were intending entrepreneurs (58.3%) or non-entrepreneurs (30.6%). Married women were evenly distributed across all groups. Women with children were most likely to be practicing entrepreneurs.

No association between ethnicity and planning to establish a business in the near future is found. Compared to women from Kinh ethnicity, ethnic minority women are more likely to believe that a high level of education is required to embark on the entrepreneurial route. They are also more likely than

Kinh women to believe that their financial status would benefit from becoming an entrepreneur.

Women without formal education were greatly over-represented among intending entrepreneurs; there were six times and three times as many women without formal education as intending entrepreneurs compared to entrepreneurs and non-entrepreneurs, respectively. This is important because more than half of intending entrepreneurs agreed that a high level of education was required to embark on the entrepreneurial route.

We explored participants’ attitudes towards starting a business and found that more than half of participants (51.3%) agreed that starting a business paves a way out of poverty, and almost half (45.3%) agreed that to start a business, a high level of education is necessary. An especially high proportion (63.3%) of those women who were engaged in farming or domestic activities agreed that becoming an entrepreneur required a high level of education. Interestingly, none among this group of women had post-secondary education. In comparison to other careers (in agriculture and domestic work), most self-employed participants (61%) agreed that entrepreneurship paves a way out of poverty, implying that they identify themselves as poor. This points to the idea that participants in this study can be understood as “necessity-driven” entrepreneurs rather than being “opportunity-driven.”

Experiences of Using Technology

Overall, participants’ use of technology was relatively low. Regarding mobile phones, some participants (12.6%) reported that they had not used any type of mobile phone over the course of their life. Notably, of the 61 participants who used smartphones, nearly half (49.2%) were self-employed. Among those

Table 3

Distribution of Entrepreneurs – Practicing, Intending, and Non-Entrepreneurs

		Frequency	Percent	Cumulative Percent
Valid	Practicing entrepreneurs	37	27.4	29.4
	Intending entrepreneurs	54	40.0	42.8
	Non-entrepreneurs	35	25.9	27.8
	Total	126	93.3	100
Missing	System	9	6.7	
	Total	135	100.0	

who had used mobile or smartphones, more than 50% were under 40 years old. Kinh women (57%) were much more likely to have used smartphones than Thái women (39%) and other ethnic groups (4%). Overall, women who had enrolled in secondary school accounted for the highest proportion of smartphone and mobile phone users (57.6%), whereas women with only primary education were the least likely to use mobile phone technology (4.5%).

Turning to computers, nearly 50% of respondents had never used a personal computer, and more than a third (37%) of women had not accessed the Internet before. Disturbingly, not one woman from the small minority ethnic groups, including Kháng, Xinh Mun, Lào and Khơ Mú, reported having access to computers, smartphones, or the Internet. However, a sizeable number of participants (n=44) did not respond to questions related to the use of technology. It is unclear why this would have occurred. Among the different purposes for using the Internet, including information seeking, communication, and social networking, most women (86%) report accessing the Internet to read the news.

A connection can be discerned between education levels and access to the Internet. Those who use the Internet are most likely to have a secondary school education or higher, whereas those with a primary school education account for the lowest number of Internet users.

Overall, practicing entrepreneurs were much greater users of technology than intending or non-entrepreneurs (See Figure 1). For example, entrepreneurs comprised the highest proportion (91.4%) of women who had used the Internet in the past year, with relatively fewer such Internet users among intending entrepreneurs (64.8%) and non-entrepreneurs (42.9%). Moreover, women respondents who used the Internet in the past were found to be approximately four times more likely to plan to establish a business in the near future than those without any experience of using the Internet. Similarly, entrepreneurs comprised the highest proportion of women who used smartphones, whereas intending entrepreneurs included the lowest proportion of smartphone users. All women currently engaged in self-employment had an experience of using smartphones or mobile phones.

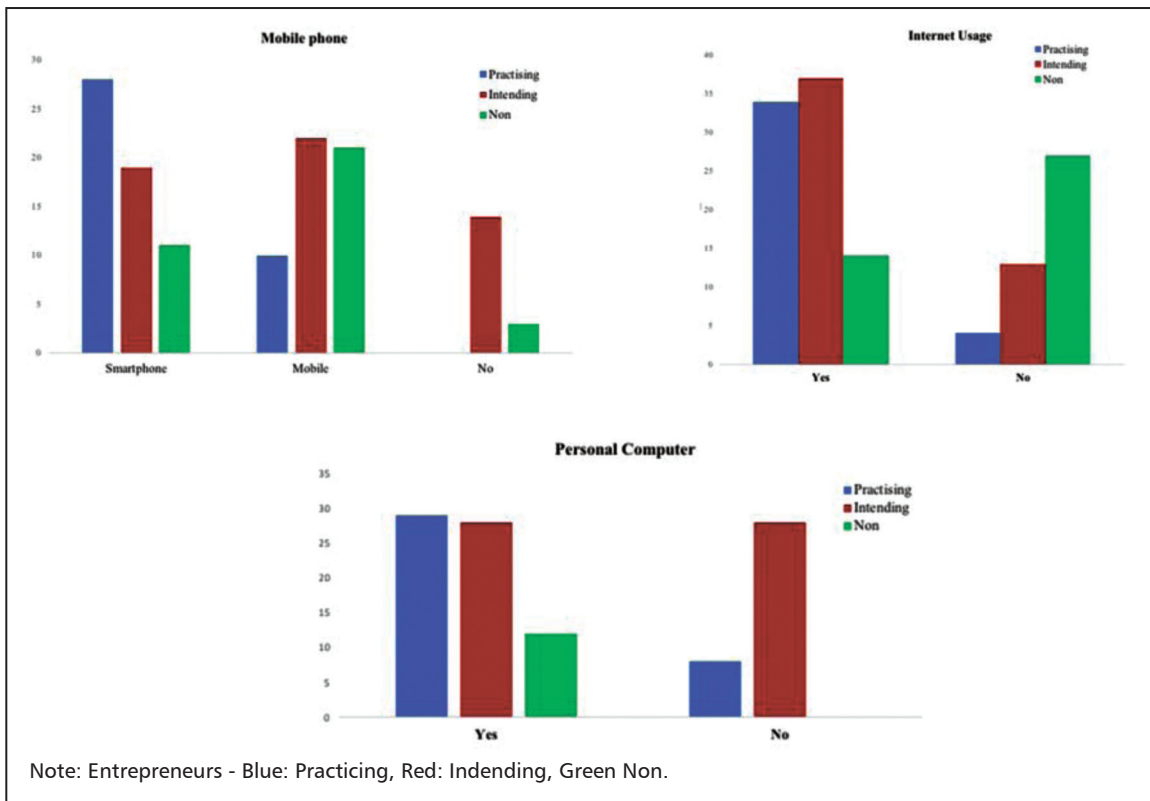


Figure 1. Distribution of Experience in the Use of Technology among Groups

Experiences of Financial Difficulty and Access to Finance

Overall, 90.4% of respondents reported experiencing financial difficulties, such as making monthly payments or other budgetary obligations in the past year. Among those facing financial difficulty, 17.8% reported having argued about financial matters with their partners on a regular basis and 31.1% on an irregular basis. Of concern, 12 women (8.9%), each of whom was self-employed, reported experiencing violence when arguing with husbands or boyfriends regarding financial matters. The number of children in the family seemed to influence the experience of financial arguments because women with two or more children more often faced disputes over financial problems with their partners. We found no such relationship between education and arguments about money, nor between the intention to start a business and arguments about money (Pearson Chi-Square p-value being larger than the significant level of 0.05).

A majority (54.7%) of respondents who faced financial difficulty had borrowed money from banks. The most common amount borrowed from banks was VND 3 million (approx. US\$132); this was the amount secured by almost one-third of respondents (29.8%) who had borrowed from a bank. This amount is roughly 1.25 times higher than the monthly income of households in rural communes. Respondents who had borrowed from a bank were most commonly self-employed (42%), followed by farmers (31.9%) and women engaged in domestic activities (20.3%). Over half (59.8%) of respondents reported seeking and securing short-term loans from non-regulated private lenders at least once despite the high-interest rates often applied by such lenders. Of those accessing private loans, ethnic minority women (non-Kinh and non-Thai) are significantly over-represented, comprising 92.9%

of all such borrowers. Most respondents (96.3%) reported that they had not inherited lands.

Table 4 highlights some differences in experiences of financial stress and accessing loans from banks. Among those who had financial difficulties, intending entrepreneurs accounted for the largest number of women, whereas, among those who did not experience financial difficulties, non-entrepreneurs were best represented, further reinforcing the idea that entrepreneurial activity is borne out of necessity. Regarding past experience of accessing official loans from banks, intending entrepreneurs included twice as many women who had never borrowed money from banks compared to both entrepreneurs and non-entrepreneurs. However, more intending entrepreneurs had experience accessing private loans rather than official loans from banks, whereas more practicing entrepreneurs sought loans from banks rather than from private lenders.

Risk-Taking Propensity

Looking at participation in entrepreneurial activities, no statistical association was found to establish a relationship between risk-taking and entrepreneurial behavior/intention. Respondents were given a set of two hypothetical investment scenarios with different levels of risk and uncertainty. The first situation explored the opportunity of winning VND 10,000 (approx. USD \$0.44) through a game. The majority of respondents (73.8%) did not agree to participate in any betting activities at all, but 26.2% of respondents said they would partake in the bet. Single women were much more likely to agree to bet (48.6%) than married women (14.6%). When the amount increased to VND 1 million (approx. US\$44) in the second scenario, the percentage of women who agreed to play reduced to 20.2% (there was no statistical

Table 4
Financial Difficulties by Entrepreneurial Level (N=126)

Entrepreneur Groups	Practicing	Intending	Non
Financial Difficulties			
Yes	.28	.44	.28
No	.385	.385	.231
Bank Loan Experience			
Yes	.369	.369	.262

difference due to a Pearson Chi-Square p-value larger than the significant level of 0.05 among different age groups and risk-taking).

Women engaged in domestic activities accounted for the highest percentage of women (28.6%) who agreed to bet in the second game, followed by the self-employed and those with agricultural occupations. When asked about betting scenarios, there was a significant difference between those who interacted with the Internet and those who did not. Women who used the Internet were more prone (31%) to take risks in betting.

In a hypothetical scenario where participants were asked about their plans for using their savings, more than half (63.7%) stated that they would deposit their money in banks, whereas 2.4% preferred to keep their cash at home. Nearly a third of the respondents would consider lending with a high-interest rate to other people. Hence, the low propensity for risk-taking could perhaps be explained by the fact that most women expressed a preference to deposit cash in banks.

Overall, self-employed women were less willing to take risks than intending and non-entrepreneurs, regardless of the weight of financial awards. The highest proportion of women who agreed to take a betting risk was found among the intending entrepreneurs (Table 5).

Discussion

This study identifies and examines differences in entrepreneurial activities and intentions among women from various ethnic groups in a rural environment. We also explore how women's different experiences may account for their participation or otherwise in

entrepreneurial activity. In particular, we consider three types of experiences: (a) women's experiences with technology, (b) experiences of financial difficulty and access to finance, and (c) propensity for risk-taking. In answer to our first research question, we find no significant difference among women of different ethnicities in terms of their entrepreneurial practices or intentions.

We find that there is enough evidence to conclude a linear relationship between entrepreneurialism and the use of technology. Self-employed women had the most experience with the use of smartphones and personal computers in comparison to intending and non-entrepreneurs. Budding women entrepreneurs appeared to have used the Internet the most, whereas non-entrepreneurs were responsible for the lowest rate of Internet use. This suggests that investing in increasing the use of technology among ethnic women in rural regions could potentially have a positive impact on entrepreneurial behaviors. We are concerned that women respondents from very small ethnic minorities have no experience accessing the Internet and limited experience using smartphones and personal computers. In contrast, most women from the Kinh and Thái ethnicities in Son La Province frequently use the Internet for information-seeking purposes. This finding suggests that special efforts may be required to ensure that women from small ethnic minorities can access technologies alongside others in their communities. In the interests of equity, it seems important to build familiarity with technology and increase access to technologies in remote and underserved areas where extremely small ethnic groups are present.

We found no statistically significant association between experiences of financial difficulty/access to

Table 5
Risk-Taking Propensity by Entrepreneurial Level (N=120)

Entrepreneur Groups	Practicing	Intending	Non
Financial Risk-Taking			
Yes	.23	.50	.27
No	.33	.39	.28
Financial Risk-Taking with bigger amount of money			
Yes	.24	.43	.33
No	.29	.44	.27

finance and entrepreneurial intentions and behaviors. This is surprising because our study also suggests that women in Son La Province who are self-employed want to get out of poverty and are motivated to become entrepreneurs largely through necessity. These women entrepreneurs generally do not consider the possibilities of expanding their businesses.

Difficulties in accessing credit from government sources remain a problem for women from minority groups who reside in remote areas. Many young women (32.6%) engaged in entrepreneurial activities would desire an entrepreneurial career pending financial support from the government. This should perhaps alert the relevant authorities and institutions, such as banks, to pay more attention to the entrepreneurial aspirations of young women aged between 20 and 30 years.

Ethnic minority women were found to be disinclined to take financial risks and prefer to deposit their savings in banks rather than establishing a business. Thus, women in this study have a low level of risk-taking propensity, which is one of the pronounced traits of (at least some) entrepreneurs. This points to the possibility that women entrepreneurs in our study can be characterized as necessity-driven (see Carland et al., 1995). This finding also suggests that these women entrepreneurs may be less likely to break out of the vicious cycle of poverty (Mosley & Verschoor, 2005). The supports and resources that necessity-driven entrepreneurs may need will likely differ from the incentives sought by opportunity-driven entrepreneurs on account of their unequal propensity to accept risk. It is unclear whether existing policy settings take adequate account of these differences.

Beyond the overall low levels of risk-taking propensity among our respondents, we also found no statistically significant association between risk-taking and entrepreneurial behaviors and intentions. More women who are intending to become entrepreneurs are willing to take risks than current entrepreneurs and non-entrepreneurs. Interestingly, we also found that low risk-taking propensity among women from ethnic minority groups is associated with having a limited experience with technology. The tension between the differing risk propensities associated with different types of entrepreneurship (that is, necessity-driven and opportunity-driven) confounds the picture that emerges from our exploratory research. More research would assist in understanding the connection, if any, between

risk-taking and entrepreneurial behavior and intention in a rural environment.

Some potential barriers for women to become entrepreneurs were identified through this study, mainly relating to education and language. A large proportion of aspiring women entrepreneurs have a secondary-level education but believe that a higher level of education is necessary for succeeding in business. Similarly, women who were engaged in farming or domestic activities and had a low level of education stated that entrepreneurship required a high level of education. These findings imply that some women may be reluctant to become self-employed due to their limited educational background. We suggest that further research may shed light on the possibility that women from diverse ethnicities practice self-exclusion from the livelihood opportunities that they desire and how this may be mitigated.

The ability to speak a mainstream local language would seem important for establishing and maintaining a microenterprise. However, we discovered a small number of women who do not speak either Kinh or Thái (the dominant languages in Son La Province) with confidence. We have not been able to find evidence of how language skills impact micro-enterprises in multi-ethnic environments and suggest that this too may be a fruitful line of further inquiries.

Conclusion

Women's entrepreneurship has drawn considerable academic attention, especially in developed countries. Research articulates the intentions, opportunities, and challenges that women entrepreneurs experience. However, rural women entrepreneurs from diverse ethnic backgrounds are understudied. This study's contribution to knowledge is manifold. Our study is unique in surveying ethnic minority and majority women who live in the same area. First, we find that ethnic minority and majority women are not significantly different in their entrepreneurial practices and intentions. Second, we find barriers (to entrepreneurial practice) of education and language that have not been adequately explored in the existing literature. Third, we have traced an important linear relationship between entrepreneurial behavior and intention, and the use of technology: Ethnic minority women use the Internet far less than ethnic

majority women. Fourth, we point to the need for further research on issues of risk-taking, which are especially complex in the face of necessity-driven entrepreneurship. Ultimately, it is important to move beyond recording differences towards building theoretical explanations for differences in entrepreneurial behavior and intention. Although the study explores the experiences of minority and majority ethnic women in relation to the use of technology, financial difficulties, and risk-taking propensity, the impacts of these three aspects on the livelihoods and business performance of minority ethnic women are not yet clearly defined. Hence, further research on a larger scale is, in our view, both timely and important.

Two recommendations are offered. First, further research is recommended. There is potential value in pursuing research that predominantly:

- explores more fully the relationship between risk-taking attitudes/behaviors and entrepreneurial behaviors in disadvantaged rural areas, noting that entrepreneurs can be motivated by necessity as well as opportunity;
- reviews the intersection between (minority) languages and entrepreneurial experiences;
- investigates how women in rural areas use technology for entrepreneurial activity; and
- examines practices of self-exclusion from livelihood development opportunities among rural and ethnic minority women.

Second, and in the meantime, it is also recommended that the Government of Vietnam invests in developing a more effective enabling environment for small-scale entrepreneurship in rural areas of Vietnam. This should include increasing minority women's access to and use of technology; supporting private sector initiatives to expand access to affordable loans; and offer information products and services in minority languages, and generally ensuring the priorities of ethnic minority women are reflected in policy settings.

Together, these measures can contribute to reducing poverty in rural areas by creating improved socio-economic opportunities and upholding the rights of ethnic minority women in Vietnam.

Declaration of ownership:

This report is our original work.

Conflict of interest:

None.

Ethical clearance:

This study was approved by our institution.

References

- Anderson, D., Tyler, P., & McCallion, T. (2005). Developing the rural dimension of business-support policy. *Environment and Planning C: Government and Policy*, 23(4), 519–536. <https://doi.org/10.1068/c44m>
- Aroui, M., Ben Youssef, A., & Nguyen, C. (2017). Does urbanization reduce rural poverty? Evidence from Vietnam. *Economic Modelling*, 60, 253–270. <https://doi.org/10.1016/J.ECONMOD.2016.09.022>
- Avin, R.-M., & Linda, P. K. (2014). Trends In female entrepreneurship in Vietnam. *The 23th Annual Conference on Feminist Economics*, 1–29. https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=IAFFE23AC&paper_id=62
- Bates, T., Jackson, W. E., & Johnson, J. H. (2007). Advancing research on minority entrepreneurship. *The Annals of the American Academy of Political and Social Science*, 613(1), 10–17. <https://doi.org/10.1177/0002716207303405>
- Baulch, B., Chuyen, T. T. K., Haughton, D., & Haughton, J. (2007). Ethnic minority development in Vietnam. *The Journal of Development Studies*, 43(7), 1151–1176. <https://doi.org/10.1080/02673030701526278>
- Bui, T. P., & Imai, K. S. (2018). Determinants of rural-urban inequality in Vietnam: Detailed decomposition analyses based on unconditional quantile regressions. *The Journal of Development Studies*, 55(12), 1–16. <https://doi.org/10.1080/00220388.2018.1536265>
- Caliendo, M., Fossen, F. M., & Kritikos, A. S. (2009). Risk attitudes of nascent entrepreneurs—New evidence from an experimentally validated survey. *Small Business Economics*, 32(2), 153–167. <https://doi.org/10.1007/s11187-007-9078-6>
- Cam, H., Sang, L. T., Cham, N. T. P., Phuong, N. T. L., Nhung, T. T., & Long, V. T. (2013). *The women's access to land in contemporary Vietnam*. United Nations Development Programme. [http://www.vn.undp.org/content/dam/vietnam/docs/Publications/Women access to land_EN.pdf](http://www.vn.undp.org/content/dam/vietnam/docs/Publications/Women%20access%20to%20land_EN.pdf)

- Carland, J. W. I., Carland, J. W. J., Carland, J. A. C., & Pearce, J. W. (1995). Risk taking propensity among entrepreneurs, small business owners and managers. *Journal of Business and Entrepreneurship*, 7(1), 15–23.
- CEIC. (2018). *Vietnam teledensity: Mobile [1960 - 2019]* [Data and Charts]. <https://www.ceicdata.com/en/indicator/vietnam/teledensity-mobile>
- Christiansen, B., & Koc, G. (Eds.). (2017). *Transcontinental strategies for industrial development and economic growth*. IGI Global. <https://doi.org/10.4018/978-1-5225-2160-0>
- Clark, K., & Drinkwater, S. (2010). Recent trends in minority ethnic entrepreneurship in Britain, *International Small Business Journal: Researching Entrepreneurship*, 28, 136–146. <https://doi.org/10.1177/0266242609355831>
- Demombynes, G., & Testaverde, M. (2018). *Employment structure and returns to skill in Vietnam: Estimates using the Labor Force Survey* (Policy Research Working Papers). The World Bank. <https://doi.org/10.1596/1813-9450-8364>
- Dodd, S. D., & Hynes, B. C. (2012). The impact of regional entrepreneurial contexts upon enterprise education. *Entrepreneurship & Regional Development*, 24(9–10), 741–766. <https://doi.org/10.1080/08985626.2011.566376>
- El Hariry, N. A. (2015). Mobile phones as useful language learning tools. *European Scientific Journal*, 11(16), 298–317. <https://ejournal.org/index.php/esj/article/viewFile/5870/5593>
- European Union. (2013). *The missing entrepreneurs: Policies for inclusive entrepreneurship in Europe*. OECD Publishing. <https://doi.org/10.1787/9789264188167-en>
- Fortunato, M. W. P. (2014). Supporting rural entrepreneurship: A review of conceptual developments from research to practice. *Community Development*, 45(4), 387–408. <https://doi.org/10.1080/15575330.2014.935795>
- García-Rodríguez, F. J., Gil-Soto, E., Ruiz-Rosa, I., & Gutiérrez-Taño, D. (2017). Entrepreneurial potential in less innovative regions: The impact of social and cultural environment. *European Journal of Management and Business Economics*, 26(2), 163–179. <https://doi.org/10.1108/EJMBE-07-2017-010>
- General Statistics Office. (2018). *Statistics - Per capita monthly income at current prices by rural/urban*. GSO Vietnam. <http://www.gso.gov.vn>
- General Statistics Office of Vietnam. (2018). *Social and economic situation in 2018*. https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=19043
- Gloede, O., Menkhoff, L., & Waibel, H. (2015). Shocks, Individual risk attitude, and vulnerability to poverty among rural households in Thailand and Vietnam. *World Development*, 71, 54–78. <https://doi.org/10.1016/J.WORLDDEV.2013.11.005>
- Gries, T., & Naudé, W. (2010). Entrepreneurship and structural economic transformation. *Small Business Economics*, 34(1), 13–29. <https://doi.org/10.1007/s11187-009-9192-8>
- Hampel-Milagrosa, A. (2010). Identifying and addressing gender issues in doing business. *The European Journal of Development Research*, 22(3), 349–362. <https://doi.org/10.1057/ejdr.2010.12>
- Huong, P. L., & Fry, G. W. (2002). The emergence of private higher education in Vietnam: Challenges and opportunities. *Educational Research for Policy and Practice*, 1, 127–141.
- ISF-UTS. (2016). *Learning brief 4: Driving equality, enterprise in WASH*. www.enterpriseinwash.info
- Jackson, D. N., Hourany, L., & Vidmar, N. J. (1972). A four-dimensional interpretation of risk taking. *Journal of Personality*, 40(3), 483–501. <https://doi.org/10.1111/j.1467-6494.1972.tb00075.x>
- Khoi, P. D., Gan, C., Nartea, G. V., & Cohen, D. A. (2013). Formal and informal rural credit in the Mekong River Delta of Vietnam: Interaction and accessibility. *Journal of Asian Economics*, 26, 1–13. <https://doi.org/10.1016/j.asieco.2013.02.003>
- Kirzner, I. M. (1999). Creativity and/or alertness: A reconsideration of the Schumpeterian entrepreneur. *Review of Austrian Economics*, 11, 5–17.
- Krajan, E. A. (2017). *Enduring poverty: Explanations for the persistence of minority poverty in Vietnam* (Unpublished masteral thesis). Naval Postgraduate School. <http://hdl.handle.net/10945/53004>
- Kumar, P. (Ed.). (2016). *Indian women as entrepreneurs*. Palgrave Macmillan. <https://doi.org/10.1057/978-1-137-60259-6>
- Langowitz, N., & Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31(3), 341–364. <https://doi.org/10.1111/j.1540-6520.2007.00177.x>
- Le, Q. V., Nguyen-Lisovich, M., & Raven, P. V. (2016). Regional differences in behaviors, attitudes, and motivations related to performance among women-owned microenterprises in Vietnam. *World Development Perspectives*, 2, 17–24. <https://doi.org/10.1016/j.wdp.2016.08.002>
- Macko, A., & Tyszka, T. (2009). Entrepreneurship and risk taking. *Applied Psychology*, 58(3), 469–487. <https://doi.org/10.1111/j.1464-0597.2009.00402.x>
- Menon, N., Rodgers, Y. V. M., & Kennedy, A. R. (2016). Land reform and welfare in Vietnam: Why gender of the land-rights holder matters. *Journal of International Development*, 29(4), 454–472. <https://doi.org/10.1002/jid.3203>
- Menon, N., van der Meulen Rodgers, Y., & Nguyen, H. (2014). Women's land rights and children's human capital in Vietnam. *World Development*, 54,

- 18–31. <https://doi.org/10.1016/J.WORLDDEV.2013.07.005>
- Minot, N., & Baulch, B. (2002). *The spatial distribution of poverty in Vietnam and the potential for targeting*. World Bank. <https://doi.org/10.1596/1813-9450-2829>
- Minot, N., Epprecht, M., Tran, T. T. A., & Trung, L. Q. (2006). *Income diversification and poverty in the northern uplands of Vietnam*. International Food Policy Research Institute. <https://doi.org/10.2499/0896291480>
- Nguyen, C., Frederick, H., & Nguyen, H. (2014). Female entrepreneurship in rural Vietnam: An exploratory study. *International Journal of Gender and Entrepreneurship*, 6(1), 50–67. <https://doi.org/10.1108/IJGE-04-2013-0034>
- Nguyen, H. T. M., Kompas, T., Breusch, T., & Ward, M. B. (2017). Language, mixed communes, and infrastructure: Sources of inequality and ethnic minorities in Vietnam. *World Development*, 96, 145–162. <https://doi.org/10.1016/J.WORLDDEV.2017.03.004>
- Nguyen, H., Doan, T., & Quang Tran, T. (2018). *Contribution to income inequality by income source: A comparison across ethnic groups in Vietnam* (MPRA Paper No. 88821). <https://ideas.repec.org/p/prapa/mprapa/88821.html>
- Nguyen, H. A. (2016). *A review of women's entrepreneurship in Vietnam taking into account socio-cultural norms and the institutional ecosystem* (SECO Working Paper Series 11/2016). SECO and World Trade Institute. <https://doi.org/10.7892/BORIS.97929>
- Nguyen, L. D., & Thi Tran, H. (2016). Determinants to female labor income in the Vietnam's informal sector. *Mediterranean Journal of Social Sciences*, 7(3), 169–177. <https://doi.org/10.5901/mjss.2016.v7n3s1p169>
- Nguyen, Q. A., & Mort, G. S. (2016). Economic reform and entrepreneurship in Vietnam: A policy perspective. In J. Ateljevic and J. Trivic (Eds.), *Economic development and entrepreneurship in transition economies* (pp. 109–127). Springer International Publishing. https://doi.org/10.1007/978-3-319-28856-7_7
- Nguyen, S. C. (2013). Appropriate methodology for poor ratio of the program for new rural community development. *Figures and Events*, 5, 1–6.
- Nguyen, T. H., Newby, M., & Macaulay, M. J. (2015). Information technology adoption in small business: Confirmation of a proposed framework. *Journal of Small Business Management*, 53(1), 207–227. <https://doi.org/10.1111/jsbm.12058>
- Nguyen, T. T. T., & Hamid, O. M. (2016). Language attitudes, identity and L1 maintenance: A qualitative study of Vietnamese ethnic minority students. *System*, 61, 87–97. <https://doi.org/10.1016/J.SYSTEM.2016.08.003>
- Nielsen. (2017). *Breaking borders: How to tap into the potential yet unknown land - rural Vietnam*. https://www.nielsen.com/content/dam/nielsen/global/vn/docs/Reports/2017/Insight Article_Rural In Vietnam_EN_Final.pdf
- Passerini, K., Tarabishy, A. El, & Patten, K. (2012). SMEs and information technologies in the broadband economy. In K. Passerini, A. E. Tarabishi, & K. Patten (Eds.), *Information technology for small business* (pp. 1–18). Springer. https://doi.org/10.1007/978-1-4614-3040-7_1
- Patrica, B., Xheneti, M., Shova, T. K., Shandana, S., Aybeniz, A., Federica, S., Shumaila, Y., Saeed, S., Ranabahu, N., Mary, B., Ewa, L., Alina, Z., Wingrove-Haugland, E., Krizkova, A., Pospisilova, M., Jurik, N., Cavender, G., Appelstrand, M., Liderstav, G., ... Foster, C. (2018). Section 2: Gendered embeddedness of women's entrepreneurial activity in the entrepreneurship ecosystem. In S. Yousafzai, A. Lindgreen, S. Saeed, C. Henry, & A. Fayolle (Eds.), *Contextual embeddedness of women's entrepreneurship: Going beyond a gender-neutral approach* (pp. 89–258). Routledge. <https://www.routledge.com/Contextual-Embeddedness-of-Womens-Entrepreneurship-Going-Beyond-a-Gender/Yousafzi-Lindgreen-Saeed-Henry/p/book/9781472483560>
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Sage Publication, Inc. <https://uk.sagepub.com/en-gb/asi/qualitative-research-evaluation-methods/book232962>
- Perry, G. E., Arias, O., Fajnzylber, P., Maloney, W. F., Mason, A., & Saavedra-Chanduvi, J. (2007). *Informality*. The World Bank. <https://doi.org/10.1596/978-0-8213-7092-6>
- Pham, T., & Talavera, O. (2018). Discrimination, social capital, and financial constraints: The case of Viet Nam. *World Development*, 102, 228–242. <https://doi.org/10.1016/J.WORLDDEV.2017.10.005>
- Poon, J. P. H., Thai, D. T., & Naybor, D. (2012). Social capital and female entrepreneurship in rural regions: Evidence from Vietnam. *Applied Geography*, 35(1–2), 308–315. <https://doi.org/10.1016/J.APGEOG.2012.08.002>
- Rung, A., Warnke, F., & Mattheos, N. (2014). Investigating the use of smartphones for learning purposes by Australian dental students. *JMIR MHealth and UHealth*, 2(2), e20. <https://doi.org/10.2196/mhealth.3120>
- Santarelli, E., & Tran, H. T. (2013). The interplay of human and social capital in shaping entrepreneurial performance: The case of Vietnam. *Small Business Economics*, 40(2), 435–458. <https://doi.org/10.1007/s11187-012-9427-y>
- Schumpeter, J. (1989). Essays on entrepreneurs, innovations, business cycles, and the evolution of capitalism. In R. Clemence (Ed.), *Economic theory and entrepreneurial history* (pp. 221–231). Transaction Publishers.
- Shah, H., & Saurabh, P. (2015). Women entrepreneurs in developing nations: Growth and replication strategies and their impact on poverty alleviation. *Technology Innovation Management Review*, 5(8), 34–43. <http://timreview.ca/article/921>

- Shillabeer, A. (2013). Development of an e-health strategic framework for Vietnam. *Proceedings of the International Conference on Managing the Asian Century*, 163–173. https://doi.org/10.1007/978-981-4560-61-0_19
- Shinnar, R. S., Giacomini, O., & Janssen, F. (2012). Entrepreneurial perceptions and intentions: The role of gender and culture. *Entrepreneurship: Theory and Practice*, 36(3), 465–493. <https://doi.org/10.1111/j.1540-6520.2012.00509.x>
- Siqueira, A. C. O., Webb, J. W., & Bruton, G. D. (2016). Informal entrepreneurship and industry conditions. *Entrepreneurship Theory and Practice*, 40(1), 177–200. <https://doi.org/10.1111/etap.12115>
- Sohns, F., & Diez, J. R. (2018). Explaining micro entrepreneurship in rural Vietnam—A multilevel analysis. *Small Business Economics*, 50(1), 219–237. <https://doi.org/10.1007/s11187-017-9886-2>
- Son La Council. (2009). *Trang tin điện tử của Ủy ban Dân tộc - TỈNH SON LA* [Homepage of the Committee – SON LA PROVINCE]. <http://web.cema.gov.vn/modules.php?name=Content&op=details&mid=7761>
- Taş, E. O., Reimão, M. E., & Orlando, M. B. (2014). Gender, ethnicity, and cumulative disadvantage in education outcomes. *World Development*, 64, 538–553. <https://doi.org/10.1016/J.WORLDDEV.2014.06.036>
- Thai, D. M., & Falch, M. (2018). Universal service in Vietnam: An institutional approach. *Telecommunications Policy*, 42(4), 323–332. <https://doi.org/10.1016/J.TELPOL.2017.10.003>
- The Vietnam Women Entrepreneurs Council. (2007). Women's entrepreneurship development in Vietnam. https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_100456.pdf
- Thong, J. Y. L., & Yap, C. S. (1996). Information technology adoption by small business: An empirical study. In A. Editor & B. Editor (Eds.), *Book title* (pp. 160–175). Publisher. https://link.springer.com/content/pdf/10.1007/978-0-387-34982-4_12.pdf
- Tran, T. H., & Santarelli, E. (2013). Capital constraints and the performance of entrepreneurial firms in Vietnam. *Industrial and Corporate Change*, 23(3), 827–864. <https://doi.org/https://doi.org/10.1093/icc/dtt030>
- Trieu, N. T. (2014). Vùng đồng bào dân tộc thiểu số gắn liền với đói nghèo và dịch bệnh [Ethnic minority areas are associated with poverty and epidemics]. Institute of Malariology Parasitology and Entomology Quynhon. <http://www.impe-qn.org.vn/impe-qn/vn/portal/InfoDetail.jsp?area=58&cat=1106&ID=7310>
- Tyszka, T., Ciešlik, J., Domurat, A., & Macko, A. (2011). Motivation, self-efficacy, and risk attitudes among entrepreneurs during transition to a market economy. *The Journal of Socio-Economics*, 40(2), 124–131. <https://doi.org/10.1016/J.SOCEC.2011.01.011>
- United Nations Development Programme. (2017). *Fact sheet on poverty reduction in Vietnam*. UNDP. <http://www.vn.undp.org/content/vietnam/en/home/library/factsheets/Poverty-reduction-in-Vietnam.html>
- Van De Walle, D., & Gunewardena, D. (2001). Sources of ethnic inequality in Viet Nam. *Journal of Development Economics*, 5(1), 177–207.
- Vietnam Export. (2012). *Son La*. <http://en.vietnamexport.com/index.php/vietnam-sourcing/item/187-son-la.html>
- Vong, J., & Song, I. (2015). *Application of ICT to improve rural livelihood in Vietnam*. Springer. https://doi.org/10.1007/978-981-287-347-7_14
- Walker, E., & Webster, B. (2004). Gender issues in home-based businesses. *Women in Management Review*, 19(8), 404–412. <https://doi.org/10.1108/09649420410570216>
- Weeks, J., Greig, F., Nguyen, T. T., Nguyen, T. H., Cutura, J., Ellis, A., Nguyen, T., Nguyen, T. M., Duong, T. T., Pendse, R., & Hue-Bi, C. (2005). *A national survey of women business owners in Vietnam: Report of findings*. <http://www.businessenvironment.org/dyn/be/docs/70/Session1.2TrangDoc.pdf>
- Williams, C. C., & Baric, M. (2014). Special issue: Entrepreneurship in the informal sector: Institutional perspectives. *Journal of Small Business & Entrepreneurship*, 27(1), 116–117. <https://doi.org/10.1080/08276331.2014.963375>
- World Bank. (2018). *Vietnam continues to reduce poverty*. World Bank. <https://www.worldbank.org/en/news/press-release/2018/04/05/vietnam-continues-to-reduce-poverty-according-to-world-bank-report>