How the Vietnamese Household Registration System Affects Urban
Migrants: A Study on Social Mobility and Income Inequality
By Anthony Raul Garcia
A Senior Honors Thesis Submitted to the Department of Political Science
University of California, San Diego
March 29, 2021

Acknowledgements

First, I want to thank Professors Simeon Nichter and David Lake for leading this year's senior honors seminar and providing essential feedback to the work my classmates and I have been conducting for the past six months. I also want to show my gratitude to our TA Alexandra Lange for resolving a technical issue that would have prevented this study from discovering significant effects that prove essential to my thesis.

Furthermore, I want to show my appreciation to my friends who never fail to make me smile and laugh. Their support and encouragement remind me that though things in life may be difficult to get through, there are always people who will take time out of their day to make sure I am well and want to see me be happy.

I am also appreciative of Professor Peter Galderisi. Our many conversations inspired me to study data analytics with a passion, and working as his research assistant has opened many opportunities for me. I also thank Professor David Fisk for sparking my interest in emerging post-communist economies and introducing me to my extraordinary thesis advisor.

Professor Megumi Naoi has been one of the most supportive people I have ever met. She encourages me to have confidence in my academic and personal life, and helped me attain both an internship in Vietnam and a scholarship to fund this exhilarating opportunity. Vietnam has fascinated me since my first week as a freshman at UC San Diego. I will always treasure her as a significant person in my life, and I am grateful she chose to be my thesis advisor.

Finally, I must acknowledge my mother and father as being the best parents I could ever ask for. My mother's love and support always put a smile on my face, and though my father passed away when I was only 13, I remember and cherish him every day. His character taught me the value of education, open-mindedness, and labor. He will always be my hero.

Table of Contents

List of Figures 4

Chapter 1: Introduction 5

Purpose 5

Argument and Hypotheses 6

Data 8

Methodology 8

A Brief Summary of Findings 10

Contribution 11

Chapter 2: Literature Review on Social Mobility in Emerging Economies13

Traditional Views on Social Mobility 13

Psychological Perspective of Social Mobility 16

Approach of this Thesis 17

Chapter 3: Evolution of Vietnam's Ho Khau System 18

Origins 18

Reforms (1986 - 2006) 18

Current System (2013 - 2020) 20

International Comparisons 22

Summary 23

Chapter 4: Argument and Hypotheses 25

Chapter 5: Research Design 31

Data 31

Measurements 33

Threats to Causal Inference 38

Chapter 6: Evidence on Subjective Social Mobility 40

Results on Respondents Under Age 40 41

Results on Respondents Over Age 40 48

Chapter 7: Evidence on Income Inequality 54

Results on Respondents Under Age 4055

Results on Respondents Over Age 40 61

Chapter 8: Conclusions 67

References 72

List of Figures

- Figure 1. Distribution of Age by Ho Khau Status 38
- Figure 2. Covariate Balance of Several Variables 39
- Figure 3. Determinants of Subjective Social Mobility (Under 40) 41
- Figure 4. Percentage of Household Enrollment by School Type and Ho Khau Status (Under 40) 42
- Figure 5. Average Subjective Social Mobility (SSM) Score of Temporary and Permanent Households (Headed by Those Under 40) by Household Income Level 44
- Figure 6. Percentage of Households (Headed by those Under 40) by Remittance Level and Ho Khau Status 45
- Figure 7. Percentage of Households (Headed by those Under 40) by Govt Health Insurance Assistance and Ho Khau Status 46
- Figure 8. Determinants of Subjective Social Mobility (Over 40) 48
- Figure 9. Percentage of Household Enrollment by School Type and Ho Khau Status (Over 40) 50
- Figure 10. Average Subjective Social Mobility (SSM) Score of Temporary and Permanent Households (Headed by Those Over 40) Located in a Rural and Urban Area 51
- Figure 11. Percentage of Households (Headed by those Over 40) by Govt Health Insurance Assistance and Ho Khau Status 52
- Figure 12. Determinants of Income Inequality (Under 40) 55
- Figure 13. Percentage of Temporary and Permanent Household Heads (Under 40) Employed in Each Sector of the Vietnamese Economy and Unemployed 58
- Figure 14. Average Monthly Income (USD) of Temporary and Permanent Households by Sector Employment and Unemployment of Head (Under 40) 58
- Figure 15. Percentage of Temporary and Permanent Households (Headed by Those Under 40) Located in a Rural and Urban Area 59
- Figure 16. Determinants of Income Inequality (Over 4061
- Figure 17. Percentage of Temporary and Permanent Household Heads (Over 40) Employed in Each Sector of the Vietnamese Economy and Unemployed 64
- Figure 18. Percentage of Temporary and Permanent Households (Headed by Those Over 40) Located in a Rural and Urban Area 65

Chapter 1: Introduction

Purpose

This thesis seeks to understand how Vietnam's household registration system impacts the social mobility of internal migrants. Internal migrants find themselves in urban environments where economic opportunities have the potential to improve their standing in society at a time of rapid economic expansion. However, these same migrants are also without access to certain rights and public resources such as employment as a public servant due to their household registration status. Researchers of different disciplines have studied social mobility as a window to understand what factors within a society (particularly those of industrialized nations) impact the ability of an individual to improve their social status. While there is a growing interest in emerging economies, little attention has been put on Vietnam's household registration system which penalizes internal migrants partaking in their nation's notable industrialization.

Once marred by devastating wars, extreme poverty, and international isolation, Vietnam has been on the rise in recent decades with remarkable economic growth. From 1992 to 2018, Vietnam achieved an average GDP growth rate of 6.9 percent, witnessed a reduction in poverty (in regard to those earnings 1.90 USD or less per day) from 52.3 percent to 1.8 percent (World Bank, 2019; World Bank, 2019), and has been gradually transitioning from an agricultural economy to one of modern industry.

These accomplishments are often credited to a series of economic reforms introduced in 1986 known as *Doi Moi*, or "renovation". *Doi Moi* sought to remove the economic barriers set through centralized planning by privatizing state-owned industries and incentivizing entrepreneurship. Since the introduction of market forces by *Doi Moi*, Vietnam's economy benefits immensely from trade, foreign-direct investments, manufacturing and with its accession

into the World Trade Organization in 2007 (Thanh & Duong, 2009; Chuc & Duong, 2019). However, despite the miraculous achievements brought on by *Doi Moi*, Vietnam's household registration system known as *ho khau*, a vestige of its command economy, continues to impact the lives of the entire Vietnamese population.

Existing analysis shows that rural-to-urban migration is increasing, from 26.2 percent of total internal migration between 1994 and 1999 to 36.2 percent between 2010 and 2015, with more young Vietnamese seeking to better their lives with economic opportunities found in cities and urban provinces which are the main beneficiaries of the *Doi Moi* reforms (Dang et al., 2003; UNESCO et al., 2018). This type of migration is deemed an inevitability typically found in developing countries with rapid economic expansion (Anh et al., 2012; UNDP, 2010).

Therefore, the *ho khau* registration system's intention to control and penalize in-migration to cities and urban provinces is still in place at a time of mass urban migration driven by the *Doi Moi* reforms. This study seeks to understand what effect the *ho khau* system has on the subjective social mobility of temporary and permanent residents as Vietnam's economy undergoes rapid industrial expansion. I also investigate what level of income inequality exists within the Vietnamese household registration system and what factors determine it.

Argument and Hypotheses

I argue that the barriers set by Vietnam's *ho khau* system prevent internal migrants without permanent registration status (temporary residents) from accessing valuable resources which can increase their subjective social mobility. I argue that the household registration in place undermines the sort of upward mobility that took place during the industrialization of former emerging economies.

I hypothesize that temporary resident status is associated with lower subjective social mobility than permanent resident status. The economic barriers set against temporary residents in urban districts will undermine their ability to improve their lives by restricting their rights and access to public resources necessary for upward mobility. Institutional restriction to public resources such as healthcare, public education, and vehicle registration will demonstrate a decrease in subjective social mobility. On the other hand, those with permanent registration status will benefit from these resources and economic opportunities and are thus better able to experience greater upward mobility than their temporary counterparts.

I further hypothesize that access to public education significantly impacts the subjective social mobility of temporary residents. Taking into consideration the findings of previous studies (Torche, 2013; Dribe et al., 2015), I assert that a public education allows for a more affordable opportunity to learn and master skills necessary to improve their social status and that of their families. Moreover, an urban living environment and its effect on subjective social mobility are subject to analysis. Similar to the benefits of a public education, I hypothesize that an urban environment allows for greater access to economic and social opportunities which can benefit even those with temporary *ho khau* status.

My research also considers the effect finances may have on subjective social mobility. I argue that temporary residents with a higher level of income are more grateful than permanent residents due to the economic and structural circumstances of the *ho khau* system. In addition, I also test whether or not temporary residents who provide a higher level of remittance have higher subjective social mobility. By having a sense of purpose in their decision to migrate to a different province and district, I theorize that the financial gains of temporary residents will encourage them to see their lives as improving.

Finally, further analysis explores to what extent assistance from the Vietnamese government impacts the subjective social mobility of a temporary resident. The provision of such assistance may influence the sense of comfort and assurance of a temporary resident that their lives will improve, despite being in an environment not registered as their permanent residency.

Data

This study utilizes cross-sectional individual-level data which contains two vital questions which I use to measure subjective social mobility among temporary and permanent residents. Given the limitation of data on temporary residents, data from a 2015 World Bank study on this specific household registration system allows for the opportunity to analyze the subjective social mobility of permanent and temporary residents in a hypothetical sense with two key questions. The study asks respondents to rate their present well-being, and what they perceive their well-being will be in five years.

This further adds to the sense of my measure of social mobility being subjective. However, it will still allow researchers to understand why people in the *ho khau* system evaluate their personal lives in a certain way. The association between these two well-being scores determines whether an individual perceives their subjective social mobility as decreasing, increasing, or staying the same. I examine the monthly incomes of permanent and temporary households and compare them to understand what level of income inequality exists in the *ho khau* system. I do this by logging their incomes (in the Vietnamese Dong), regressing variables on them, and convert the results to the U.S. dollar based on the 2015 exchange rate.

Methodology

To test these hypotheses, I measure social mobility in the context of the psychological perspective. Rather than use income or occupation as measures of social mobility, subjective well-being can offer a more personal insight to the state of Vietnamese people's lives within the *ho khau* system. This measure evaluates whether respondents believe their lives will improve (positive social mobility), worsen (negative social mobility), or stay stagnant (immobile) between two different time periods. With subjective well-being as the measurement of social mobility, I also consider sociological and economic variables which have shown to have an impact on subjective well-being.

This study utilizes multivariate regressions to measure the subjective social mobility of respondents. The focus of this study is to determine the regression coefficient of respondents' *ho khau* registration status on their subjective social mobility to test for my hypotheses. I assume that a multivariate regression measuring this kind of social mobility should consider independent variables such as expenditures by household, education level and type, gender, income, and other economic and sociological factors used in previous studies on vertical, intergenerational, and intragenerational mobility.

Multivariate regression models also test to what extent similar factors determine income inequality. I hold it will be beneficial to understand the level of income inequality between temporary and permanent residents granted the two groups vary in their lawful access to public goods and economic opportunities. These multivariate regressions on income can therefore grant a better understanding of how well the *ho khau* system performs in its objective to discourage in-migration to cities when it comes to impacting such a vital driver of social mobility as income.

Therefore, two empirical chapters will compose the findings of this study on the *ho khau* system. The first chapter investigates the subjective social mobility among temporary and

permanent residents. The second chapter analyzes the level of income inequality between temporary and permanent residents.

A Brief Summary of Findings

Analysis shows that contrary to their counterparts with permanent residency status, a high level of household income has no significant effect on the subjective social mobility of temporary residents under age 40. Instead, younger temporary residents who provide a high level of remittance to others and receive government assistance in purchasing health insurance are more likely to report upward subjective social mobility. Temporary residents over the age of 40 are more likely to report upward subjective social mobility by having household members attend a public school rather than a private school, and by living in an urban area of an industrial district or province.

While temporary resident status is associated with a lower level of income, a rural living environment is likely to see no significant level of income inequality between temporary and permanent residents under age 40. Completing an upper secondary education or greater as a temporary resident is associated with a significant decrease in income inequality with permanent residents, along with employment in the service and primary sectors of the Vietnamese economy. A household headed by someone over age 40 and with temporary residency status is more likely to have a higher level of income if a member currently receives a public education, not a private one.

Altogether, the *ho khau* system succeeds in penalizing the incomes of temporary residents living in urban areas but has no effect on their subjective social mobility. This inconsistency indicates that personal finance is not a significant motive of urban migrants.

Contribution

Contrary to my prediction that temporary *ho khau* status is associated with lower subjective social mobility, *ho khau* status alone seems to have no significant effect on how people evaluate their future well-being. Instead, access to government services, such as public school enrollment, substantially improves migrants' subjective social mobility. The age of a migrant also significantly effects how they report their subjective social mobility when given access to these valuable public services.

This study shows that younger urban migrants' self-reported future mobility does not differ from having a low or high level of income. Instead, they see their lives as improving when they can provide for the needs of others, such as their families, through high levels of remittance and the attainment of health insurance. With this understanding, the Vietnamese government can improve the well-being of youthful migrants by enacting policies that allow for the ability to earn higher incomes for the care of others and ease access to health insurance. Incentives for these two factors could encourage youths in Vietnam's rural provinces to invest time and effort into its metropolises and become productive members of its industrializing economy.

This thesis also shows that enrollment into a public school is superior to a private school in terms of increasing the subjective social mobility of older temporary residents. Along with the finding that temporary households with higher levels of income are also more likely to have a member receive a public education rather than a private one, that should be an indication to policymakers that temporary residents highly value an affordable public education because it offers a higher chance of enriching the human capital of their children and future generations.

If city officials really perceive temporary residents to be a burden on public resources (Anh et al., 2016), perhaps they should expand opportunities for public school enrollment so

these families can become more productive and enhance the economies of their cities and the rural provinces these temporary residents typically come from. Economic improvements to these rural provinces could eventually decrease rural-to-urban migration and lessen the "burden" placed on city resources.

Empirical results illustrate that a significant level of income inequality does exist between temporary and permanent residents. A previous study shows that this disparity already existed 2009 (Nguyen & Minh, 2016), and this thesis shows it still exists in 2015 following a 2013 reform to the *ho khau* system which currently grants local governments the authority to set their own requirements for permanent residency status (World Bank Group & Vietnam Academy of Social Sciences, 2016). Demonstrating that the attainment of an upper secondary education or greater is associated with a significant increase in the income of a temporary household, this study adds to the importance of education in emerging economies and reducing income inequality (Abdullah et al., 2013; Glomm & Ravikumar, 2003)

The lack of statistical significance of a manufacturing occupation in increasing the subjective social mobility and incomes of urban migrants should be of concern to Vietnamese officials and those who strive to grow their industrializing economies. Despite being more likely to experience upward social mobility and earn a higher income by working in the primary and service sectors, temporary residents are more likely to work in the manufacturing sector. Should these migrants opt to work in the other two sectors or return home in massive numbers following dissatisfaction with the manufacturing sector, Vietnamese industrialization could be undermined. This workforce is currently a major incentive for investment into Vietnam (Koty, 2020; Mason, 2010), and institutional harm being done to it may inadvertently harm an economy that is heavily dependent on trade, foreign-direct investments, and especially manufacturing.

Chapter 2: Literature Review on Social Mobility in Emerging Economies

Since the 1960s, historians, sociologists and political scientists have studied social mobility to understand what factors influence the movement of an individual, family or group of people between the different strata of society, particularly in the age of modern, industrialized societies (Kaelble, 2001). Social mobility comes in different forms, from vertical mobility or a change in one's occupational status, to the change in the social standing between two or more generations known as intergenerational mobility, and intragenerational mobility which is the movement of an individual's social status within their lifetime or a single generation.

As different models and methods of measurements have evolved throughout time, social mobility and its subsets have been studied under three particular perspectives with their respective variables of interest.

Traditional Views on Social Mobility

The first perspective is the sociological perspective, which seeks to understand what societal factors influence occupational and social class mobility (or vertical mobility). Research shows that while GDP per capita has more than doubled since accession into the World Trade Organization in 2007 (World Bank, 2019), the mobility of Vietnam's lowest economic class, or income quintile, has been declining with a growing income gap between it and the second lowest income quintile (Oxfam, 2018). Moreover, figures from the bi-annual Vietnam Household Living Standards Survey (VHLSS) illustrate that within the lowest income quintile, every demographic with the exception of ethnic minorities experienced a decline in upward mobility from 2010 to 2014 in comparison to the 2004-2008 period (Hoa & Wells-Dang, 2019). These findings suggest that opportunities for nearly all members of the lowest income class (no matter gender, living

environment, or age) to earn higher incomes and improve their social status are on the decline as Vietnam develops as an industrialized country, a phenomenon that is commonly found in developing and emerging economies (Derviş & Qureshi, 2018).

Sociologists often cite universal education as one of the most important determinants of vertical mobility, for as the education of an individual increases, so will be the opportunities to have a higher paying, white-collar occupation (Torche, 2013). Living in a compact, urban environment is also found to be associated with higher intergenerational mobility as residents in these areas will have easier access to occupations that can increase their incomes and standards of living that are typically not found in more rural environments (Ewing, 2016). These findings would obviously explain why there has been an increase in in-migration to cities and industrial provinces in Vietnam since the launch of the *Doi Moi* reforms.

However, some have criticized the sociological perspective for wrongly emphasizing occupation and education as the most important measures and determinants of social mobility, in that social assets and income do not necessarily correlate with social class mobility (Ishida et al., 1995; Warren et al., 1998). The is exemplified by reports of young rural-to-urban Vietnamese migrants finding work in the manufacturing sector not necessarily superior to working on a farm when it comes to improving their social status in Vietnam, for to own and work farmland is often seen as more respectable and dependable than laboring in a hazardous factory, as long as they are above the poverty line (Oxfam, 2017).

The second perspective in understanding and measuring social mobility is that of economics. Economists tend to study social mobility in the form of intergenerational mobility with the use of regression models which place the income of a child as dependent upon the income of a parent (Torche, 2013). A recent study that utilizes the Vietnamese government's

VHLSS data found that a 10 percent increase in the individual income of a Vietnamese father associates on average with a 3.94 and 3.33 percent increase in the individual income of a son and daughter from the 1997-2012 period (Dang, 2015).

In addition, researchers also found that from 2004 to 2014, association between the income of a Vietnamese parent and child decreases as the level of education for the child increases (Nguyen & Nguyen, 2019), which indicates that those with a university education will have a greater income than that of their parent. These findings are expected given that intergenerational mobility increased following the industrialization of European countries such as Sweden, which saw those in the impoverished agrarian class having less difficulty in their transition to the metropolitan middle-class, particularly with the help of public education and meritocracy (Dribe et al., 2015).

Although income is an objective measure of mobility, it does not bring much insight into the satisfaction of the individual in regard to their social status or perceived hope for upper social mobility in the future. Income is like the GDP of a country in that it is a quick measure that gives some indication of overall economic standing, but does not include factors such as health, inflation, human rights, trust in government, and other factors which influence the well-being of a population (Diener & Seligman, 2004).

The lack of reflection on these important factors does not allow economists, policymakers, and other researchers to observe and study the status of valuable non-financial assets people strive to maintain and improve on throughout their lives. Therefore, the use of income as a measure of social mobility grants an incomplete understanding of the state of things people value as they move up and down the social hierarchy of societies.

Psychological Perspective of Social Mobility

The third perspective which studies social mobility is the psychological, which utilizes the subjective well-being of an individual as the main measure of intragenerational mobility. Subjects in these studies are asked to rate the quality of their life on a numerical scale which is then compared to another rating in a different point in time, replacing income and occupation as dependent variables.

Though no study of this kind has been used to understand how Vietnam's *ho khau* influences the social mobility of its population, a longitudinal study which uses this method to understand social mobility within China's *hukou* system (which *ho khau* takes inspiration from) does exist. The study found that from 2005 to 2011, Chinese families with an urban *hukou* were better able than their rural counterparts to be protected from downward mobility, indicating that the resources available in an urban environment help maintain one's social status within the *hukou* system (Zhou & Li, 2019). Researchers also suggest improving the state of urban environments after finding that the children of migrant families are more likely to experience psychological issues (Lu et al., 2019).

As the measure indicates, subjective well-being is not objective nor universal as income when it comes to the analysis of social mobility. Nonetheless, a variety of variables are taken into account with this measure which has shown that higher levels of democracy are associated with an increase in well-being due to an increase in choice and self-autonomy (Inglehart & Klingemann, 2000). Moreover, well-being in under-developed nations is higher than that of developed nations with an increase in income due to lower levels of aspiration (Hagerty & Veenhoven, 2003). While this interdisciplinary approach was able to find that urban well-being decreased while rural well-being increased from 2004 to 2008 in Vietnam (Phan & O'Brian,

2019), it emphasized the importance of household assets and made no mention of a household's *ho khau* status since temporary residents are usually not included in conventional sources of socio-economic data used by researchers to study social mobility in Vietnam (Anh et al., 2016).

Approach of this Thesis

To conclude, I use the psychological perspective's use of subjective well-being to measure social mobility in this study. While the more traditional uses of occupation status and income as measurements do offer a more concrete understanding of how people transition through social strata, I do not consider them as insightful as subjective well-being. This study seeks to understand what personally matters to those within the *ho khau* system. Income and an occupation may significantly matter to others, and not as much to others. The subjective well-being approach to social mobility can allow researchers to comprehend what factors influence the emotions and judgements people experience and make within a society.

Though I do not use income nor occupational standing as dependent variables in measuring social mobility, they are utilized as independent variables. Previous findings on the determinants of well-being demonstrate that these factors do significantly influence self-evaluations of life quality. I also use income as a dependent variable to measure income inequality in the *ho khau* system in the seventh chapter of this study. This thesis therefore takes a multidimensional approach to determine what aspects of the Vietnamese household registration system impact the psychology of migrants and non-migrants.

The next chapter establishes the history and present form of the Vietnamese household registration system, and comparisons are made with other household registration systems to illustrate it uniqueness in function and purpose.

Chapter 3: Evolution of Vietnam's Ho Khau System

Origins

The movement of people has long been the subject of regulation in Vietnam. Prior to French colonization in the 1880's, local taxpayer registrations determined the availability of services and rights such as access to communal land. A tax card system and village residence papers introduced by the French further added to governmental control of migration (World Bank Group & Vietnam Academy of Social Sciences, 2016). *Ho khau*, the household registration still in place today, came into fruition in 1964 after the government of North Vietnam recognized the need to restrict urban migration with the rise of urban unemployment and decrease in rural farmers and production in 1957 (Nguyen, 2019).

Mainly taking inspiration from the Chinese *hukou* system (Anh et al., 2016), each North Vietnamese citizen was given a household registration booklet that would be used by authorities in a subsidy system meant to control migration and restrict public services such as food rations, employment, housing, and education. Though certificates which could transfer one's place of residency to a city or urban province did exist, their obtainment often proved difficult (World Bank Group & Vietnam Academy of Social Sciences, 2016). Given that North Vietnam was at war during this time, one can see the security benefits associated with having a person's name, marriage, occupation, and place of permanent residence be known to local officials (Anh et al., 2016). Thus, North Vietnam's household registration system had the intent to limit urban migration, strengthen state control of the economy, and maintain security throughout the nation.

Reforms (1986 - 2006)

The years following the end of the Vietnam War saw a now unified Vietnam struggling with mass poverty and economic decline. With more than 50 percent of the Vietnamese population under the poverty line, a series of economic reforms (known as *Doi Moi*) with the aim of liberalizing the Vietnamese socialist economy started in 1986 (Ngo, 2019). With these reforms came changes to the *ho khau* system, bringing an end to the subsidy system which severely limited the livelihood of an unregistered individual in an urban environment, letting them have access to consumer goods such as foods and bicycles (Hardy, 2001; World Bank Group & Vietnam Academy of Social Sciences, 2016). *Doi Moi* brought industrialization to Vietnam, leading to spontaneous increase in urbanization to cities such as Hanoi and Ho Chi Minh City where the service and industrial sectors thrive to this day (Dang et al., 2003). Therefore, the economic reforms brought on by *Doi Moi* have eased the authority of the state on the Vietnamese economy and the movement of individuals.

The 2006 Law on Residence is especially consequential as to how the household registration operates today. The law places Vietnamese into two categories based on their *ho khau* registration and where they currently live: permanent and temporary residency (Nguyen, 2019). Essentially, a permanent resident is someone who lives in the place of residency that is registered in their *ho khau* booklet, whereas a temporary resident currently lives in a district (typically a large city) other than their *ho khau* registration. This law also grants citizens the right to request the issue of a *ho khau* booklet or a certificate of temporary residence from local authorities (Refugee Review Tribunal, 2008). In addition, transfer from temporary to permanent residency status no longer requires individuals to provide documentation of employment or school enrollment in the place of designation, nor permission for local authorities to move to and

¹ Prior registration categories were KT1: permanent resident, KT2: permanent resident in the same province, but in a different district, KT3: long-term temporary resident, and KT4: short-term temporary resident.

register in a new location (World Bank Group & Vietnam Academy of Social Sciences, 2016).

Thus, the path to obtaining temporary resident status is made simpler by the 2006 Law on Residence.

However, the transition from temporary to permanent status has been made complicated since 2013. Following an upsurge in urbanization because of the 2006 *ho khau* reforms, the Vietnamese National Assembly now requires temporary residents to continuously live in a central metropolis for two years and grants their administrators the authority to create their own requirements for permanent registration (Anh et al., 2016). A common requirement set by city officials to curb rural-to-urban migration is the minimum area of rental housing (Nguyen, 2019). Land ownership and marriage into a family with permanent residency status are other paths to gaining permanent residency in a new district (De Luca, 2017).

Current System (2013 - 2020)

Temporary residents in Vietnam's industrializing cities and provinces have less access to beneficial public services and opportunities than their permanent counterparts. For instance, temporary residents have difficulty enrolling their children into public schools because they prioritize the children of permanent residents (Anh et al., 2016). Private schools are an alternative for temporary residents, but their higher tuition costs lead to migrant children being less likely to enroll in school at lower and upper secondary education levels (Coxhead et al., 2016; Le et al., 2008; Anh et al., 2016). Access to healthcare services in local facilities is another obstacle for temporary residents, with health insurance being associated with one's *ho khau* registration. Though the difference in health insurance rates among adults by *ho khau* status is

small, children under the age of six with temporary status are much less likely than their permanent counterparts to have healthcare coverage (74 percent to 87 percent), and temporary residents of all ages are more likely to pay higher healthcare fees (World Bank Group & Vietnam Academy of Social Sciences, 2016).

Higher electricity costs are also associated with temporary resident status since these urban migrants are ineligible to partake in a progressive electricity utility rate structure (De Luca, 2017). Instead, many temporary residents pay a flat electricity utility rate set by landlords which averages above the highest rate of the progressive utility structure (World Bank Group & Vietnam Academy of Social Sciences, 2016). These electricity fees would suggest that temporary residents who are renting are encouraged to use the utility less than permanent residents. In fact, a 2015 study found that temporary residents on average have lower monthly total electricity expenses when comparing the expenditures of temporary and permanent residents (World Bank Group & Vietnam Academy of Social Sciences, 2016).

One's *ho khau* status also influences employment in both the private and public sector in urban provinces and districts. The 2008 Migrant Impact Survey found that about 70 percent of temporary residents were rejected by formal employers who are encouraged by local authorities to prioritize those with permanent *ho khau* registrations, and 95 percent lack labor contracts (Le et al., 2008). Permanent household registration is set as a requirement for employment as a civil servant in the capital city of Hanoi (World Bank Group & Vietnam Academy of Social Sciences, 2016). Public sector employment in other metropolitan districts such as Binh Duong and Da Nang is often made difficult for temporary residents, who are much more likely to be employed in the private sector (Anh et al., 2016).

Governmental procedures such as home ownership are also made difficult by Vietnam's household registration system. Housing policies discourage home and land ownership by temporary residents, leaving 93 percent to rent in typically poor neighborhoods and pay the higher utility rates set by landlords (De Luca, 2017 & Le et al., 2008). The *ho khau* booklet is also required to conduct governmental procedures such as motorcycle registration, social welfare claims, and birth and marriage certification, creating an administrative burden for temporary residents to resolve through long distance travel to their place of permanent residency, long waiting periods, and few instances of bribery payments (Hardy, 2001; World Bank Group & Vietnam Academy of Social Sciences, 2016).

A new change to the *ho khau* system is the creation of an online database to replace the current booklets containing the *ho khau* registration. First announced in 2017 and institutionalized by the 2020 Residence Law, the National Database of Residence will contain identification information of each Vietnamese (via a unique 12-digit ID number) for the benefit of citizens and governmental agencies starting in July of 2021 (Huy, 2017; Apolat Legal, 2020). This reform will simplify the previously mentioned governmental procedures and retire the booklets which have dominated Vietnamese society for the past 50 years. However, the household registration system itself will not be heavily reformed (World Bank Group & Vietnam Academy of Social Sciences, 2016).

International Comparisons

Vietnam's household registration system is unique with its relation to public services, barriers to change, and liberalizing reforms. To illustrate, Germany, France, Japan, and South

Korea each have or have had a family registration system which entail the date of birth, names, and relations of each family member, but without any ties to social service access (Chapman & Krogness, 2016; World Bank Group & Vietnam Academy of Social Sciences, 2016). The information in these registrations is for legal administrative procedures which the Vietnamese *ho khau* system also considers. Furthermore, ties to public services via a household registration or proof of local residency do take place in countries such as Japan and the United States (such as enrollment in a public school) but differ from Vietnam in that changes to the registration can be made much easier (Chapman, 2008; O'Day & Smith, 2016).

The former Soviet *propiska* and current Chinese *hukou* systems are much closely aligned with Vietnam's *ho khau* by functioning as both a family and residential register with ties to public and economic resources (World Bank Group & Vietnam Academy of Social Sciences, 2016). However, the reforms brought on by *Doi Moi* make the Vietnamese household registration system less restrictive than China's *hukou*, which distinguishes between the "rural and "non-rural" populations and mandates greater permission from local authorities to partake in rural-urban migration (Donzuso, 2014; Lu et al., 2019; Merkley & McGovern, 2004). The economic reforms started in 1986 let Vietnam's household registration system grant more opportunities for migrants to travel and live in major cities, but still restrict access to certain public services and some economic opportunities based on their temporary *ho khau* status.

Summary

The series of economic *Doi Moi* reforms allow Vietnam's internal migrants easier opportunities to live in urban districts. However, the local government of these districts restrict

access to certain public services and economic opportunities due to their temporary residency status. These same local governments also make the transition from temporary to permanent residency difficult with strict requirements. Next, I present my theories concerning the *ho khau* system and subjective social mobility.

Chapter 4: Argument and Hypotheses

After reviewing and taking into consideration what is known about urban migration within Vietnam's *ho khau* system, this dialogue on theories will present different hypotheses concerning social mobility in Vietnam as migrants continue to relocate to urban sectors of the South East Asian country.

The sociological, economic, and psychological perspectives have shown that social mobility can be measured in three different ways: status, income, and subjective well-being. Given that past studies on social mobility utilize status and income as their measures through the sociological and economic perspectives, I will use subjective well-being as my measure of social mobility in Vietnam. This study will follow the example set by the researchers who used subjective well-being as their measure of social mobility within China's *hukou* system (Zhou & Li 2019). However, the lack of objectivity in the measure of subjective well-being prevents me from presenting this outcome as the conventional measure of social mobility found in studies which use occupation and income as their measures of social mobility. Instead, I present my measure of social mobility as "subjective social mobility" to address concerns over the universal application of subjective well-being.

I consider the following hypotheses after reviewing the findings of past studies that have followed the sociological, economic, and psychological views of social mobility. This is because subjective well-being has been seen to be interdisciplinary (Diener & Seligman, 2004; Hagerty & Veenhoven 2003). It is also important to consider as many conventional variables such as income, education, and healthcare to have a substantive understanding of what influences the subjective social mobility of temporary and permanent residents.

The economic barriers set against temporary residents in urban sectors will undermine their ability to improve their lives by restricting their rights and access to public resources necessary for upward subjective social mobility. Institutional restriction to public resources such as healthcare, public education, and vehicle registration will bring about a decrease in subjective social mobility. Moreover, given the presence of Vietnam's *ho khau* system for over five decades, I expect the subjective social mobility of temporary residents to be negatively affected by their acknowledgement of being "outsiders" to an urban setting, where they are institutionally discouraged from migrating in the first place. Thus, I expect temporary residents to anticipate their *ho khau* status as a compromise to improving their lives. On the other hand, Vietnamese with permanent registration status will benefit from public resources and economic opportunities and are better able to experience and anticipate greater upward mobility than their temporary counterparts.

Hypothesis 1 (H1): Temporary resident status is more likely to be associated with lower subjective social mobility than permanent resident status.

The findings and recommendations of previous studies on social mobility suggest that access to public education is important for the upward transition from one strata of society to another. While it is conventionally believed that public schools are subpar to private schools in terms of providing a higher quality of education, the cost difference between the two must be considered. Given the fact that private schools in Vietnam are found to be more expensive than public schools (Anh et al., 2016), I assert that the financial burden associated with private schools will discourage further attendance from a temporary resident household which would

prefer enrollment in a public school for an affordable education. Should a temporary resident household not be able to enroll a member (specifically a child) in a public school due to the *ho khau* system prioritizing the enrollment of permanent residents, it will not receive the necessary affordable education to move up the social ladder. I believe a public school, rather than a private school, will allow a temporary household a more affordable opportunity to gain the skills and knowledge required to become competitive, valuable, and productive members of the labor force.

Hypothesis 2 (H2): Temporary residents whose household member enrolls in a public school are more likely to report higher subjective social mobility.

Furthermore, I theorize that the environment where an individual or family lives has a profound impact on their ability to improve their lives. Obviously, temporary residents are traveling and living in different, metropolitan-oriented provinces in Vietnam to improve the social standing of themselves. However, the proximity to resources typically found in an urban environment can mean the difference in having an impact on mobility between social strata. Resources such as public transportation, schools, hospitals, first responders, and high-paying non-agricultural occupations can have their access made easier for temporary residents living in an urban area. I suspect that temporary residents living in a rural area will lack convenient access to such valuable resources and thus experience lower subjective social mobility than their counterparts in the city. Living in a more urban province alone does not necessarily mandate equal access to economically valuable resources.

Hypothesis 3 (H3): Temporary residents in urban areas are more likely to report higher subjective social mobility than their counterparts in rural areas.

Having a higher household income is normally viewed to have a positive impact on the social mobility of an individual or family unit. I do not believe that Vietnam is excluded from this effect. Afterall, having a higher income would allow more secure access to goods and services for oneself and families. However, Vietnam's *ho khau* system creates two kinds of Vietnamese which face different life experiences and barriers which I suppose influence their attitude towards levels of household income. Temporary residents are leaving less-wealthy provinces to live in wealthier ones with the intent on earning a higher income that is unlikely to be available in their home province. Researchers have found that increases in income have a greater positive effect on the well-being of poor nations than richer ones (Hagerty and Veenhoven, 2003), and the same effect may be witnessed between temporary and permanent residents. By having a high level of household income, temporary residents will have their well-being increase more than permanent residents who will be less grateful for such a level of income. Temporary residents will have more capacity for higher subjective social mobility than their permanent counterparts when both have a high level of household income.

Hypothesis 4 (H4): Temporary residents with higher levels of household income are more likely to report higher subjective social mobility than permanent residents.

Like *H4*, the level of remittance is assumed to affect subjective social mobility. Seeing how it has been found that remittance, or financial assistance typically provided by a migrant

worker to others from their place or origin, can significantly reduce the measure and intensity of poverty in underdeveloped countries (Adams & Page, 2005), a similar reduction may be possible in this study. Temporary residents are expected to provide remittance to family or acquaintances in their home province, but I reckon the level of remittance can have a significant impact on their subjective social mobility. Having a higher level of remittance would indicate that the temporary resident is better able to financially assist those whom they care for by living and working in a different province. Therefore, higher remittance levels would grant a higher sense of meaning and purpose in their decision to change their *ho khau* status to "temporary" to earn more income in an urban province. A higher level of remittance would also indicate that the temporary resident is earning a substantial income and is in a better financial situation than one who is providing a low level of remittance. Therefore, with the higher the level of remittance, a greater sense of financial satisfaction and self-worth will be felt within the temporary resident, showcasing higher upward mobility.

Hypothesis 5 (H5): Temporary residents with a high level of remittance are more likely to report higher subjective social mobility than temporary residents with a low level of remittance.

Finally, I expect access to healthcare to significantly influence subjective social mobility. Healthcare is a service and resource temporary residents (particularly their children) have trouble getting access to, despite Vietnam reforming its national health insurance policy to cover all children under the age of six in 2005 (Anh et al., 2016; Anh et al., 2019). Understanding the importance of health insurance and the fact that many temporary residents find themselves in urban environments where resources such as healthcare are to be preserved, I propose that their

subjective social mobility will increase should they obtain health insurance. Temporary residents will greatly appreciate public programs meant to assist people purchase health insurance because it secures them from fears of medical incidents or illnesses with the help of the Vietnamese government. Hence, having health insurance as a temporary resident will make them believe their lives are improving.

Hypothesis 6 (H6): Temporary residents are more likely to report higher subjective social mobility by having public assistance in purchasing health insurance as opposed to not.

Chapter 5: Research Design

Given the previously mentioned concern over the universal application and understanding of subjective social mobility, it is important to provide a more concrete universal understanding of how Vietnam's *ho khau* system affects the lives of temporary and permanent residents.

Therefore, the subjective social mobility of these two different groups will undergo a comparison in the first empirical chapter of this study ("Determinants of Subjective Social Mobility"), followed by an analysis of their household income in the second empirical chapter ("Determinants of Income Inequality")

Seeing how a variety of factors other than the *ho khau* status of an individual affect subjective social mobility and income, this study utilizes cross-sectional data on thousands of individuals within this household registration system. Having access to an abundance of variables, I take advantage of multivariate regressions to determine which variables have a significant effect on my measures of interest and to test each of my hypotheses.

Data

I use a 2015 World Bank study of Vietnam's *ho khau* system which contains cross-sectional data on over 5,000 heads of households. Titled "Household Registration Study 2015", researchers at the World Bank sampled populations in five provinces with some of the highest rates of in-migration according to the 2009 Population Census: Da Nang, Binh Duong, Ho Chi Minh, Dak Nong, and Hanoi. The researchers created eleven data sets containing information of the 5,000 heads of households and members of their households for a total of 17,316 observations. Their descriptive statistics find that the population of temporary residents accounts to at least 5.6 million, is more likely than permanent residents to work in the private

sector (particularly manufacturing), and continue to face difficulty in areas such as public school enrollment, vehicle registration, and credit access (Anh et al. 2016). However, the study did not conduct multivariate regressions to investigate wealth inequality nor subjective social mobility.

A limitation of the dataset, and of my study, is the fact that this data is cross-sectional data and not panel data. Panel data would be ideal for a study on subjective social mobility, where individuals give themselves a subjective well-being score at one point in time and another score later (such as in five or ten years). I would then run the data through regressions to find if individuals' subjective well-being score increased (upward subjective social mobility), decreased (downward subjective social mobility), or remained the same (stagnant subjective social mobility). This World Bank study does ask individuals (temporary and permanent residents) to provide a subjective well-being score for their present situation, and a hypothetical score in five years' time. However, since the study was conducted in 2015, the five-year follow-up to the subjective well-being score would take place in 2020.

I am not able to find a follow-up study by the World Bank as of the writing of this thesis, and I speculate that the COVID-19 pandemic may undermine efforts to re-survey all individuals in the 2015 study. Though Vietnam's response to the pandemic is praised as exemplary with low infection and death rates due to prompt restrictions and mobilization of governmental resources (Hoang et al., 2020; Dinh et al., 2020; Branch et al., 2020), restrictions may make it difficult to contact the 2015 respondents and undermine Vietnam's tourism and manufacturing economy (McDonald, 2020; Delteil et al., 2020). With these industries severely impacted by COVID-19, I suspect many temporary residents will lack incentive to stay in the five urban provinces involved in the 2015 World Bank study, making an effort to re-survey difficult.

Measurements

- Future Well-Being (FRWB): The dependent variable of the empirical chapter on subjective social mobility, FRWB is a discrete variable provided by the 5,000 heads of households to the following question: Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. Just your best guess, on which step do you think you will stand in five years from now? The value represents their hypothetical subjective well-being score ranging from 0 to 10, and I regress this value onto multiple independent variables to evaluate its determinants to test each of my hypotheses on subjective social mobility.
- Household Income (HICM): The dependent variable of the empirical chapter on income inequality, HICM is the natural log of the reported monthly household income of each 5,000 households in the study. It is therefore the natural log of a continuous variable which I regress on multiple independent variables to evaluate the determinants of possible income inequality between temporary and permanent residents. Doing so grants a more concrete understanding of the ho khau system and its effects on income.
- Current Well-Being (CNWB): Like FRWB, CNWB is a value the 5,000 heads of households give in their answer to the question: Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time? The value is a discrete value ranging from 0 to 10, and I use it as an independent variable in the regression model on subjective social mobility.

- Temporary Resident (TEMP): Indicates whether the head of household is a temporary or permanent resident. As a binary value, a value of 0 equates being a permanent resident, and 1 means they are a temporary resident. This is one of the most important independent variables in both empirical chapters on wealth inequality and subjective social mobility. It determines whether there is a significant difference in both measures of interest or not, and it interacts with other independent variables to test certain hypotheses.
- Female (FMAL): Indicates whether the head of household is a male or female. As a binary value, a value of 0 equates to the individual as being a male, and 1 means they are a female. It is an independent/control variable that I use in both empirical chapters.
- Married (MARD): Indicates whether the head of household is married or not (single, divorced, separated, widowed). As a binary value, a value of 0 equates to the individual as not being married, and 1 means they are married (registered and unregistered). It is an independent/control variable that I use in both empirical chapters.
- Age (AGE): The age of the head of household at the time of the World Bank study in 2015. It is a continuous variable that ranges from 17 to 80 when I account for only the heads of household. It is an independent/control variable that I use in both empirical chapters. Later in this chapter, I discuss the issue with this variable with it being a confounding variable in the subjective social mobility regression with its influence on FRWB and TEMP and how I address this inconvenience.
- Education Level (EDUB): The education level of a household head. It is a binary with a value of 0 equating to an education level below a higher secondary education, and 1 being otherwise. The original values of this variable from the World Bank study range from 0 to 10 to represent the Vietnamese education system. Numerical progression goes

from "No qualification", "Primary", "Lower Secondary", "Higher Secondary", "Elementary Vocational School", "Professional school", "3-year college", "University", "MA/MSc", "PhD", and "Others." I use it as a control variable in the subjective social mobility chapter, and as an interaction variable in the income inequality chapter.

- *Household Size Binary (HSZB)*: a binary value with 1 meaning the household size is above the median (three), and 0 otherwise. I use this variable as an independent/control variable in the income inequality regressions.
- Years in Province Binary (YPVB): The number of years a temporary resident has been in the province they are currently living in are categorized as low and high. I subtract the year the household head first moved to the province from 2015 and create this binary variable with a value of 0 meaning the number of years is below the median, and 1 as over the median. I include this variable to address and control for any concern of temporary residents naturally having a high FRWB score due to the expected optimism of a migrant. YPVB is included in both empirical chapters as an independent variable.
- *Public School Household (PUSL)*: a binary variable with 1 meaning at least one member of the household is currently enrolled in a public school and 0 otherwise. The variable is made possible through a unique household ID that is created with the province, district, commune, village, and household code included in the datasets containing all 17,316 observations. This variable is used to test *Hypothesis 2 (H2)* and in the income inequality chapter as an independent/control variable by interacting with *TEMP*.
- *Private School Household (PRSL)*: a binary variable with 1 meaning at least one member of the household is currently enrolled in a private school and 0 otherwise. The variable is made possible through a unique household ID that is created with the province, district,

- commune, village, and household code included in the datasets containing all 17,316 observations. This variable is used to test *Hypothesis 2 (H2)* and in the income inequality chapter as an independent/control variable by interacting with *TEMP*.
- No School Household (NOSL): a binary variable with 1 meaning no member of the household is currently enrolled in a school and 0 otherwise. The variable is made possible through a unique household ID that is created with the province, district, commune, village, and household code included in the datasets containing all 17,316 observations. This variable is used to test *Hypothesis 2 (H2)* and in the income inequality chapter as an independent/control variable by interacting with *TEMP*.
- *Urban (URBN)*: a binary variable with a value of 1 indicating that the household head lives in an urban area/environment, and 0 meaning they live in a rural area/environment. This binary variable interacts with *TEMP* to test *Hypothesis 3 (H3)* and determine if a living area significantly affects the income of a temporary and permanent resident.
- *Household Income Binary (ICMB)*: The income of a household is categorized as low and high in this binary value. Household incomes below the median are equal to 0, and 1 means the household income is above the median. This independent variable is only used in the subjective social mobility empirical chapter's regression models to test for *Hypothesis 4 (H4)* when it interacts with *TEMP*.
- Remittance Binary (RMTC): The amount of remittance a household gives is categorized as low and high in this binary value. Remittance amounts below the median are equal to 0 and those over the median are equal to 1. This independent variable interacts with TEMP to test for Hypothesis 5 (H5) and is only included in the subjective social mobility empirical chapter's regression models.

- Healthcare Support (HLTH): a binary variable with 1 meaning the household head
 benefits from government support in purchasing health insurance cards, and 0 otherwise.

 It is an independent variable which interacts with TEMP to test for Hypothesis 6 (H6) in
 the subjective social mobility and income inequality empirical chapters.
- Necessities Expenditure (NSXP): a discrete variable with a possible range of 0.00 to 1.00.
 I use it to consider what the percentage of a household monthly expenditure is dedicated to basic necessities such as clothing, food, and electricity.
- Social Inclusion (SOCL): a binary variable with 1 meaning the household head
 participates or has access to social events or communal resources such as local elections,
 associations, immunization programs, and 0 otherwise. I include it on both empirical
 chapters as an independent/control variable.
- *Primary Sector Employment (PRMY)*: A binary variable with a value of 1 indicating that the household head is employed in the primary sector of the economy (agriculture, forestry, mining), and 0 being otherwise. This independent variable interacts with *TEMP* in the chapter on and income inequality determinants.
- Secondary Sector Employment (SCDY): A binary variable with a value of 1 indicating that the household head is employed in the secondary sector of the economy (processing, manufacturing, construction), and 0 being otherwise. This independent variable interacts with TEMP in the chapter on and income inequality determinants.
- Service Sector Employment (SERV): A binary variable with a value of 1 indicating that the household head is employed in the service sector of the economy (retail, dining, professional services), and 0 being otherwise. This independent variable interacts with TEMP in the chapter on income inequality determinants.

Threats to Causal Inference

A covariate balance analysis reveals a concerning imbalance between temporary and permanent residents when measuring for age. *Figure 1* is a density plot of the distribution of age according to *ho khau* status and shows that temporary residents are substantially more likely to be under the age of 40 (76.43 percent to be exact), much larger than the 30.67 percent of permanent residents who are under 40 years old.

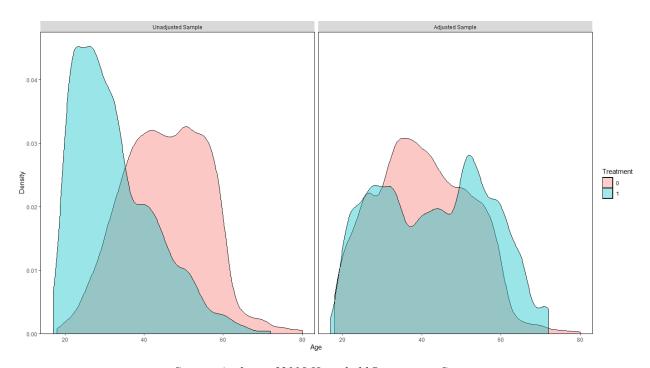


Figure 1. Distribution of Age by Ho Khau Status

Source: Analysis of 2015 Household Registration Survey

Moreover, preliminary regression results reveal that the exclusion of *AGE* would cause *TEMP* to have a significant positive effect on *FRWB*, and its inclusion in the multivariate regression shows it has a statistically significant negative impact on FRWB. *AGE* is therefore a confounding variable, which makes sense given that younger people are more likely to migrate and older people lose optimism in seeing their well-being improve in the future due to having a longer life experience. Therefore, both empirical chapters divide the sample population into two

groups: those under and above the age of 40. Both age groups have their own regression models and results which I analyze so a better understanding of the *ho khau* system is made.

The variable on education level is binary at a certain level of a particular reason. Through descriptive statistics, the 2015 World Bank study finds that 44 percent of permanent residents and 62 percent of temporary residents over the age 25 and older (the typical age range of a household head) have an education level below upper secondary (World Bank Group & Vietnam Academy of Social Sciences, 2016).

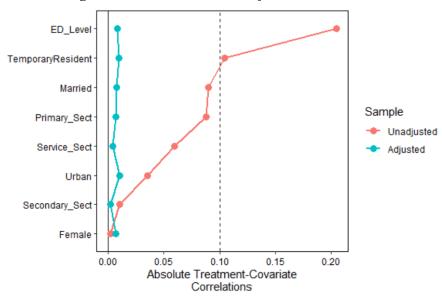


Figure 2. Covariate Balance of Several Variables

Source: Analysis of 2015 Household Registration Survey

Figure 2 demonstrates that the distribution of educational level (ED_Level) in the sample is unevenly distributed and requires overwhelming adjustments. Therefore, I make the decision to define a higher education level (a value of 1 in the EDUB variable) as having completed an upper secondary education or greater, and a lower education level otherwise.

After addressing these concerns, I present the results of these regression models on subjective social mobility and income inequality in the next two chapters.

Chapter 6: Evidence on Subjective Social Mobility

This chapter analyzes the effect certain factors have on subjective social mobility within Vietnam's household registration system. Given the confounding variable of age (AGE) previously mentioned Chapter 5, I divide the sample in the 2015 World Bank study into two different age groups: Under 40 and Over 40. Both age groups have six multivariate regression models to test each of my hypotheses.

The dependent variable of these regressions is *Future Well-Being* (FRWB), a value provided by the heads of households (5,000 in total). This value and *Current Well-Being* (CNWB) represent the subjective social mobility of these household heads and not all members of a household.

Model 1 tests Hypothesis 1 (H1) by determining the effect temporary ho khau status (TEMP) has on subjective social mobility while considering other factors like age (AGE), household size level (HSZB), and sectors of employment (PRMY, SCDY, and SERV). Model 2 tests whether enrollment in a public, private or no school by ho khau status influences subjective social mobility for Hypothesis 2 (H2). Model 3 assesses if a temporary resident has their subjective social mobility impacted by the type of environment they live in (URBN) for Hypothesis 3 (H3). I use Model 4 to see if income level (ICMB) affects the subjective social mobility differently based on ho khau status in testing Hypothesis 4 (H4). Model 5 evaluates Hypothesis 5 (H5) by seeing if temporary residents with a high level of remittance have higher subjective social mobility. Finally, Model 6 examines if a temporary resident who receives government assistance in purchasing a health insurance card (HLTH) has higher subjective social mobility than otherwise, in testing Hypothesis 6 (H6).

Figure 3.

Determinants of Model 1 Model 2 Model 3 Model 4 Model 5 Model 6

Subjective Social

Mobility (Under 40)

(Intercept) TEMP FMAL CNWB MARD AGE EDUB HSZB YPVB SOCL	3.50 (0.29) 0.06 (0.08) 0.06 (0.06) 0.73 (0.02) 0.04 (0.08) -0.02 (0.01) 0.24 (0.06) -0.09 (0.07) -0.07 (0.07)	p < 0.001 0.427 0.351 < 0.001 0.606 < 0.001 0.205 0.383 0.942	3.49 (0.40) 0.19 (0.34) 0.06 (0.06) 0.73 (0.02) 0.05 (0.08) -0.02 (0.01) 0.23 (0.06) -0.12 (0.07)	p < 0.001	3.46 (0.33) 0.09 (0.09) 0.07 (0.06) 0.74 (0.02) 0.04 (0.08) -0.02 (0.01) 0.25 (0.07) -0.11	P <0.001 0.365 0.246 <0.001 0.611 <0.001	3.32 (0.32) 0.24 (0.10) 0.07 (0.06) 0.73 (0.02) 0.05 (0.08) -0.02 (0.01) 0.26	p <0.001 0.014 0.253 <0.001 0.574 <0.001	3.21 (0.32) 0.25 (0.10) 0.07 (0.06) 0.73 (0.02) 0.04 (0.08) -0.03 (0.01)	p <0.001 0.014 0.239 <0.001 0.634 <0.001	3.32 (0.33) 0.01 (0.08) 0.06 (0.06) 0.73 (0.02) 0.02 (0.08) -0.03 (0.01)	p <0.001 0.895 0.300 <0.001 0.831 <0.001
TEMP FMAL CNWB MARD AGE EDUB HSZB YPVB SOCL	(0.29) 0.06 (0.08) 0.06 (0.06) 0.73 (0.02) 0.04 (0.08) -0.02 (0.01) 0.24 (0.06) -0.09 (0.07) -0.07 (0.07) -0.01 (0.16)	0.427 0.351 <0.001 0.606 <0.001 0.205 0.383	(0.40) 0.19 (0.34) 0.06 (0.06) 0.73 (0.02) 0.05 (0.08) -0.02 (0.01) 0.23 (0.06) -0.12 (0.07) -0.06	0.583 0.343 <0.001 0.508 <0.001	(0.33) 0.09 (0.09) 0.07 (0.06) 0.74 (0.02) 0.04 (0.08) -0.02 (0.01) 0.25 (0.07)	0.365 0.246 <0.001 0.611 <0.001	(0.32) 0.24 (0.10) 0.07 (0.06) 0.73 (0.02) 0.05 (0.08) -0.02 (0.01) 0.26	0.014 0.253 <0.001 0.574 <0.001	(0.32) 0.25 (0.10) 0.07 (0.06) 0.73 (0.02) 0.04 (0.08) -0.03 (0.01)	0.014 0.239 <0.001 0.634 <0.001	(0.33) 0.01 (0.08) 0.06 (0.06) 0.73 (0.02) 0.02 (0.08) -0.03 (0.01)	0.895 0.300 <0.001 0.831 <0.001
FMAL CNWB MARD AGE EDUB HSZB YPVB SOCL	(0.08) 0.06 (0.06) 0.73 (0.02) 0.04 (0.08) -0.02 (0.01) 0.24 (0.06) -0.09 (0.07) -0.07 (0.07) -0.01 (0.16)	0.351 <0.001 0.606 <0.001 <0.205 0.383	(0.34) 0.06 (0.06) 0.73 (0.02) 0.05 (0.08) -0.02 (0.01) 0.23 (0.06) -0.12 (0.07) -0.06	0.343 <0.001 0.508 <0.001 <0.001	(0.09) 0.07 (0.06) 0.74 (0.02) 0.04 (0.08) -0.02 (0.01) 0.25 (0.07)	0.246 <0.001 0.611 <0.001	(0.10) 0.07 (0.06) 0.73 (0.02) 0.05 (0.08) -0.02 (0.01) 0.26	0.253 <0.001 0.574 <0.001	(0.10) 0.07 (0.06) 0.73 (0.02) 0.04 (0.08) -0.03 (0.01)	0.239 <0.001 0.634 <0.001	(0.08) 0.06 (0.06) 0.73 (0.02) 0.02 (0.08) -0.03 (0.01)	0.300 <0.001 0.831 <0.001
CNWB MARD AGE EDUB HSZB YPVB SOCL	(0.06) 0.73 (0.02) 0.04 (0.08) -0.02 (0.01) 0.24 (0.06) -0.09 (0.07) -0.07 (0.07) -0.01 (0.16)	<0.001 0.606 <0.001 <0.001 0.205 0.383	(0.06) 0.73 (0.02) 0.05 (0.08) -0.02 (0.01) 0.23 (0.06) -0.12 (0.07) -0.06	<0.001 0.508 <0.001 <0.001	(0.06) 0.74 (0.02) 0.04 (0.08) -0.02 (0.01) 0.25 (0.07)	<0.001 0.611 <0.001	(0.06) 0.73 (0.02) 0.05 (0.08) -0.02 (0.01) 0.26	<0.001 0.574 <0.001	(0.06) 0.73 (0.02) 0.04 (0.08) -0.03 (0.01)	<0.001 0.634 <0.001	(0.06) 0.73 (0.02) 0.02 (0.08) -0.03 (0.01)	<0.001 0.831 <0.001
MARD AGE EDUB HSZB YPVB SOCL	(0.02) 0.04 (0.08) -0.02 (0.01) 0.24 (0.06) -0.09 (0.07) -0.07 (0.07) -0.01 (0.16)	0.606 <0.001 <0.001 0.205 0.383	(0.02) 0.05 (0.08) -0.02 (0.01) 0.23 (0.06) -0.12 (0.07) -0.06	0.508 <0.001 <0.001	(0.02) 0.04 (0.08) -0.02 (0.01) 0.25 (0.07)	0.611 <0.001	(0.02) 0.05 (0.08) -0.02 (0.01) 0.26	0.574 <0.001	(0.02) 0.04 (0.08) -0.03 (0.01)	0.634 <0.001	(0.02) 0.02 (0.08) -0.03 (0.01)	0.831 <0.001
AGE EDUB HSZB YPVB SOCL	(0.08) -0.02 (0.01) 0.24 (0.06) -0.09 (0.07) -0.07 (0.07) -0.01 (0.16)	<0.001 <0.001 0.205 0.383	(0.08) -0.02 (0.01) 0.23 (0.06) -0.12 (0.07) -0.06	<0.001 <0.001	(0.08) -0.02 (0.01) 0.25 (0.07)	<0.001	(0.08) -0.02 (0.01) 0.26	<0.001	-0.03 (0.01)	<0.001	(0.08) -0.03 (0.01)	<0.001
EDUB HSZB YPVB SOCL	(0.01) 0.24 (0.06) -0.09 (0.07) -0.07 (0.07) -0.01 (0.16)	<0.001 0.205 0.383	(0.01) 0.23 (0.06) -0.12 (0.07) -0.06	<0.001	(0.01) 0.25 (0.07)		(0.01)		(0.01)		(0.01)	
HSZB YPVB SOCL	(0.06) -0.09 (0.07) -0.07 (0.07) -0.01 (0.16)	0.205	(0.06) -0.12 (0.07) -0.06		(0.07)	<0.001		-0.000		-0.001	0.25	
YPVB SOCL	-0.07 (0.07) (0.07) -0.01 (0.16)	0.383	(0.07) -0.06	0.109	-0.11		(0.07)	<0.001	(0.06)	<0.001	(0.06)	<0.001
SOCL	(0.07) -0.01 (0.16)				(0.07)	0.150	-0.11 (0.07)	0.132	-0.12 (0.07)	0.098	-0.12 (0.07)	0.101
	(0.16)	0.942	(0.07)	0.420	-0.05 (0.08)	0.532	-0.05 (0.08)	0.507	-0.04 (0.08)	0.639	-0.05 (0.08)	0.507
NSXP	-0.43		-0.00 (0.16)	0.978	-0.03 (0.16)	0.833	-0.03 (0.16)	0.836	-0.04 (0.16)	0.807	-0.06 (0.16)	0.721
	(0.14)	0.002	-0.46 (0.14)	0.001	-0.44 (0.14)	0.002	-0.42 (0.14)	0.003	-0.28 (0.16)	0.082	-0.20 (0.16)	0.207
PRMY	0.30 (0.11)	0.005	0.26 (0.11)	0.014	0.22 (0.11)	0.047	0.15 (0.11)	0.202	0.24 (0.11)	0.038	0.28 (0.12)	0.019
SCDY	-0.01 (0.12)	0.934	-0.02 (0.12)	0.841	-0.01 (0.12)	0.915	-0.01 (0.12)	0.923	-0.00 (0.12)	0.969	-0.01 (0.12)	0.957
SERV	0.15 (0.07)	0.026	0.14 (0.07)	0.039	0.15 (0.07)	0.026	0.14 (0.07)	0.032	0.14 (0.07)	0.037	0.14 (0.07)	0.029
PUSL			0.11 (0.29)	0.718	0.02 (0.13)	0.896	0.01 (0.13)	0.923	0.03 (0.13)	0.792	0.04 (0.13)	0.756
PRSL			-0.03 (0.10)	0.796	-0.00 (0.06)	0.965	0.00 (0.06)	0.977	0.01 (0.06)	0.888	0.01 (0.06)	0.877
NOSL			-0.22 (0.38)	0.560	-0.18 (0.16)	0.243	-0.18 (0.16)	0.242	-0.16 (0.16)	0.315	-0.16 (0.16)	0.302
TEMP * PUSL			-0.14 (0.33)	0.678								
TEMP * PRSL			0.02 (0.13)	0.867								
TEMP * NOSL			0.01 (0.42)	0.978								
URBN					0.15 (0.11)	0.172	0.14 (0.06)	0.026	0.16 (0.06)	0.012	0.15 (0.06)	0.016
TEMP * URBN					-0.00 (0.12)	0.984						
ICMB							0.29 (0.10)	0.005	0.08 (0.06)	0.202	0.09 (0.06)	0.133
TEMP * ICMB							-0.30 (0.13)	0.015				
RMTC									0.42 (0.10)	<0.001	0.23 (0.07)	0.001
TEMP * RMTC									-0.32 (0.12)	0.010		
НІТН											-0.18 (0.12)	0.128
TEMP * HLTH											0.40 (0.16)	0.012
Observations 2	2549		2549		2549		2549		2549		2549	

Household Registration Status

The results of *Model 1* indicate that household registration status has no significant effect on the subjective social mobility. When controlling for the number of years spent in the province (YPVB), level of education (EDUB), necessities expenditures (NSXP), and other variables, the p-value of temporary status (TEMP) is over 0.05. This indicates a lack of statistically significant association between *ho khau* status and subjective social mobility (SSM) for those under age 40.

Therefore, the outcome of *Model 1* does not support *H1*: *Temporary resident status is more likely to be associated with lower subjective social mobility than permanent resident status.*

School Enrollment

Model 2 tests for the effect the enrollment of a household member has on the subjective social mobility of that household and finds no association between the two. With the enrollment of a member in a public school (PUSL), private school, (PRSL), and no school (NOSL) interacting with household registration status (TEMP), all p-values of these interactions are above the 0.05 threshold, showcasing insignificant influence on future well-being (FRWB) and subjective social mobility for those under age 40.

Figure 4. Percentage of Household Enrollment by School Type and Ho Khau Status (Under 40)

Ho Khau Status	Public	Private	None	Grand Total
Permanent	92.73%	2.93%	4.34%	100.00%
Temporary	73.58%	6.13%	20.28%	100.00%
Total	79.99%	5.06%	14.95%	100.00%

Source: Analysis of 2015 Household Registration Survey

Figure 4 (above) shows that permanent households are more likely to have at least one member enroll in a public school than temporary households, which are under the sample total of

79.99%. Moreover, temporary households are over two times more likely to have a member enroll in a private school than their permanent counterparts. Temporary households are over five times more likely to have no member enroll in any type of school. One out of five temporary households may not have school age children or are unable to enroll them in any school.

School enrollment of any kind is not associated with a significant effect on subjective social mobility based on household registration status for those under age 40. Consequently, these results nullify *H2: Temporary residents whose household member enrolls in a public school are more likely to report higher subjective social mobility.*

Living Environment

In determining if the living in a rural or urban environment (URBN) impacts the SSM of a temporary resident (TEMP), *Model 3* demonstrates that the interaction between the two variables is statistically insignificant with a p-value of 0.984. Accordingly, an urban area is not associated with a significant increase in the SSM of temporary residents, nor does a rural area. *H3* cannot be reinforced, at least for this particular age group.

Household Income Level

The results of *Model 4* appear to contradict *H4: Temporary residents with higher levels of household income are more likely to report higher subjective social mobility than permanent residents*.

While the p-value of the interaction between high income level (ICMB) and temporary status (TEMP) is under five percent (0.015), the coefficient is negative and cancels the significant and positive coefficient of a high-income level. The substantive outcome on the

subjective social mobility of a temporary resident with a high level of household income is 0.23 (0.24 + 0.29 - 0.30). This indicates that a permanent resident with a high level of household income is more likely to report higher subjective social mobility with their substantive outcome of 0.29 being greater than 0.23. For those under the age of 40, H4 cannot be supported.

Figure 5. Average Subjective Social Mobility (SSM) Score of Temporary and Permanent Households (Headed by Those Under 40) by Household Income Level

Ho Khou Status	Low Income	High Income	Grand Total
Permanent	1.19	1.48	1.35
Temporary	1.54	1.54	1.54
Total	1.45	1.52	1.48

Source: Analysis of 2015 Household Registration Survey

The average SSM score of temporary residents with low and high household income levels demonstrate the results of *Model 4* (shown in *figure 5*). Being identical on average, household income level does not seem to have a significant impact on the subjective social mobility of temporary residents. It could be that any level of income will significantly increase the SSM of temporary residents unlike their permanent counterparts who value a higher level.

Remittance Level

In testing if providing a high level of remittance significantly increases the subjective social mobility of a temporary resident (*H5*), *Model 5* seems to marginally support said hypothesis. The variable of remittance level (RMTC) and its interaction with temporary *ho khau* status are statistically significant with their respective p-values being less than 0.001 and 0.010.

The substantive coefficient outcome of 0.35 (0.25 + 0.42 - 0.32) suggests that a temporary resident is more likely to have higher subjective social mobility by having a high remittance level. Despite the coefficient of the interaction variable being -0.32, it does not nullify the positive coefficient of TEMP (0.42) unlike what is seen in *Model 4*. Therefore, the subjective social mobility of a temporary resident with a high level of remittance will likely be greater than a fellow migrant with a low level of remittance by a substantive difference of 0.10 (0.35 - 0.25). *Model 5* does appear to support *H5* by a SSM difference of 0.10.

Figure 6. Percentage of Households (Headed by those Under 40) by Remittance Level and Ho
Khau Status

Ho Khau Status	Low Remittance	High Remittance	Grand Total
Permanent	49.82%	50.18%	100.00%
Temporary	39.80%	60.20%	100.00%
Total	43.15%	56.85%	100.00%

Source: Analysis of 2015 Household Registration Survey

Just over 60 percent of temporary residents provide a high level of remittance, whereas permanent residents are more evenly distributed in both levels of remittance (*figure 6*). With the results of *Model 5*, most temporary residents under age 40 are more likely to increase their SSM by providing a high level of financial assistance to others.

Public Healthcare Assistance

The last regression for those under age 40, *Model 6*, finds that temporary residents are more likely to have higher subjective social mobility by having government assistance in purchasing health insurance as opposed to not, supporting *H6*.

Figure 7. Percentage of Households (Headed by those Under 40) by Govt Health Insurance
Assistance and Ho Khau Status

Ho Khau Status	No Assistance	Receive Assistance	Grand Total
Permanent	74.79%	25.21%	100.00%
Temporary	89.27%	10.73%	100.00%
Total	84.43%	15.57%	100.00%

Source: Analysis of 2015 Household Registration Survey

The interaction variable of healthcare support (HLTH) and temporary status (TEMP) is statistically significant with a p-value of 0.012 and positive coefficient of 0.40. With the individual coefficients for HLTH and for TEMP being insignificant, I interpret these results to mean that receiving support from the government to purchase health insurance cards more likely benefit the SSM of a temporary resident, specifically. A substantive outcome of 0.40 therefore suggests that this public service more likely significantly increases the subjective social mobility of nearly 11 percent of temporary residents under age 40 (*figure 7*).

Summary

When utilizing the data of those under age 40, *Hypotheses 1*, 2, and 3 lack support following the results of their corresponding regression models. Temporary *ho khou* status, public school enrollment, and an urban living environment show no significant influence on the subjective social mobility within Vietnam household registration system.

The level of household income appears to be indifferent to the subjective social mobility of temporary residents. Statistically, any level of income will increase temporary residents' perceived future well-being equally. On the contrary, permanent residents are more likely to experience an increase in their subjective social mobility by having a high level of household

income. Therefore, these temporary residents see their lives as improving no matter their level of income, contradicting *Hypothesis 4*.

Financially supporting others with a high remittance level and receiving assistance from the government in purchasing health insurance cards do statistically increase the subjective social mobility of temporary residents, supporting *Hypotheses 5* (marginally) and 6.

Next, I present the results of regression models using the data of those over age 40 in testing the same hypotheses. I also use similar tabulations to further illustrate these findings.

Figure 8.

Determinants of Model 1 Model 2 Model 3 Model 4 Model 5 Model 6

Subjective Social

Mobility (Over 40)

	FRV	WB	FR			WB	FR		FR	WB		WB
Predictors	Estimates	p	Estimates		Estimates		Estimates	-	Estimates	p	Estimates	
(Intercept)	(0.51)	<0.001	(0.56)	<0.001	2.98 (0.55)	<0.001	(0.55)	<0.001	(0.56)	<0.001	(0.56)	<0.001
TEMP	0.15 (0.09)	0.083	-1.11 (0.40)	0.006	0.14 (0.11)	0.208	0.18 (0.11)	0.099	0.17 (0.12)	0.160	0.12 (0.09)	0.185
FMAL	-0.07 (0.07)	0.291	-0.08 (0.07)	0.236	-0.04 (0.07)	0.516	-0.03 (0.07)	0.637	-0.03 (0.07)	0.676	-0.03 (0.07)	0.676
CNWB	0.84 (0.02)	<0.001	0.84 (0.02)	<0.001	0.85 (0.02)	<0.001	0.84 (0.02)	<0.001	0.84 (0.02)	<0.001	0.84 (0.02)	<0.001
MARD	-0.01 (0.10)	0.936	0.00 (0.10)	0.975	-0.01 (0.10)	0.944	-0.01 (0.10)	0.927	-0.01 (0.10)	0.895	-0.01 (0.10)	0.897
AGE	-0.02 (0.00)	<0.001	-0.02 (0.00)	<0.001	-0.01 (0.00)	0.001	-0.01 (0.00)	0.001	-0.01 (0.00)	0.001	-0.01 (0.00)	0.001
EDUB	0.01 (0.06)	0.819	-0.00 (0.06)	0.996	0.07 (0.06)	0.272	0.08 (0.06)	0.245	0.07 (0.07)	0.293	0.07 (0.07)	0.274
HSZB	0.21 (0.08)	0.013	0.19 (0.08)	0.023	0.22 (0.08)	0.009	0.22 (0.08)	0.010	0.22 (0.08)	0.010	0.21 (0.08)	0.011
YPVB	-0.55 (0.14)	<0.001	-0.61 (0.14)	<0.001	-0.53 (0.14)	<0.001	-0.53 (0.14)	<0.001	-0.53 (0.14)	<0.001	-0.50 (0.14)	<0.001
SOCL	-0.36 (0.41)	0.381	-0.34 (0.41)	0.408	-0.43 (0.41)	0.298	-0.43 (0.41)	0.289	-0.44 (0.41)	0.280	-0.46 (0.41)	0.260
NSXP	-0.43 (0.16)	0.006	-0.42 (0.15)	0.007	-0.39 (0.15)	0.011	-0.37 (0.15)	0.017	-0.32 (0.17)	0.055	-0.31 (0.16)	0.062
PRMY	0.52 (0.09)	<0.001	0.52 (0.09)	<0.001	0.40 (0.10)	<0.001	0.35 (0.10)	0.001	0.34 (0.10)	0.001	0.33 (0.10)	0.001
SCDY	0.06 (0.13)	0.608	0.05 (0.13)	0.680	0.07 (0.13)	0.602	0.07 (0.12)	0.590	0.07 (0.12)	0.596	0.07 (0.12)	0.596
SERV	0.03 (0.07)	0.696	0.03 (0.07)	0.675	0.04 (0.07)	0.539	0.02 (0.07)	0.725	0.02 (0.07)	0.767	0.02 (0.07)	0.805
PUSL			-0.32 (0.22)	0.161	0.06 (0.18)	0.752	0.07 (0.18)	0.712	0.07 (0.18)	0.708	0.06 (0.18)	0.756
PRSL			0.01 (0.07)	0.880	0.14 (0.06)	0.033	0.14 (0.06)	0.032	0.14 (0.06)	0.032	0.13 (0.06)	0.035
NOSL			-0.31 (0.25)	0.216	0.03 (0.20)	0.878	0.05 (0.20)	0.812	0.05 (0.20)	0.791	0.05 (0.20)	0.823
TEMP * PUSL			1.08 (0.38)	0.005								
TEMP * PRSL			0.60 (0.17)	<0.001								
TEMP * NOSL			1.06 (0.44)	0.015								
URBN					0.36 (0.08)	<0.001	0.34 (0.07)	<0.001	0.34 (0.07)	<0.001	0.34 (0.07)	<0.001
TEMP * URBN					-0.03 (0.15)	0.866						
ICMB							0.16 (0.07)	0.021	0.14 (0.06)	0.027	0.14 (0.06)	0.026
TEMP * ICMB							-0.08 (0.15)	0.572				
RMTC									0.08 (0.07)	0.237	0.07 (0.06)	0.245
TEMP * RMTC									-0.06 (0.15)	0.704		
HLTH											0.06 (0.08)	0.478
TEMP * HLTH											0.24 (0.23)	0.287
Observations	2318		2318		2318		2318		2318		2318	
R ² / R ² adjusted		502	0.510 / 0	.506	0.511 / 0	.508	0.513 / 0	.509	0.513 / 0	.509	0.513 / 0	.509

Household Registration Status

The results of *Model 1* indicate that household registration status has no significant effect on the subjective social mobility. When considering the size of a household (HSZB), level of education (EDUB), sectors of employment (PRMY, SCDY, SERV), and other variables, the p-value of temporary status (TEMP) is 0.083, over the 5 percent threshold. As a result, there is lack of significant association between *ho khau* status and subjective social mobility (SSM) for those over age 40. Therefore, the results of *Model 1* do not support *H1*: *Temporary resident status is more likely to be associated with lower subjective social mobility than permanent resident status*.

School Enrollment

Model 2 does appear to support H2: Temporary residents whose household member enrolls in a public school are more likely to report higher subjective social mobility. With the enrollment of a household member in a public school (PUSL), private school, (PRSL), and no school (NOSL) interacting with household registration status (TEMP), all p-values of these interactions are under the 0.05 threshold. Therefore, significant effects on subjective social mobility for those over age 40 is seen in this regression. The interaction of PUSL and TEMP creates a substantive effect of -0.03 (-1.11 + 1.08), which is greater than those of the PRSL and NOSL interactions (respectively, -0.51 and -0.05). As a result, temporary residents who have a household member enroll in a public school are more likely to have higher subjective social mobility than enrollment in a private school.

Also, the lack of statistical significance associated with the individual variables of PUSL, PRSL, and NOSL indicates that school enrollment more likely has no significant impact on subjective social mobility of those with permanent residency status.

Ho Khau Status	Public	Private	None	Grand Total
Permanent	88.65%	2.23%	9.13%	100.00%
Temporary	76.10%	5.03%	18.87%	100.00%
Total	86.07%	2.80%	11.13%	100.00%

Figure 9. Percentage of Household Enrollment by School Type and Ho Khau Status (Over 40)

Source: Analysis of 2015 Household Registration Survey

Figure 9 (above) shows that permanent households are more likely to have at least one member enroll in a public school than temporary households. In addition, temporary households are over two times more likely to have a member enroll in a private school and no school than their permanent counterparts. These distributions showcase that temporary households have more difficulty than permanent households in enrolling members in a public school no matter the age of the household head.

Living Environment

In determining if the living in a rural or urban environment (URBN) significantly influences the SSM of a temporary resident (TEMP), *Model 3* demonstrates that the interaction between the two variables is not statistically significant with a p-value of 0.866. However, the main effect of URBN is statistically significant with a p-value under 5 percent and a coefficient of 0.36. Accordingly, living in an urban environment more likely significantly increases the SSM of an individual, no matter their household registration status.

This effect is seen in *figure 10* (below) with average SSM gap, favoring both urban permanent and temporary residents, being similar in size: 0.56 (1.26 - 0.70) and 0.51 (1.53 - 1.02). An urban area does not seem to discriminate based on household registration status in

terms of SSM. Therefore, *Model 3* finds that temporary residents over age 40 living in an urban area, instead of a rural area, are more likely to have higher SSM, supporting *H3*.

Figure 10. Average Subjective Social Mobility (SSM) Score of Temporary and Permanent Households (Headed by Those Over 40) Located in a Rural and Urban Area

Ho Khou Status	Rural	Urban	Grand Total
Permanent	0.70	1.26	0.88
Temporary	1.02	1.53	1.28
Total	0.75	1.34	0.96

Source: Analysis of 2015 Household Registration Survey

Household Income Level

The results of Model 4 do not support H4: Temporary residents with higher levels of household income are more likely to report higher subjective social mobility than permanent residents.

While having a high level of household income (ICMB) does statistically increase the SSM of an individual with a p-value of 0.021 and coefficient of 0.16, its interaction with temporary status (TEMP) is over the 0.05 threshold. Following the findings of *Model 3*, *Model 4* shows that having a high level of household income does not benefit one *ho khau* registration type over the other.

Remittance Level

In testing if having a high level of remittance significantly increases the subjective social mobility of a temporary than otherwise (*H5*), *Model 5* does not support this hypothesis. The variable of remittance level (RMTC) and its interaction with temporary *ho khau* status (TEMP)

are statistically insignificant with their respective p-values being over 0.05. As a result, this regression cannot support the position of a temporary resident (over 40) being more likely to have higher subjective social mobility by having a higher level of remittance, nullifying *H5*.

Public Healthcare Assistance

The results of *Model 6* demonstrate that receiving financial assistance from the government in purchasing health insurance cards has no statically insignificant influence on subjective social mobility. The variable of healthcare support (HLTH) and its interaction with *ho khau* status (TEMP) carry p-values above the five percent threshold. Consequently, temporary residents over age 40 receiving this public service are not likely to have higher SSM than those who do not, invalidating *H6*.

Figure 11: Percentage of Households (Headed by those Over 40) by Govt Health Insurance
Assistance and Ho Khau Status

Ho Khau Status	No Assistance	Receive Assistance	Grand Total
Permanent	79.03%	20.97%	100.00%
Temporary	89.52%	10.48%	100.00%
Total	81.19%	18.81%	100.00%

Source: Analysis of 2015 Household Registration Survey

Permanent residents over 40 are two times more likely than temporary residents to receive aid from the government in purchasing health insurance (*figure 11*). Again, there is a nearly identical number of temporary residents receiving this public service (compared to 10.73 percent of those under 40 in *figure 7*).

Summary

With the use of data of those under over 40, regression results do not support *Hypotheses* 1, 4, 5, and 6. Temporary *ho khou* status, household income level, remittance level, and receiving assistance in purchasing health insurance cards by the government appear to not be associated with subjective social mobility within Vietnam household registration system.

In support of *Hypothesis 2*, the enrollment of a member of a household with temporary *ho khau* status in a public school is associated with higher subjective social mobility than enrollment in a private school. In addition, enrollment in no school will likely result in higher subjective social mobility than enrollment in a private school.

An individual's household registration status appears to have no significant effect on their subjective social mobility when considering an urban living environment. Those who live in an urban area (including temporary residents) are more likely to report higher subjective social mobility than by living in a rural area. Therefore, *Hypothesis* 3 is upheld according to regression results.

It is understandable to consider subjective social mobility as an incomplete measurement in understanding how Vietnam's *ho khau* system impacts the lives of its citizens. Next, I present and interpret the results of regression models to understand what factors influence the incomes of temporary and permanent residents. Doing so will allow for an understanding as to what level of income inequality is brought on by a household registration system reminiscent of the nation's former centralized economy.

Chapter 7: Evidence on Income Inequality

This chapter analyzes income inequality between temporary and permanent residents in Ho Chi Minh City, Hanoi, Da Nang, Binh Duong, and Dak Nong for a more concrete and objective understanding of the *ho khau* system beyond subjective social mobility. For consistency with *Chapter 6*, the sample in the World Bank's 2015 study on Vietnam's household registration is put into two categories to consider the confounding variable of age: under 40 and over 40.

The two age categories and their available data are utilized in six multivariate regression models to determine the effect certain factors have on the income of a household. Respondents in the 2015 study provide information on the monthly income their household have received in the past thirty days. This income is logged in the models and is in the form of USD in the following result analysis and tabulations. Again, the respondents who provide the information and figures in the World Bank dataset are the heads of these households. It is therefore possible for a respondent to not be employed and yet have a monthly household income greater than someone who is employed because other members of the household can contribute to its income.

Model 1 compares household incomes on the main basis of ho khau status (TEMP) while considering other factors. Model 2 considers the level of educational attainment (EDUB) and its interaction with ho khau status in measuring income inequality. Model 3 uses the enrollment of a household member in public (PUSL), private (PRSL), or no school (NOSL) and its interaction with ho khau status. Employment in the primary (PRMY), secondary (SCDY), and service sector (SERV) and their interactions with ho khau status are seen in Model 4. Model 5 tests the effect of living in an urban area (URBN) and its interaction with ho khau status. The effect of obtaining public assistance in purchasing health insurance (HLTH) with ho khau status is seen in Model 6.

Figure 12.
Determinants
of Income

Model 1 Model 2 Model 3 Model 4 Model 5 Model 6

Inequality (Under 40)

	HIC	CM	HIC	M	HIC	CM	HIC	CM	HIC	CM	HIG	CM
edictors	Estimates	p										
Intercept)	5.78 (0.79)	<0.001	5.93 (0.81)	<0.001	5.83 (1.18)	<0.001	6.32 (0.95)	<0.001	5.38 (0.93)	<0.001	6.31 (0.91)	<0.00
EMP	-1.32 (0.23)	<0.001	-2.64 (0.31)	<0.001	-1.00 (1.03)	0.329	-1.54 (0.38)	<0.001	-0.42 (0.28)	0.136	-1.16 (0.24)	<0.00
MAL	-0.17 (0.19)	0.360	-0.18 (0.18)	0.340	-0.15 (0.19)	0.424	-0.15 (0.18)	0.408	-0.14 (0.19)	0.435	-0.16 (0.19)	0.379
IARD	-1.39 (0.25)	<0.001	-1.06 (0.25)	<0.001	-1.19 (0.25)	<0.001	-1.15 (0.25)	<0.001	-1.08 (0.25)	<0.001	-1.14 (0.25)	<0.00
AGE	-0.03 (0.02)	0.157	-0.01 (0.02)	0.480	-0.03 (0.02)	0.209	-0.02 (0.02)	0.229	-0.02 (0.02)	0.393	-0.03 (0.02)	0.161
SZB	1.05 (0.23)	<0.001	1.02 (0.22)	<0.001	0.87 (0.23)	<0.001	0.86 (0.23)	<0.001	0.78 (0.23)	0.001	0.86 (0.23)	<0.00
PVB	-0.67 (0.23)	0.004	-0.74 (0.23)	0.001	-0.66 (0.23)	0.004	-0.70 (0.23)	0.002	-0.78 (0.23)	0.001	-0.68 (0.23)	0.003
OCL	-0.25 (0.49)	0.607	-0.19 (0.49)	0.705	-0.18 (0.49)	0.713	-0.22 (0.49)	0.659	-0.00 (0.49)	0.999	-0.09 (0.49)	0.858
ISXP	3.02 (0.43)	<0.001	2.82 (0.42)	<0.001	2.73 (0.43)	<0.001	2.70 (0.43)	<0.001	2.63 (0.42)	<0.001	2.70 (0.43)	<0.001
RMY	4.67 (0.31)	<0.001	4.25 (0.33)	<0.001	4.58 (0.32)	<0.001	4.37 (0.45)	<0.001	4.39 (0.33)	<0.001	4.87 (0.34)	<0.001
CDY	0.13 (0.36)	0.709	0.04 (0.36)	0.917	0.00 (0.36)	1.000	0.59 (0.62)	0.336	-0.05 (0.36)	0.895	-0.00 (0.36)	0.993
ERV	1.63 (0.20)	<0.001	1.52 (0.20)	<0.001	1.46 (0.20)	<0.001	0.75 (0.39)	0.057	1.43 (0.20)	<0.001	1.42 (0.20)	<0.001
DUB			-1.29 (0.32)	<0.001	0.30 (0.19)	0.121	0.30 (0.19)	0.122	0.27 (0.20)	0.173	0.22 (0.20)	0.261
EMP * EDUB			2.52 (0.38)	<0.001								
USL					0.08 (0.89)	0.928	-0.04 (0.40)	0.913	-0.09 (0.40)	0.815	-0.09 (0.40)	0.830
RSL					-0.39 (0.31)	0.206	-0.35 (0.19)	0.064	-0.33 (0.19)	0.083	-0.37 (0.19)	0.055
OSL					-1.14 (1.15)	0.321	-1.75 (0.48)	<0.001	-1.75 (0.47)	<0.001	-1.79 (0.48)	<0.001
EMP * PUSL					-0.13 (1.00)	0.897						
EMP * PRSL					0.05 (0.39)	0.890						
EMP * NOSL					-0.70 (1.26)	0.580						
EMP * PRMY	,						-0.14 (0.68)	0.839				
EMP * SCDY							-1.13 (0.75)	0.129				
EMP * SERV							1.03 (0.45)	0.023				
RBN									0.73 (0.32)	0.024	-0.39 (0.19)	0.040
EMP * URBN	ī								-1.64 (0.38)	<0.001		
LTH											-0.48 (0.36)	0.184
EMP * HLTH											-0.24 (0.48)	0.618
bservations	2549		2549		2549		2549		2549		2549	
/ R ² adjusted	0.181 / 0	1.000	0.196 / 0.	102	0.196 / 0	101	0.200 / 0.	104	0.204 / 0.	100	0.200 / 0	104

Household Registration Status

Model 1 lacks any interaction between ho khau status and any other variable that may have a significant influence on household income. Its results show that temporary residents (TEMP) are expected to have 1.32 less monthly household income (or 320 USD less) than their permanent counterparts when controlling for variables such as gender (FMAL), marriage status (MARD), and sector of employment (PRMY, SCDY, and SERV).

Other factors may be responsible for this negative effect on household income. I now look at other possible determinants of income inequality within *the ho khau* system.

Education Level

Having a secondary higher education or greater (EDUB) seems to significantly decrease household income by 1.29 (about 320 USD) with a p-value of less than 0.001 as seen in *Model 2*. A possible explanation could be that household heads who are in school (such as university students) are not yet working, or there is a lack of high-paying professional occupations to benefit from.

Moreover, the interaction between *ho khou* status (TEMP) and a higher level of education, while having a positive coefficient of 2.52 and being significant at p-value less than 0.001, indicates that should a temporary resident have a high level of educational attainment, the substantive effect on household income for the temporary resident is -1.41 (-2.64 – 1.29 + 2.52) or minus 135.40 USD. Therefore, while having a higher level of education is associated with a significant increase in income, it is not likely to nullify the income gap between temporary and permanent households.

School Enrollment

Model 3 shows that temporary ho khau status (TEMP) has no significant effect on household income when the type of school a householder member attends (PUSL, PRSL, NOSL) is accounted for in the regression. Furthermore, the results show that any type of schooling (and lack thereof) lacks significant association with the income of a household (headed by those under age 40) with all p-values of these interactions being greater than 0.05.

Economic Sector Employment

The results of *Model 4* show that though temporary *ho khau* status (TEMP) associates with a decrease in household income with a coefficient of -1.54 (negative 165.80 USD) and a p-value under 0.001, employment in the service sector (SERV) is shown to likely increase the income of a temporary household and lower income inequality between the two *ho khau* registration types. The interactions between temporary residence status and employment in the primary and secondary sectors (PRMY and SCDY) are statistically insignificant.

To illustrate, employment in the service sector as a temporary resident significantly increases their monthly household income with a p-value less than 0.05. The effect of this interaction demonstrates that the income penalty for being a temporary resident under the age of 40 can decrease (-1.54 + 1.03 = -0.51). Therefore, an estimated monthly income gap of 76.00 USD exists between a temporary and permanent household. The interaction between temporary status and secondary sector employment, lacking statistical significance with a p-value of 0.129, indicates that the sector a majority of working temporary residents under the age of 40 are employed in (shown in *Figure 13*) does not correspond to significant increase in their income.

Figure 13. Percentage of Temporary and Permanent Household Heads (Under 40) Employed in Each Sector of the Vietnamese Economy and Unemployed

Ho Khou Status	Primary Sector	Secondary Sector	Service Sector	Unemployed
Permanent	26.26%	21.10%	45.84%	6.80%
Temporary	4.25%	46.82%	34.96%	13.97%
Total	11.61%	38.21%	38.60%	11.57%

Source: Analysis of 2015 Household Registration Survey

Moreover, the statistical significance of primary sector employment (having a p-value under 5 percent) suggests a better economic opportunity. Though many rural-to-urban migrants travel to the big cities with the intent to earn more money in the manufacturing and service sectors, their monthly household incomes are more likely to be better off by working in say, agriculture, within an industrial district (further seen in *figure 14*). A positive coefficient of 4.37 corresponds with an estimated increase of 161.80 USD, which does negate the income penalty associated with temporary *ho khau* status (4.37 > 1.54). Overall, the monthly income of a permanent farm worker will still be higher than their temporary counterparts by a log value of 2.83 (~ 264.00 USD).

Figure 14. Average Monthly Income (USD) of Temporary and Permanent Households by Sector Employment and Unemployment of Head (Under 40)

Ho Khou Status	Primary Sector	Secondary Sector	Service Sector	Unemployed
Permanent	\$2261.44	\$453.83	\$528.67	\$952.87
Temporary	\$1983.36	\$138.42	\$622.72	\$1321.39
Total	\$2193.80	\$196.71	\$585.35	\$1248.94

Source: Analysis of 2015 Household Registration Survey

Living Environment

More striking are the results from *Model 5* which indicate living in an urban area within the five provinces in this World Bank study significantly decreases the monthly income of a temporary household. The p-value of an interaction between temporary *ho khau* status (TEMP) and living in an urban environment (URBN) is less than 0.001, resulting in a coefficient of -1.64 (or monthly income decrease of about 183.40 USD). The lack of a statistically significant negative coefficient for temporary residency status in *Model 5* also suggests that an urban living environment is a confounding variable in relation to monthly household income and *ho khau* status.

Figure 15 demonstrates that 43.22 percent of temporary households in this age category earn a significantly lower monthly income due to living in an urban area as opposed to the 52.52 percent of permanent households. Overall, the distribution of the two registration types across rural and urban environments seems to be equal.

Therefore, the rural areas of these industrial provinces are expected to have significantly less income inequality between temporary and permanent residents. Living in an urban environment will likely only financially benefit those with permanent *ho khau* status and significantly penalize those with temporary *ho khau* status.

Figure 15. Percentage of Temporary and Permanent Households (Headed by Those Under 40)

Located in a Rural and Urban Area

Ho Khou Status	Rural	Urban
Permanent	47.48%	52.52%
Temporary	56.78%	43.22%
Total	53.67%	46.33%

Source: Analysis of 2015 Household Registration Survey

Public Healthcare Assistance

The results of *Model 6* indicate that those who benefit from receiving government support in purchasing health insurance cards (HLTH) see no significant benefit nor penalty to their monthly income. This regression model shows no significant increase nor decrease on household income with its inclusion of an interaction between *ho khau* status (TEMP) and this benefit having a p-value over 0.05.

Summary

Empirical analysis shows that temporary residents with a higher level of education can significantly increase the income of their households, but likely not enough to nullify the financial penalty associated with their *ho khau* status. While working in the service sector will likely significantly increase a temporary household's income, employment in the primary sector will more likely negate the level of income inequality between temporary and permanent households. An urban living area may explain the income gap between temporary and permanent residents by being a confounding variable on *ho khau* status and monthly household income. As a result, rural areas more likely see no significant level of income inequality between the two household registration types.

Enrollment in a certain school type and receiving governmental assistance in purchasing healthcare seem not be associated with the income of temporary and permanent households.

Next, I present the regression results of respondents over age 40.

Figure 16.
Determinants of Model 1 Model 2 Model 3 Model 4 Model 5 Model 6
Income
Inequality (Over 40)

	****	·	****	***	****	· M	****	TMT	****	24	****	- N
D	HIC		HIC		HIC		HIC		HIC		HIC	
Predictors (Intercent)	Estimates 2.83	p 0.043	Estimates 3.13	p 0.025	Estimates 4.62	p 0.003	Estimates 4.39	p 0.003	Estimates 2.37	0.114	Estimates 2.70	p 0.073
(Intercept)	(1.40)	0.043	(1.39)	0.025	(1.54)	0.003	(1.49)	0.003	(1.50)	0.114	(1.51)	0.073
TEMP	-1.53 (0.24)	<0.001	-1.96 (0.28)	<0.001	-4.99 (1.11)	<0.001	-3.15 (0.37)	<0.001	-0.95 (0.30)	0.002	-1.78 (0.25)	<0.001
FMAL	-0.37 (0.19)	0.047	-0.43 (0.19)	0.021	-0.45 (0.19)	0.017	-0.44 (0.19)	0.018	-0.35 (0.19)	0.059	-0.37 (0.19)	0.049
MARD	0.33 (0.27)	0.222	0.42 (0.27)	0.123	0.40 (0.27)	0.143	0.43 (0.27)	0.110	0.40 (0.27)	0.136	0.37 (0.27)	0.173
AGE	0.03 (0.01)	0.038	0.03 (0.01)	0.022	0.03 (0.01)	0.017	0.02 (0.01)	0.089	0.04 (0.01)	0.002	0.04 (0.01)	0.004
HSZB	0.15 (0.23)	0.519	0.13 (0.23)	0.583	0.03 (0.23)	0.882	-0.00 (0.23)	0.984	0.08 (0.23)	0.714	0.09 (0.23)	0.691
YPVB	0.12 (0.39)	0.762	0.08 (0.39)	0.845	0.09 (0.39)	0.827	0.11 (0.40)	0.772	-0.11 (0.39)	0.782	0.22 (0.39)	0.570
SOCL	1.49 (1.14)	0.189	1.54 (1.13)	0.173	1.33 (1.14)	0.243	1.33 (1.12)	0.236	1.53 (1.13)	0.174	1.17 (1.13)	0.299
NSXP	-0.82 (0.43)	0.054	-0.93 (0.43)	0.029	-0.95 (0.43)	0.026	-1.07 (0.42)	0.011	-0.89 (0.42)	0.036	-0.90 (0.43)	0.034
PRMY	4.18 (0.25)	<0.001	3.93 (0.26)	<0.001	3.89 (0.26)	<0.001	3.45 (0.28)	<0.001	3.50 (0.27)	<0.001	3.63 (0.27)	<0.001
SCDY	-0.01 (0.35)	0.976	-0.10 (0.35)	0.772	-0.12 (0.35)	0.734	-0.10 (0.40)	0.810	-0.14 (0.34)	0.683	-0.11 (0.35)	0.740
SERV	1.87 (0.19)	<0.001	1.88 (0.19)	<0.001	1.87 (0.19)	<0.001	1.21 (0.22)	<0.001	1.87 (0.19)	<0.001	1.90 (0.19)	<0.001
EDUB			-0.82 (0.19)	<0.001	-0.71 (0.17)	<0.001	-0.75 (0.17)	<0.001	-0.50 (0.18)	0.005	-0.55 (0.18)	0.002
TEMP * EDUB			0.97 (0.46)	0.037								
PUSL					-1.19 (0.62)	0.054	-0.14 (0.49)	0.774	0.04 (0.50)	0.937	0.06 (0.50)	0.907
PRSL					-0.13 (0.19)	0.513	-0.02 (0.17)	0.909	0.06 (0.18)	0.750	0.02 (0.18)	0.913
NOSL					-1.81 (0.70)	0.010	-0.84 (0.56)	0.133	-0.82 (0.56)	0.146	-0.76 (0.57)	0.179
TEMP * PUSL					3.34 (1.06)	0.002						
TEMP * PRSL					0.60 (0.46)	0.191						
TEMP * NOSL					2.77 (1.21)	0.022						
TEMP * PRMY							1.71 (0.66)	0.010				
TEMP * SCDY							-0.12 (0.74)	0.876				
TEMP * SERV							2.96 (0.45)	<0.001				
URBN									1.22 (0.21)	<0.001	0.80 (0.19)	<0.001
TEMP * URBN									-1.79 (0.41)	<0.001		
HLTH											-0.23 (0.23)	0.319
TEMP * HLTH											0.51 (0.63)	0.419
Observations	2318		2318		2318		2318		2318		2318	
R ² / R ² adjusted	0.169 / 0.	165	0.176 / 0.	172	0.182 / 0.	.176	0.195 / 0.	.189	0.191 / 0.	.185	0.184 / 0.	178

Household Registration Status

Model 1 shows that temporary ho khau status (TEMP) is associated with a significant decrease in monthly household income with a p-value of less than 0.001 and coefficient of -1.53 (or a monthly household income 484.88 USD). Comparing the results of *figures 12* and *16*, income inequality seems to be greater between temporary and permanent residents in this age group. Unlike subjective social mobility, income is significantly affected by *ho khau* status.

Education Level

Model 2 illustrates that having a high education level (EDUB) associates with a lower level of income inequality between the two *ho khau* registration types (TEMP). The level of education an individual attains and its interaction with *ho khau* status are both statistically significant (their respective p-values less than 0.001 and 0.05). However, the substantive effect of this interaction demonstrates that when controlling for other variables (such as gender, age, and sector of employment), a temporary resident will have a significantly less monthly income than their permanent counterpart by about 244.00 USD (-1.96 - 0.82 + 0.97 = -1.81).

Nonetheless, a higher level of education seems more likely to significantly benefit the income of a temporary resident than a permanent resident. As a result, temporary residents who have not completed an upper secondary education or greater are expected to earn the least amounts of income in cities and provinces such as Ho Chi Minh City, Da Nang, and Hanoi.

School Enrollment

The enrollment of a temporary household member in a public school or no school does correspond with a significant increase in household income, according to *Model 3*. Interactions between temporary resident status (TEMP) and household enrollment in a public school (PUSL)

and no school (NOSL) have positive coefficients with p-values less than 0.001 and 0.05, respectively. Nonetheless, either option is not able to nullify the monthly household income gap associated with a temporary resident status as demonstrated with their substantive effects.

Enrollment in a public school sees an income gap of about 308.41 USD (-4.99 - 1.25 + 3.34 = -2.9) in the disfavor of the temporary household. Having no member enroll in any kind of school will see a temporary household make about 958.63 USD less than a permanent household (-4.99 - 1.81 + 2.77 = -4.03). Enrollment in a private school seems to have no significant effect on the income of temporary and permanent households.

Therefore, public schools do appear to be the most optimal of the three interactions by being associated with an increase of about 469.31 USD to the monthly income of a temporary household. The lack of statistical significance from the main public school variable suggests that households with temporary *ho khau* status are specifically associated with a significant increase in income with the enrollment of members in public schools.

Economic Sector Employment

Temporary household heads can nullify and surpass the income reduction associated with temporary *ho khau* status by being employed in the primary and service sectors of the Vietnamese economy, as seen in the regression results of *Model 4*.

The interaction between temporary status (TEMP) and employment in the primary sector (PRMY) carries statistical significance (p-value < 0.05) and has a positive coefficient of 1.71 (\sim 221.75 USD). Thus, the monthly income of temporary household with a head working in the primary sector would be: -3.15 + 3.41 + 1.77 = 2.01, a net positive of about 310.72 USD. The inclusion of household size level (HSZB) in this regression indicates that having a low or high

number of members in a household (the median being three) has no significant effect on its monthly income. Farming activity itself, not the number of household members working in farming, is associated with this significant increase in income and nullification of income inequality between the two household registration types.

Employment in the service sector (SERV) as a temporary household head over age 40 has a p-value under 0.001 and coefficient at 2.96 (about 911.92 USD), meaning their income would be: -3.15 + 1.21 + 2.96 = 1.02 or a net positive of about 83.85 USD. Again, employment in the secondary sector (SCDY) has no significant consequence on income.

Figure 17. Percentage of Temporary and Permanent Household Heads (Over 40) Employed in Each Sector of the Vietnamese Economy and Unemployed

Ho Khou Status	Primary Sector	Secondary Sector	Service Sector	Unemployed
Permanent	18.79%	14.56%	44.87%	21.78%
Temporary	11.95%	37.95%	40.25%	9.85%
Total	17.39%	19.37%	43.86%	18.56%

Source: Analysis of 2015 Household Registration Survey

Figure 17 demonstrates that farming occupations are least likely to be held by temporary household heads over age 40. About 38 percent of these household heads do not benefit from a significant increase in monthly income by working in the secondary (manufacturing) sector. Moreover, household heads over age 40 with temporary ho khau status are two times more likely to still be working than those with permanent residency. By comparing the unemployment rates of household heads under and over age 40, we can see that temporary residents are more likely to have difficulty in financially supporting their households at a young age, and in retiring in comfort at an older age.

Living Environment

The results of *Model 5* indicate that temporary residents (TEMP) of both age groups will have their incomes decrease significantly by living in an urban area (URBN). A coefficient of -1.78 (an estimated decrease of 239.55 USD) and p-value of less than 0.001 results from the interaction between temporary residency status and living in an urban area. When controlling for age, gender, and sector of employment, living in an urban environment as a temporary resident is associated with a disfavoring monthly income gap of about 168.37 USD (-0.95 + 1.22 - 1.79 = -1.52).

There seems to be no significant monetary benefit to living in a municipality as a temporary resident, who is more likely than a permanent resident to live in such an area as shown in *figure 18* (below). Unlike what is seen in the regression results of those under age 40, temporary residence status does not cease to have negative statistical significance on income. This suggests that an urban living environment is not a confounding variable in relation to monthly household income for those over age 40, meaning household registration status does contribute to income inequality between temporary and permanent residents in urban areas.

Figure 18. Percentage of Temporary and Permanent Households (Headed by Those Over 40)

Located in a Rural and Urban Area

Ho Khou Status	Rural	Urban
Permanent	67.30%	32.70%
Temporary	49.06%	50.94%
Total	63.55%	36.45%

Source: Analysis of 2015 Household Registration Survey

Public Healthcare Assistance

Garcia 70

Finally, the *Model 6* demonstrates that being a recipient of government assistance in

purchasing health insurance cards (no matter the status of one's ho khau) has no significant effect

on monthly household income. The p-values for this variable and its interaction with ho khau

status have p-values over 0.05, and that for temporary status is under 0.001 with a coefficient of

0.51.

Summary

For those over age 40, having temporary *ho khau* status and living in an urban

environment are shown to be associated with a significant loss in household income. An urban

area is not shown to be a confounding variable in this age group.

In addition, having a higher level of education (upper secondary or above) and having a

household member in a public school or no school as a temporary resident are associated with a

significant decrease in income inequality between temporary and permanent residents.

Employment in the primary sector or service sector of the Vietnamese economy as a temporary

resident provides the most optimal option for nullifying the income penalty associated with

temporary ho khau status.

Again, receiving assistance from the government in purchasing health insurance cards

does not have any statistically significant effect on household income, at least within Vietnam's

household registration system.

Chapter 8: Conclusions

This thesis sought to understand how Vietnam's household registration system impacts the lives of internal migrants at a time of massive urbanization. I evaluate how this legacy of the nation's command economy affects individuals' subjective social mobility and income inequality through the use of multivariate regression.

When measuring social mobility with perceived future mobility, household registration status itself does not appear to have a significant effect on an individual's subjective social mobility. However, providing a higher level of remittance and receiving government subsidies in purchasing health insurance do significantly increase younger temporary residents' expectations of their well-being improving. This indicates that younger temporary residents value the financial well-being and health of others such as relatives. Older temporary residents seem to significantly value access to a public education and living in an urban area, suggesting that convenient and more inclusive improvements to human capital and economic resources enhance subjective social mobility as the age of internal migrants increases. Therefore, the main incentive for rural-to-urban migration seems to be not necessarily the well-being of the migrant, but that of the collective which they belong to: their family.

This study also demonstrates that internal migrants are unlikely to view enrollment in a private school (despite typically having a higher quality of education) as a means to improving their subjective social mobility, possibly due their higher costs of attendance. Instead, public schools appear to be key to improving the subjective well-being of the family unit by providing an affordable education which incentivizes greater enrollment rates (increasing human capital). Accordingly, the sociological view of universal education being a significant determinant vertical social mobility (Torche, 2013) is supported by this study.

Surprisingly, having a higher level of household income does not associate with greater subjective social mobility for younger temporary residents. I speculate that these migrants are more concerned with the present financial well-being of their families in the countryside, to which any level of income will satisfy this want to help them. Perhaps these youthful urban migrants are more likely to see lives as improving by simply being above the poverty line. Only when being over age 40 does a higher income level increase subjective social mobility, no matter one's ho khau status. A reason could be that older generations seek to establish a plentiful and stable financial foundation to support their households and future generations, a goal which may not be accomplished by simply being above the poverty line. These findings would suggest that analyzing social mobility through the economic perspective may not grant a meaningful insight as to what variables younger people (particularly rural-to-urban migrants in emerging economies) value as improvements to their quality of life. This thesis therefore lends support to the psychological perspective of social mobility (Diener & Seligman, 2004; Hagerty & Veenhoven 2003).

Overall, these findings show that in respect to Vietnamese society and possibly other developing countries, rural-to-urban migrants seek to attain resources which benefit the income and human capital of others (particularly family members). Doing so significantly improves their perceived future mobility, but also penalizes their own income. An explanation could be that urban migrants gain satisfaction through altruistic behaviors which benefit the social status of their families back home, rather than through personal gain. Afterall, studies have shown that altruistic behaviors are significant determinants in people's decision to migrate (Agarwal & Horowitz, 2002; Gardner, 2019).

Self-selection bias could be another explanation for these results. Seeing how younger people are more likely to be temporary residents (*figure 1*), these urban migrants may be overwhelmingly optimistic of their futures despite facing the economic barriers set by the *ho khou* system. Seeing how those of lower social status have shown to be more willing to take significant risks than those of higher status with more resources (Osman et al., 2018), temporary residents are possibly less likely to reflect on the current financial burden associated with their *ho khau* status when reporting their subjective social mobility. They simply see their lives as improving no matter their *ho khau* status.

Should policymakers strive to enhance the optimism of an urbanizing society, efforts should be made to grant urban migrants easier access to healthcare, public education, and opportunities to financially support others through remittance. Age also needs to be considered by researchers of subjective well-being given that certain variables differ in their effect on people's self-evaluations between those under and over 40, supporting the procedures and recommendations of past studies on this subject (Diener et al., 1999; Huang et al., 2017)

When measuring income inequality within the *ho khau* system, temporary households earn substantially less than permanent households in metropolises with the highest rates of migration. However, living in an urban rather than temporary *ho khau* status does appear to have a confounding effect for those under age 40. This finding supports the suggestion made by researchers of the Chinese *hukou* system that improvements be made specifically to urban environments to ensure more inclusive gains to people's lives (Lu et al., 2019).

Temporary *ho khau* status is associated with a significantly lower monthly household income regardless of the age of the household head. Having a higher level of education and a

household member enroll in a public school correspond with greater income within temporary households, supporting the financial benefits of education in emerging economies.

Contrary to the assumption by sociologists and economists who study social mobility that manufacturing jobs are associated with higher wages and greater subjective well-being as opposed to more traditional work such as in agriculture (Ishida et al., 1995; Warren et al., 1998), temporary residents are worst off in this sector of the Vietnamese economy. Instead, significant improvements to the income and subjective social mobility of Vietnamese under age 40, including temporary residents, are associated with employment in the service sector. As age increases, working in the primary sector also carries these benefits. An explanation for this can be that manufacturing jobs do not grant autonomy to workers in negotiation for higher wages and in their sense of self, which could otherwise be found in the service and primary sectors. I speculate that owning and working farmland in old age reinforces a sense of legacy and ownership which can be passed onto future generations, however more research needs to be made in this area.

The results of these regressions demonstrate that despite the series of reforms made to Vietnam's household registration system, temporary residents are at a statistically significant disadvantage in comparison to their permanent counterparts. The fact that local governments set the square area of rental unit, land ownership, and marriage into a permanent family as requirements for permanent *ho khau* status despite living in a populated city for two years illustrates the discriminatory attitude Vietnamese officials have towards those seeking to improve not only their lives, and the well-being of their families.

Further institutional undermining to these efforts is done in the private sector where temporary residents are forced to work seeing how public sector employment favors permanent

residents. Nearly all three sectors of the economy have temporary residents earning substantially less income. Arguments that identify the cause of this inequality being a difference in educational attainment instead of *ho khau* status should acknowledge the fact that prioritizing public school enrollment for permanent residents prevents a fair opportunity for the children of temporary residents to enrich their human capital through the attainment of higher education levels.

Additional research on this topic is recommended to substantiate the findings of this study. Nonetheless, these findings highlight the different economic circumstances and psychology of those with and without permanent *ho khau* status in Vietnam's metropolises. Vietnam has without doubt made significant improvements to its economy and poverty rate since the implementation of the *Doi Moi* reforms in 1986. Nevertheless, its household registration system remains a legacy of a dark and unfortunate past. Opportunities are continuing to grow for those seeking to improve their lives at a time of intense industrialization, but are limited to those who were simply born in a different part of the country. Seeing how a large majority of both temporary and permanent residents agree that the *ho khau* system discriminates against those without permanent status and should be less restrictive Anh et al., 2016), government officials may need to make further reforms to the household registration system to address this national concern.

Should reforms not be made, then internal migrants may begin to not see the cities as instruments to improving social status and return to the countryside in overwhelming numbers. Such a phenomenon could possibly put out the fire fueling Vietnam's industrialization and bring about a return to the economic hardship that impacted virtually all Vietnamese, no matter their *ho khau* status.

References

- Abdullah, Abdul, et al. "Does Education Reduce Income Inequality? A Meta-Regression Analysis." *Journal of Economic Surveys*, vol. 29, no. 2, 19 Dec. 2013, pp. 301–316., doi:10.1111/joes.12056.
- Adams, Richard H., and John Page. "Do International Migration and Remittances Reduce Poverty in Developing Countries?" World Development, vol. 33, no. 10, Oct. 2005, pp. 1645–1669.
- Agarwal, Reena, and Andrew W. Horowitz. "Are International Remittances Altruism or Insurance? Evidence from Guyana Using Multiple-Migrant Households." World Development, vol. 30, no. 11, Nov. 2002, pp. 2033–2044., doi:10.1016/s0305-750x(02)00118-3.
- Anh, Bui Thi My, et al. "Health Insurance Cards and Health Care Services Utilization: Evidence From Children in Mountainous Regions of Vietnam." Global Pediatric Health, vol. 6, 1 Jan. 2019, doi:10.1177/2333794X19843917.
- Anh, Le Thi Kim, et al. "An analysis of interprovincial migration in Vietnam from 1989 to 2009." Global Health Action, vol. 5, no. 1, 21 Dec. 2012, doi:10.3402/gha.v5i0.9334
- Anh, Dang Nguyen, et al. "Reforming Vietnam's Household Registration System." Worldbank, World Bank Group, 16 June 2016, pubdocs.worldbank.org/en/597131465814757714/Vietnam-Household-Policy-note-EN-2 0160610.pdf.
- Apolat Legal. "New Points of the Residence Law 2020 Passed on November 13, 2020." Lexology, 30 Nov. 2020, www.lexology.com/library/detail.aspx?g=f61dd604-18d6-4a64-98fa-c742592427fa
- Branch, Joel, et al. "No new community COVID-19 infection in four consecutive weeks: what lesson can be learned from Vietnam." J Infect Dev Ctries. 2020 Oct 31;14(10):1125-1127. doi: 10.3855/jidc.13080. PMID: 33175706.
- Chapman, David. "Tama-Chan and Sealing Japanese Identity." *Critical Asian Studies*, vol. 40, no. 3, 15 Aug. 2008, pp. 423–443., doi:10.1080/14672710802274144.
- Chuc, Nguyen Dinh, and Ta Phuc Duong. "Trade, Structural Adjustments and Productivity Growth in Vietnam: The Shift to Services." Southeast Asian Economies, vol. 36, no. 2, 31 Aug. 2019, pp. 256–273., doi:10.1355/ae36-2g.
- Coxhead, Ian et al. "Migration in Vietnam: New Evidence from Recent Surveys." *World Bank, Hanoi.* World Bank. 2015. https://openknowledge.worldbank.org/handle/10986/23597. Accessed 22 Feb. 2021.
- Dang, Nguyen Anh, et al. "Migration in Vietnam: A review of information on current trends and patterns, and their policy implications." Department for International Development (DFID), UK, 2003, https://pubs.iied.org/sites/default/files/pdfs/migrate/G00479.pdf
- Dang, Thang. "Intergenerational mobility of earnings and income among sons and daughters in Vietnam." MPRA, 1 May. 2015, https://core.ac.uk/download/pdf/194832222.pdf
- De Luca, Jonathan. "Vietnam's Left-Behind Urban Migrants." The Diplomat, The Diplomat, 8

- Apr. 2017, the diplomat.com/2017/04/vietnams-left-behind-urban-migrants/.
- Delteil, Bruce, et al. "Emerging from the Pandemic, Vietnam Must Position Itself for Recovery." *McKinsey & Company*, McKinsey & Company, 6 Aug. 2020, www.mckinsey.com/featured-insights/asia-pacific/emerging-from-the-pandemic-vietnam-must-position-itself-for-recovery.
- Derviş, Kemal, and Zia Qureshi. "Income Distribution within Countries: Rising Inequality." Brookings, Brookings, 4 Jan. 2018, www.brookings.edu/research/income-distribution-within-countries-rising-inequality/.
- Diener, Ed, et al. "Subjective Well-Being: Three Decades of Progress." *Psychological Bulletin*, vol. 125, no. 2, Mar. 1999, pp. 276–302., doi:10.1037/0033-2909.125.2.276.
- Diener, Ed, and Martin E.P. Seligman. "Beyond Money: Toward an Economy of Well-Being." Psychological Science in the Public Interest, vol. 5, no. 1, pp 1-31., 1 Jul. 2004, doi: 10.1111/j.0963-7214.2004.00501001.x
- Dinh, Phung Cong, et al. "Combating the COVID-19 Epidemic: Experiences from Vietnam." *Int J Environ Res Public Health*, vol. 17, no. 9, 30 Apr. 2020, p. 3125., doi:10.3390/ijerph17093125.
- Donzuso, Nunzio Nazareno. "Equality of Opportunities' in Education for Migrant Children in China." *Global Social Welfare*, vol. 2, no. 1, 9 May 2014, pp. 9–13., doi:10.1007/s40609-014-0012-y.
- Dribe, Martin, et al. "Did Social Mobility Increase during the Industrialization Process? A Micro-Level Study of a Transforming Community in Southern Sweden 1828–1968." Research in Social Stratification and Mobility, vol. 41, Sept. 2015, pp. 25–39., doi:10.1016/j.rssm.2015.04.005.
- Ewing, Reid, et al. "Does urban sprawl hold down upward mobility?" Landscape and Urban Planning, vol. 148, Apr. 2016, pp. 80–88., doi:10.1016/j.landurbplan.2015.11.012.
- Gardner, John. "Intergenerational Altruism in the Migration Decision Calculus: Evidence from the African American Great Migration." Journal of Population Economics, vol. 33, no. 1, 14 June 2019, pp. 115–154., doi:10.1007/s00148-019-00738-5.
- Glomm, Gerhard, and B Ravikumar. "Public Education and Income Inequality." *European Journal of Political Economy*, vol. 19, no. 2, 29 Jan. 2003, pp. 289–300., doi:10.1016/s0176-2680(02)00178-7.
- Hagerty, Michael R., and Rutt Veenhoven. "Wealth and Happiness Revisited Growing National Income Does Go with Greater Happiness." Social Indicators Research, 2003, vol 64, pp 1-27, doi: 10.1023/A:1024790530822
- Hardy, Andrew. "Rules and Resources: Negotiating the Household Registration System in Vietnam under Reform." Sojourn: Journal of Social Issues in Southeast Asia, vol. 16, no. 2, 2001, pp. 187–212. JSTOR, www.jstor.org/stable/41057062. Accessed 12 Mar. 2021.
- Hoang, Van Minh, et al. "Rapid Response to the COVID-19 Pandemic: Vietnam Government's Experience and Preliminary Success." Journal of Global Health, vol. 10, no. 2, 28 July 2020, p. 020502., doi:10.7189/jogh.10.020502.

- Huang, Silin, et al. "The Effects of Objective and Subjective Socioeconomic Status on Subjective Well-Being among Rural-to-Urban Migrants in China: The Moderating Role of Subjective Social Mobility." *Frontiers in Psychology*, vol. 8, 22 May 2017, doi:10.3389/fpsyg.2017.00819.
- Huy, Quang. "Household Registration Books to Be Scrapped by 2020." *VnEconomicTimes*, Vietnam Economic Times, 11 June 2017, vneconomictimes.com/article/vietnam-today/household-registration-books-to-be-scrappe d-by-2020.
- Inglehart, R. and H.D. Klingemann. "Genes, culture, democracy, and happiness. Culture and subjective well-being." MIT Press. 2000, pp. 165–183.
- Ishida, Hiroshi et al. "Class Origin, Class Destination, and Education: A Cross-National Study of Ten Industrial Nations." American Journal of Sociology, Jul 1995, vol. 101, no. 1, pp 145-193. JSTOR, www.jstor.org/stable/2782508. Accessed 8 Dec. 2020.
- Karble, H. "Social Mobility, History of." International Encyclopedia of the Social & Behavioral Sciences, 2001, pp 14345-14348., doi: 10.1016/B0-08-043076-7/02734-0
- Koty, Alexander Chipman. "China Plus One Series: Vietnam's Appeal to Investors in Asia." *China Briefing News*, 9 Apr. 2020, www.china-briefing.com/news/china-plus-one-series-understanding-vietnams-appeal-investors-asia/.
- Krogness, Karl Jakob, and David Chapman. "Japan's Household Registration System and Citizenship: Koseki, Identification and Documentation." *Social Science Japan Journal*, vol. 19, no. 1, 2016, pp. 119–122., doi:10.4324/9781315889757-9.
- Le, Bach Duong et al., et al. "Social protection for rural-urban migrants in Vietnam: current situation, challenges and opportunities." *Institute for Social Development Studies, Hanoi, Vietnam*, Center for Social Protection, 2011, https://www.ids.ac.uk/download.php?file=files/dmfile/ResearchReport08REVISE.pdf
- Lu, Jingjing, et al. "Relaxation in the Chinese Hukou System: Effects on Psychosocial Wellbeing of Children Affected by Migration." *International Journal of Environmental Research and Public Health*, vol. 16, no. 19, 4 Oct. 2019, pp. 37–44., doi:10.3390/ijerph16193744.
- Mason, Pauline. "Low Wage Costs Attract Investors to Vietnam." BBC News, BBC, 17 June 2010, www.bbc.com/news/10344233.
- McDonald, Tim. "Vietnam Economy Is Asia's Shining Star during Covid." *BBC News*, BBC, 19 Nov. 2020, www.bbc.com/news/business-54997796.
- Merkley, Jeff, and James P McGovern. "Recent Chinese Hukou Reforms." *Cecc*, Congressional-Executive Commission on China, 2004, www.cecc.gov/recent-chinese-hukou-reforms.
- Ngo, Ha Quyen. "Reducing rural poverty in Vietnam: issues, policies, challenges." Mekong Development Research Institute, 2019, https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2019/03/Reducing-rural-poverty-in-Vietnam-Issues-Policies-Challenges.pdf
- Nguyen, Cuong Viet, and Thai Pham Minh. "Are Migrants in Large Cities Underpaid? Evidence

- from Vietnam." *IZA Journal of Migration*, vol. 5, no. 1, 27 Oct. 2016, doi:https://doi.org/10.1186/s40176-016-0068-9.
- Nguyen, Thi Thu Hien. Consequences of urban migration of adult children for the elderly left-behind in rural Vietnam. Diss. John Curtin Institute of Public Policy Curtin Business School. 2019. Web. Accessed 24 Feb. 2021.
- O'Brian, Martin, and Phuc Pham. "Multidimensional Wellbeing Inequality in a Developing Country: A Case Study of Vietnam." Soc Indic Res 145, 157–183 (2019). https://doi.org/10.1007/s11205-019-02104-0
- O'Day, Jennifer A., and Marshall S. Smith. "Quality and Equality in American Education: Systemic Problems, Systemic Solutions." *The Dynamics of Opportunity in America*, 2016, pp. 297–358., doi:10.1007/978-3-319-25991-8_9.
- Osman, Magda, et al. "Can Empathy Promote Cooperation When Status and Money Matter?" Basic and Applied Social Psychology, vol. 40, no. 4, 27 June 2018, pp. 201–218., doi:10.1080/01973533.2018.1463225.
- OXFAM. "Even It Up: How to Tackle Inequality in Vietnam." Oxfam International, Oxfam International, 12 Jan. 2017, www.oxfam.org/en/research/even-it-how-tackle-inequality-vietnam.
- RRT Research Response. Refugee Review Tribunal, Australia. 18 Aug. 2008. https://www.justice.gov/sites/default/files/eoir/legacy/2013/06/11/household%20registration.pdf. Accessed 24 Feb. 2021.
- Thanh, Vo Tri, and Nguyen Anh Duong. "Vietnam after Two Years of WTO Accession: What Lessons Can Be Learnt?" ASEAN Economic Bulletin, vol. 26, no. 1, 2009, pp. 115–135. JSTOR, www.jstor.org/stable/41317022. Accessed 8 Dec. 2020.
- Torche, Florencia. "How Do We Characteristically Measure and Analyze Intergenerational Mobility?" Inequality, Stanford Center on Poverty and Inequality, July 2013, inequality.stanford.edu/sites/default/files/media/_media/working_papers/torche_how-dowe-measure.pdf.
- UNDP. "Internal migration: opportunities and challenges for social-economic development in Vietnam." UN Publications, 2010, https://bangkok.unesco.org/sites/default/files/assets/article/Social%20and%20Human%20 Sciences/publications/vietnam.pdf
- Warren, J.R. et al. 2002. "Occupational Stratification across the Life Course:

 Evidence from the Wisconsin Longitudinal Study." American Sociological Review, 2002, vol. 67, pp 323-346.
- Wells-Dang, Andrew, and Vi Thi Quynh Hoa. "Shrinking Opportunities: Social Mobility and Widening Inequality in Vietnam." UNRISD, 20 May 2019, www.unrisd.org/80256B3C005BE6B5/search/C0838EC429923FAAC12584000032319.
- World Bank. "GDP Growth (Annual %) Vietnam." *World Development Indicators*. The World Bank Group, 2019, data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=VN.
- World Bank. "GDP per capita (current US\$) Vietnam." World Development Indicators. The

- World Bank Group, 2019, data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=VN
- World Bank. "Poverty (Annual %) Vietnam." *World Development Indicators*. The World Bank Group, 2019, data.worldbank.org/topic/poverty?locations=VN
- World Bank Group, and Vietnam Academy of Social Sciences. "Vietnam's Household Registration System." *World Bank*, Hong Duc Publishing House, 2016, openknowledge.worldbank.org/bitstream/handle/10986/24594/Vietnam0s0household0reg istration0system.pdf?sequence=1&isAllowed=y.
- Zhao, Yizhang, and Yaojun Li. "Differential Acculturation: A Study of Well-Being Differences in Intergenerational Social Mobility between Rural and Urban China." Sociology, vol. 53, no. 4, 7 Jan. 2019, pp. 724–743., doi:10.1177/0038038518818405.