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MOBILITY AND THE MEASUREMENT OF WELL-BEING IN HANOI AND HO CHI MINH CITY

One of the most glaring anomalies in the analysis of poverty in Asia is the low estimates of urban poverty reported by official statistical agencies and aid donors. Although great disparities in wealth and living conditions are readily apparent to even casual observers of Asia's megacities, official surveys consistently portray cities that are virtually free from poverty and destitution. Just to cite a few examples, the official urban headcount poverty rate in China—a country that has become manufacturer to the world based on its comparative advantage in cheap labour—was just 3.8 percent in 2007 (Wu *et al.* 2010, 3). The corresponding rate for Thailand in 2006 was a mere 3.1 percent (Warr 2008). The official urban poverty rate in Indonesia, the poorest of these three countries, was just 1.9 percent in 2009.[1] World Bank researchers estimate that in 2002 urban poverty for the entire East Asia Pacific region was just 2.3 percent (Ravallion *et al.* 2007, 38). Vietnam's urban poverty rate is also low—just 3.3 percent in 2008 according to the General Statistics Office.

Urban poverty statistics are low in the region in part because official sources adopt low urban poverty lines, which generate low headcount rates of poverty. Another important reason that surveys routinely under-report poverty in Asian cities is that they exclude migrants. In recognition of this problem, the General Statistics Office conducted a new Urban Poverty Survey (UPS) in 2009 in Hanoi and Ho Chi Minh City. The UPS adopted a sampling method that differed in important ways from successive rounds of the Vietnam Household Living Standard Survey (VHLSS) on which official poverty estimates in Vietnam are based. UPS is more likely to capture short-term migrants than VHLSS because it does not impose a minimum residency requirement on respondents, and because it includes respondents who live in dormitories, shared accommodations and other non-standard dwellings.

The aim of this paper is to identify the group of 'missing migrants' that is present in the UPS sample but excluded from VHLSS owing to differences in sampling methods between the two surveys. We compare the main characteristics of this group to groups of households and individuals that would be included in VHLSS. Using an asset index of well-being, we test the proposition that the missing migrant group significantly worse off than other respondents. We conclude on the basis of this evidence that adopting the UPS methodology in other household surveys in Vietnam, including VHLSS, would result in a more realistic, and most likely higher, estimate of urban poverty. Greater attention to the living and working conditions of short-term migrants would help government formulate policies to improve the well-being of poor urban people.

[1] As reported on the Badan Pusat Statistik website for the year 2009 (http://www.bps.go.id/tab_sub/view.php?tabel=1&daftar=1&id_subyek=23&notab=3).

The authors take full responsibility for the information and analysis contained in this working paper. The views expressed in the paper are the authors' alone and do not necessarily reflect the point of view of the Harvard Kennedy School, the University of Economics Ho Chi Minh City or the Fulbright Economics Teaching Program. The authors welcome comments and suggestions on all matters of fact and interpretation.

Introduction

Globalization is usually understood as a trend increase in the cross-border flows of goods, money, people and information. Over the past two decades, scholars from a range of disciplines and perspectives have studied the relationship between globalization and economic development. This research has focused almost exclusively on international trade and capital flows, with comparatively few studies of the globalization of labour markets. The reasons are not difficult to fathom. Migration is a politically contentious issue in rich countries. While donor agencies applaud exports and inward investment, their response to rising levels of migration is more muted. Remittances to developing countries are generally seen as a good thing, but emphasis is placed on the need to reduce the incidence of illegal immigration, to prevent a 'brain drain' from the developing world and to 'support returns rather than the poverty-reducing effects of immigration.'[2]

It is less easy to explain the lack of attention paid to *internal* migration in view of the close relationship between trade, investment and *domestic* labour mobility. Manufacturing value added in low and middle income countries more than tripled between the years 1990 to 2007, and exports grew four-fold.[3] Foreign direct investment (FDI) and trade have played an important role in this industrialization process, with FDI stocks in the developing world increased from $525 billion to $4.5 trillion over the same period.[4] In 2004, developing countries accounted for 78 percent of global exports of manufactures, up from 34 percent in 1980 (Cline 2010, 203). The factories producing these goods are located in and around cities and on industrial estates, which means that most of the people working in them have moved from somewhere else.

Yet governments and aid agencies have been slow to recognize the vital link between globalization and internal mobility. Poverty reduction programs in many parts of the world have enthusiastically embraced geographical targeting methods, replete with multi-collared poverty maps that rank regions according to average levels of consumption or income. Geographical targeting is based on the assumption that poor people live in poor locations, and therefore reducing the incidence of poverty means reducing the number of poor places. This is to be achieved by investing in infrastructure and micro-credit programs in the hopes that this additional investment will convert poor into non-poor areas. This approach does not take into account the dynamic nature of poverty and the central role of labour mobility in providing people with access to stable employment, and hence a route out of poverty (see, for example, Krishna 2007).

One of the reasons that governments do not fully appreciate the important role of labour mobility is that migrants are undercounted in official statistics. Representative household surveys typically derive their sampling frame from a population census that is at least one year old. By the time the survey is carried out, people who have moved on since the census are simply dropped from the household lists. These surveys also adopt a 'cooking pot' definition of the household, in which temporary migrants are excluded because they do not regularly eat with the household or sleep under the same roof. Many of these surveys fail to account for the diversity of living arrangements of mobile people, including workers' dormitories, shared rented accommodation, squatters' settlements and urban slums (Kabeer 2000, 78).

The links between globalization, development and mobility should be exceptionally apparent in Vietnam if only because of the country's unusually rapid pace of industrialization. Growth of manufacturing value added has averaged more than ten percent per year for two decades. Average annual growth of exports has exceeded fifteen percent over the same period. The factories producing these goods are heavily concentrated in Ho Chi Minh City and Hanoi and the surrounding provinces,

[2] See, 'Migration and Development: Report of the Secretary-General,' a report presented at the 2010 meeting of the General Assembly (http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N10/470/04/PDF/ N1047004.pdf?OpenElement); also the 2009 UNDP Human Development Report entitled *Overcoming Barriers: Human Mobility and Development*.

[3] Data on manufacturing and exports were obtained from the World Development Indicators (www.databank.worldbank.org).

[4] Foreign direct investment statistics were obtained from UNCTAD (www.unctadstat.unctad.org).

attracting long term and temporary migrants from other regions. These industries have in turn have created demand for services and construction that have attracted millions of other workers.

Unfortunately, population mobility is only partially recorded in official statistics. Undercounting the mobile poor has most likely resulted in an underestimation of poverty rates in Vietnam. More importantly, the exclusion of migrants from consumption surveys and other official statistics has distorted our understanding of the *process* of poverty reduction and the close and complex relationship between mobility and development. Relying on statistical evidence from which most evidence of mobility has been expunged, development agencies and scholars have continued to focus on places rather than people, and on static indicators such as the sex of the household head and household size rather than labour market outcomes.

This paper sets out to achieve three things. First, we argue that existing measures of geographic mobility in Vietnam are partial, although researchers have been slow to recognize the implications of incomplete data in their studies of migration. Second, we identify a group of short-term migrants in the 2009 Urban Poverty Survey in Hanoi and Ho Chi Minh City that would have been left out of successive rounds of the Vietnam Household Living Standards Survey (VHLSS), and we describe the essential characteristics of this group. Finally we test the hypothesis that this group is significantly less well off than other urban dwellers using an asset index of well-being. We find that temporary migrants are indeed poorer than respondents that would have been included in VHLSS surveys. We conclude that adoption of UPS sampling strategies in VHLSS would result in a more realistic estimation of the dimensions and characteristics of urban poverty.

Measuring Mobility in Vietnam

Most poverty studies in Vietnam rely on data from the Vietnam Living Standards Surveys (conducted in 1992/1993 and 1997/1998) and Vietnam Household Living Standard Surveys (conducted in 2002, 2004, 2006 and 2008). VLSS and VHLSS are large scale, expenditure surveys designed to be statistically representative at the regional level. The sampling method adopted in these surveys is biased against migrants for a number of reasons (Pincus and Sender 2008). Most important among these is the rule that sample households must have been resident in the enumeration area for at least six months, which eliminates incoming migrants from the surveys. Because of the long lead time between the compilation of household lists and the actual interviews, the minimum residence requirement is effectively one year or longer. If households are absent at the time of the survey, enumerators are simply instructed to drop the missing household and replace it with another, non-mobile respondent. This introduces a systematic bias into the sample. In addition, individuals or households living in institutional or temporary housing are excluded. Factory workers living in dormitories or rented accommodation or construction workers living on building sites are by definition omitted from the sample.

The use of an outdated sampling frame means that enumeration areas have become increasingly unrepresentative of the population with each passing year. The 2002 to 2008 VHLSS sample from enumeration areas identified on the basis of the 1999 Population Census. Many of the enumeration areas classified as rural in 1999 were in fact highly urbanized by 2008.[5] Peri-urban areas that have sprung up around the edges of major cities are under-sampled since these communes and wards grew rapidly after the completion of the 1999 census.

Individual migrants are dropped from resident households if they have not lived with the household for six of the last twelve months. Thus, a young man or woman who has migrated to an

[5] In fact, many of the EAs classified as rural in 1999 were already urban at that time. In Vietnam localities are classified as urban or rural based on administrative criteria that may not reflect demographic or economic conditions. As a result, many of the EAs classified as rural in VHLSS are highly urbanized, which means that in all likelihood the income gap between actual rural and urban areas is much greater than VHLSS data indicate (Pincus and Sender 2008).

industrial zone but is still listed in his or her parents' *ho khau* will not be included in the VHLSS sample. The sample of migrants in VHLSS is therefore largely confined to individual household members that have left their location of origin temporarily or who have lived with the household at least six months during the previous year. VHLSS also asks questions about remittances, but does not specify whether the remittances have been sent by migrants or other relatives or friends.

A major obstacle to improved coverage of migrants in sample surveys in Vietnam, including VHLSS, is the household registration system or *ho khau*. The system was established in urban areas of Democratic Republic of Vietnam in 1955 and extended to rural areas in 1960. The immediate purpose was to channel migration towards 'new economic zones' in the uplands and away from cities and border regions (Hardy 2003, 210). Every household was required to maintain a registration book listing all members of the household. Under central planning, possession of a *ho khau* was needed to access food rations and other state benefits. During the reform period, the allocation of rural and urban land use rights was tied to household registration. Prior to reform of the system in 2007, households fell into one of four registration categories depending on whether they lived where they had been registered.[6] Individuals who lived for thirty days or more in a location other than their registered district were required to report to the local police to obtain permission for temporary residence. To obtain permanent residence in a new location, migrants had to be able to demonstrate three years of uninterrupted employment and residence at the destination. Home ownership at the destination was a requirement for permanent resident until 2005, a provision that effectively ruled out official transfers of residence for nearly all migrants.

The *ho khau* system is no longer an effective obstacle to migration, since people now procure their subsistence on the market rather than through government rations. However, it does raise the cost of mobility by adding administrative hurdles and rendering migrants ineligible for subsidized social services. Household registration has also had a lasting impact on the collection official statistics. Sampling methods adopted for large scale surveys exclude temporary residents and omit locations where migrants often live from the sample of enumeration areas. The samples in VLSS and VHLSS consist almost entirely of permanent residents of the locations surveyed (KT1), and contain virtually no temporary residents.

A new Law on Residence was enacted in 2006 and came into effect in 2007. The revised law simplified the *ho khau* system and reduced the residency requirement from three years to one for households applying for permanent residence. In addition, applicants no longer had to prove that they had stable employment for the duration of their stay (UNFPA 2010, 19). This will mostly help employees in the formal sector who need to move their residence to buy property or enrol children in school. The administrative obstacles to changing residence are still considerable, and beyond the means of most mobile wage workers. Migrants still need approval from the authorities at their location of origin to apply for residence at their destination.

Decennial population censuses provide some information on migration. Respondents are asked to report where they lived at a specific date five years before the survey. According to the 2009 census, 6.6 million people (about eight percent of the population) changed residence during the period 2004-2009. No attempt is made in the census to measure short term migration or the relocation of individuals who had moved more than five years before the census was carried out.

The exclusion of most migrants from the household surveys and the absence of data on short-term migration in the census have contributed to a skewed understanding of the relationship between

[6] A KT1 *ho khau* meant that the household lived where it was registered, and was therefore entitled to buy land use rights, register children in school and use local health clinics. KT2 registration included only households who had a KT1 registration in another district in the same province. They could buy land but could not access social services. KT3 status was for people moving between provinces. They could also buy land but could not access local schools unless space was available. KT4 registration was a temporary residence permit for individuals (UNFPA 2010, 18).

mobility and poverty reduction in Vietnam.[7] In the absence of relevant data, scholars and policy makers have tended to fall back on simple theories and have failed to challenge the naïve assumptions underlying them. Since Todaro (1970), economists have viewed migration through the lens of marginal utility, imagining an uncomplicated trade-off between the risk of temporary unemployment in the city and the reward of higher wages or profits from self-employment. Wages are higher in the city, and if an individual or household can finance the search period then migration is welfare enhancing. While this scenario probably does describe the decisions of many better-off migrants, particularly those with secondary and tertiary educational qualifications and some link to formal sector employment, it is largely irrelevant to the poor, for whom 'push' factors like indebtedness, the casualisation of local labour markets, the concentration of landholding, and a strict gender division of labour in rural areas are the driving forces behind the decision to move. The view of migration as a portfolio choice exercise is innocent of the degree of compulsion to which the poor are subject, and their limited options. The high but largely unmeasured incidence of rural to rural migration is symptomatic of the extent to which the migration literature has focused on what is apparent in the data rather than what is happening on the ground.[8] Closer examination of the real conditions facing migrant workers in industrial zones in and around Ho Chi Minh City would quickly disabuse researchers of comfortable assumptions regarding the attractiveness of employment in labour intensive industries. For example, a exposé in the Vietnamese press described horrific conditions in industrial zones such as forced overtime, cramped living conditions, inedible food and workers forced to collect recyclable bottles on the street after work because they cannot survive on their wages. Whether conditions in the industrial estates is superior to those that workers have left behind is of less importance than the limited range of options available to them—particularly to the young women—either in the city or countryside.[9]

Underlying these assumptions—consciously or otherwise—is an image of the Vietnamese economy as divided into traditional/rural sector and modern/urban sectors, with labour flowing from rural to urban, from lower to higher productivity occupations and from the informal to the formal sector. These dualisms dissolve with greater familiarity with labour market conditions in specific locations and industries.

This partial grasp of the nature of migration in Vietnam is evident in recent studies. For example, Nguyen Thu Phuong et al. (2008) conclude on the basis of their analysis of VHLSS 2004 data that migration increases inequality in sending locations and that both the very poor and very well off are less likely to migrate. Although they recognize that new arrivals and unregistered households are excluded from the VHLSS sample, they nevertheless maintain that '[t]he representativeness of the survey is a big advantage as it allows us to study the determinants of migration by comparing the characteristics of migrants and non-migrants in the sending rather than destination areas' (Nguyen *et al.* 2008, 4). They fail to mention that households that have left the sending area are omitted from their analysis, with the result that their sample of 'migrants' is limited to individuals who were recorded as household members in 2002 and are now absent and recent migrants who are still listed as household members.

De Brauw and Harigaya (2007) use a module in VLSS 1992/93 and 1997/98 that asked respondents about seasonal migration. Nowhere in the article do the authors mention that temporary

[7] There is in fact a long tradition in Vietnam of undercounting migrants, particularly casual wage workers. Hardy cites the Guernut Commission, the investigation of colonial affairs initiated by the French Popular Front government in 1936 and implemented (partially) after its demise in 1938. Despite its reformist intentions, according to Hardy, the commission avoiding interviewing the truly poor, in focused instead 'only those folk who were settled, established members of the community' (Hardy 2003, 106).

[8] While absent from the scholarly literature, newspaper reports have periodically given us a glimpse of the scale of rural to rural migration. In a recent example, Đạng Trung Kiên (2010) describes conditions for the four to five thousand wage workers, including children and the elderly, in cut flowers and vegetable production that he encountered in the Prenn Pass outside of Dalat.

[9] Breman (1996, Chapter 2) provides a detailed critique of standard migration models using evidence from India.

residents are excluded from the sample. They define seasonal migration as 'household members who left the household for part of the year to work, but are still considered household members' (2007, 434). Unsurprisingly, given this narrow definition of migration, the authors estimate that only 1.9 percent of the sample consisted of 'migrant households' in 1993 and 10.6 percent in 1998. They found virtually no migration from upland locations, which they implausibly attribute to 'underdeveloped transportation links' rather than sampling bias (2007, 434). Having excluded mobile households (as opposed to household members), recent arrivals, and mobile individuals who do not return or who are gone for longer than six months, De Brauw and Harigaya conclude that '[m]igrants are typically young, relatively well-educated men when compared with the rest of the rural population' (*Ibid*.). This, too, is unsurprising given that an unreported proportion of 'migrants' were students in secondary and tertiary education. The authors' observation that migration increased the Gini coefficient from 0.28 to 0.281 is a valiant but ultimately absurd attempt to wring meaningful conclusions out of partial and misleading data (*Ibid*., 443).

Phan and Coxhead (2010) rely on the question in the 1989 and 1999 census that asks respondents whether their place of residence had changed during the five year period prior to the census. The authors restrict their definition of 'migrants' to people who were at least five years of age at the time of the last census who had moved over the previous five years (2010, 105). In other words, their sample consists of the subset of permanent migrants that left their place of origin no more than five years before the census, but excludes temporary and circular migrants. They use provincial level income data to estimate the impact of migration on interprovincial inequality, and find that people move from poorer to richer provinces. Permanent migration to Ho Chi Minh City reduces inter-provincial inequality, while migration to Hanoi tends to increase it. Presumably many migrants to Hanoi captured in the census are young people entering secondary or tertiary education, or public sector employees.

These studies concentrate on sub-groups of the population of migrants in Vietnam for which data can be obtained in existing surveys. To the extent that the authors explicitly recognize the patchiness of the evidence, they can help to fill in some specific gaps in our knowledge about mobility and the relationship between migration and poverty. Too often, however, the fact that the evidence is partial, and systematically omits important migrant groups—particularly casual wage workers—is left unsaid, or is relegated to the footnotes. The result is that findings that relate to specific groups are presented as if they describe the entire migrant population, which in the end serves to obfuscate rather than clarify the complex relationship between mobility and poverty.

The Urban Poverty Survey

In an effort to obtain more accurate information about urban migrants, the government's General Statistics Office, with support from the United Nations Development Program (UNDP), conducted an additional survey in Hanoi and Ho Chi Minh City in 2009.[10] The 'Urban Poverty Survey' (UPS) adopted several methodological innovations designed to improve coverage of migrants and collect relevant information about their living conditions and survival strategies. This section describes these innovations and reviews the impact of their adoption on the UPS sample.

The first innovation introduce in the UPS was the inclusion of all residents regardless of temporary or permanent registration status (*ho khau*). No minimum period of residence was required for inclusion in the sample. Even households and individuals who had just arrived in the location shortly before the implementation of the survey could be included.

Second, UPS adopted a new definition of the household. Like VHLSS, households in UPS are defined in the first instance in terms of shared resources. People who live together and pool resources are considered to be a household. Unlike VHLSS, UPS allows households to define themselves. For

[10] UNDP Project 00071642 'Support for In-Depth Assessment of Urban Poverty in Hanoi and Ho Chi Minh City.

example, absent people are considered household members if they are listed as such by present household members. By way of contrast, VHLSS would exclude these individuals from the household if they have not been physically present for six of the previous 12 months. This change is important because it ensures that more detailed information about absent household members is collected. Under the VHLSS methodology, income from absent household members would be classified as remittances, and the source of the income would not be identified. A potential problem is that allowing households to define themselves could introduce inconsistency into the sample, given that some households would consider absent relatives to members and some would not. Resource flows from the people not considered to be household members would be classified as remittances rather than household income.

Third, UPS allows for single member households. Individuals who share accommodations but do not pool resources are defined as separate one-person households. This innovation enables UPS to capture a wide range of individuals who are excluded from VHLSS, for example workers sharing rented accommodation in dormitories or hostels and construction workers living on construction sites. VHLSS does not survey these individuals, as they are considered to be members of households elsewhere (even if they are not eligible to be included in those households according to VHLSS rules). The sampling method of the UPS explicitly includes single person households to ensure that the survey obtained sufficient information about these people, who are mainly short-term migrants.

Fourth, and related to the provision for single member households, UPS explicitly includes people living in temporary accommodations or who have no regular shelter at all, such as the homeless (sleeping under bridges or other public places), squatters living in temporary dwellings and workers living in workshops, restaurants and shops. This provision increases the likelihood that UPS will capture migrants that are left out of VHLSS household lists.

Fifth, domestic servants are included in households but listed and interviewed separately to obtain information about their living and employment conditions. Since domestic servants are not included in families' *ho khau*, they are generally dropped from VHLSS households. Hence, information on this important source of wage employment for poor women is missing from VHLSS.

UPS sampling proceeded in two stages. In the first stage, eighty enumeration areas (EAs) were selected in each city based on data from the 2009 Population Census using the Probability Proportional to Size method. To ensure that the EAs and household lists were accurate and up to date, the selected EA boundaries were checked and household lists were recompiled in each EA. After receiving a map of the EAs, enumerators visited them to identify any inconsistencies in EA boundaries, to update the maps and re-number inhabited houses and to add to the list any other areas where people were living, for example public places. The enumerators made lists of households and individuals based on these new ordinal numbers. Enumerators were required to meet each individual living in the EA in person rather relying on landlords and other informants. Each resident was asked if he or she would still be present in the EA after ten days, and if he or she was a student. Those who would no longer be present after ten days and students were dropped from the lists.[11]

In the second stage, 11 households (including domestic servants) and 11 individuals were randomly selected from each EA. In total, the sample consists of 3349 households (including single member households, of which 1,637 are from Hanoi, and 1,712 from HCMC.

Table **1** presents some details of the UPS sample. Although only a small number of respondents are recent arrivals to Hanoi and Ho Chi Minh City, one third of respondents in the latter city and nearly one quarter in the former were not registered at the time of the survey. Only 12 percent claim to have been at their current location for less than six months, which suggests that even relatively long-term migrants do not obtain official registration in the city.

[11] The need to drop residents who would no longer be present at the time of the survey is self-evident. However, the rationale for dropping students is unclear.

Table 1: The UPS Sample Description

	Hanoi	HCMC	TOTAL
Number of households	1,637	1,712	3,349
Of which, households with more than 1 member	839	836	1,675
Of which, households with one member	798	876	1,674
Number of individuals	4,197	4,011	8,208
Of which, men	2,123 (51%)	1,959 (49%)	4,082 (50%)
Of which, women	2,074 (49%)	2,052 (51%)	4,126 (50%)
Average Age (years)	31.17	29.75	30.46
Men	30.37	28.64	29.5
Women	31.99	30.81	31.4
Number of individuals living < 6 months at current place	574 (14%)	413 (10%)	987 (12%)
Men	339 (16%)	255 (13%)	594 (15%)
Women	235 (11%)	158 (8%)	393 (10%)
Number of 'new comers', moving to city < 6 months	146 (3%)	133 (3%)	279 (3%)
Men	85 (4%)	82 (4%)	167 (4%)
Women	61 (3%)	51 (2%)	112 (3%)
Number of individuals with registration	3,229 (77%)	2,630 (66%)	5,859 (71%)
Number of individuals without registration	968 (23%)	1,381 (34%)	2,349 (29%)
Average length of stay in city (months, until Dec 2009)*	54.14	66.62	
Average length of stay in current location (until Dec 2009) *	21.01	28.78	

*For unregistered residents.

Many of these respondents would have been excluded under the sampling methodology adopted In VHLSS as discussed above. VHLSS excludes households that have not been resident in the enumeration area for at least six months prior to the survey. In addition, single member households are generally not included as it is assumed that these individuals normally reside elsewhere. As a result, the number of migrants (registered and unregistered under the provisions of the Residence Law) is small in VHLSS. Most importantly, VHLSS is sampled from lists compiled by local authorities who do not consider temporary migrants to be local residents. Since the sampling frame of VHLSS dates from the 1999 census, entire neighbourhoods of the city in which migrants congregate may be

missed out. The long period of time between the compilation of household lists and the implementation of the survey also reduces the number of migrants that can be included in the sample.

The main differences between the sampling methods used in VHLSS and UPS are summarized in Table 2. Whereas VHLSS excludes people from the sample who have not been resident in the locality for at least six months, UPS only requires that respondents remain in the area over a ten day period (between the compilation of household lists and the implementation of the survey). VHLSS includes very few unregistered migrants. Only 48 unregistered individuals were included in the VHLSS sample from Hanoi out of total sample of 4,820. The corresponding figures for Ho Chi Minh were 243 unregistered migrants out of a total sample of 6,325. Similarly, single member households are largely absent from the VHLSS sample in Hanoi and Ho Chi Minh City. Unlike VHLSS, UPS instructed enumerators to include people living at their workplace, in institutional housing, in substandard housing and the homeless in household lists.

Table 2. Sampling Differences between VHLSS and UPS

Sampling Criteria	*VHLSS 2008*	*UPS 2009*
Mobile migrants (less than 6 months at current place)	No	Yes
Unregistered migrants	Yes, but very few[1]	Yes
Single-member households	Yes, but very few[2]	Yes
Students	Yes	No
Residents in dormitories, construction sites, workshops, under bridges	No	Yes

1. Only 48 in Hanoi (out of a sample of 4820 individuals) and 243 in HCMC out of a sample of 6325 individuals.
2. Only 43 single-member households in Hanoi, and 75 in HCMC.

The impact of these differences in sampling methodology is apparent in the age structures of the Hanoi and Ho Chi Minh City samples in the two surveys. As shown in Figures 1 and 2, the most striking difference between the surveys can be found in the 20 to 29 year age groups. While these groups make up about 17 percent of the VHLSS sample, they comprise 27 percent in UPS. This result is all the more remarkable given that UPS explicitly omits students from the sample. UPS has identified a large group of young migrants in the two cities that are missing from VHLSS. Figure 3 presents the national gender and age structure from the 2009 Population Census.[12] Comparing the census figures with the UPS and VHLSS, we see that VHLSS also under-samples the 10-19 year old group.

[12] Unfortunately, the gender and age distribution for Hanoi and Ho Chi Minh City from the 2009 Population Census was not yet available.

Figure 1. Gender and age structure, VHLSS 2008, Hanoi and HCMC

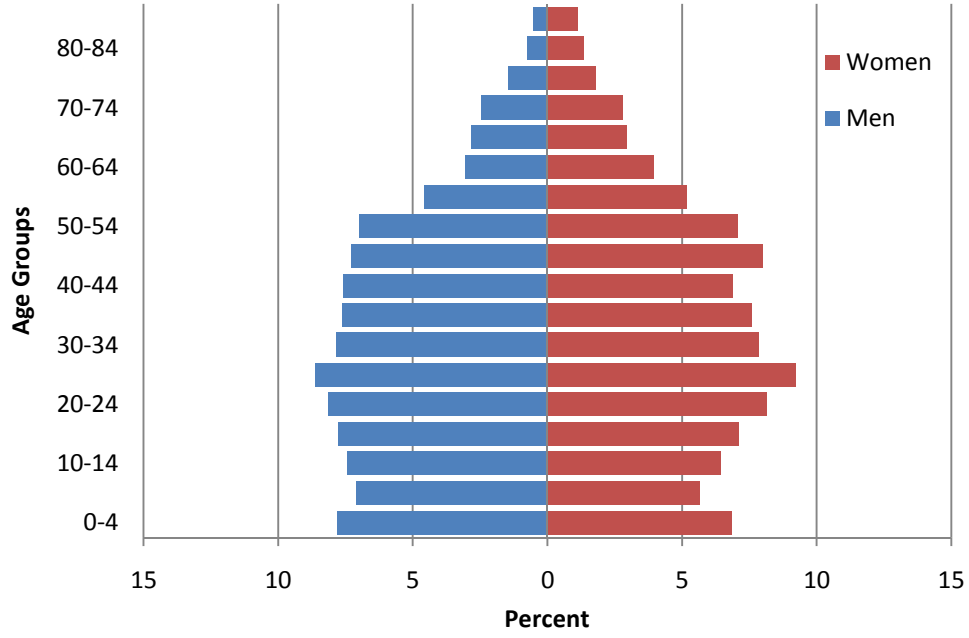


Figure 2. Gender and age structure, UPS 2009, Hanoi and HCMC

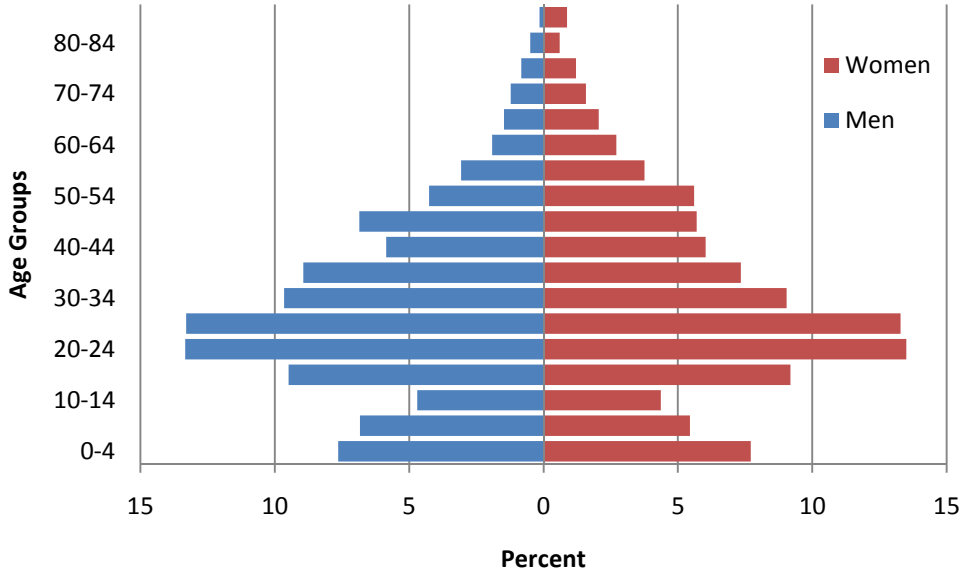
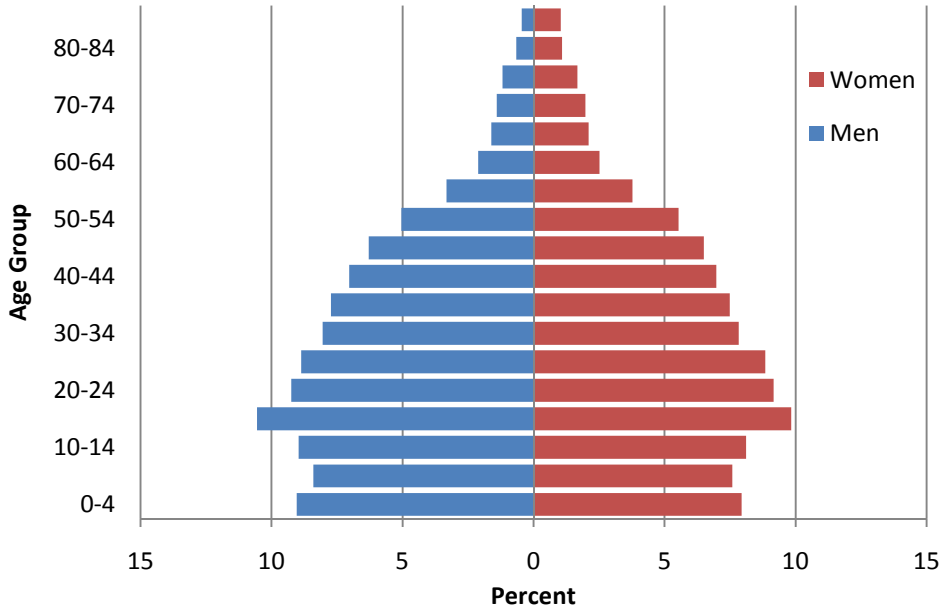


Figure 3. Gender and Age Structure, 2009 Population Census, Vietnam



Migrants' Living Standards in Hanoi and Ho Chi Minh City

This paper exploits the differences in sampling methods between VHLSS and UPS to identify a group of migrants and compare their characteristics and living conditions to non-migrants in the sample. We divide the UPS sample into four groups based on length of residency in Hanoi or Ho Chi Minh City and registration status. We then compare the characteristics of these groups. We find that migrants are more likely to be wage employees living in shared accommodation and in single person households than long term residents. On the basis of an asset index, we conclude that migrants are on average poorer than long-term residents.

In the following analysis, we divide the UPS into four groups:

1. **Short-term residents with no registration (*ho khau*)**: People who have lived in their current residence for less than six of the last 12 months, and do not have a *ho khau* in Hanoi/HCMC.
2. **Short-term residents with local registration**: People who have lived in their current dwelling for less than six of the past 12 months, but who hold a *ho khau* registration in Hanoi/HCMC.
3. **Long-term residents with no registration:** People who have lived in their current dwelling for over 6 months of the past 12 months, but do not have a *ho khau* in Hanoi/HCMC.
4. **Long-term residents with local registration:** People who have lived in the current dwelling for more than 6 of the past 12 months, and who hold a *ho khau* registration in Hanoi/HCMC.

Our 'missing migrants' story is essentially concerned with Group 1, short-term residents with no local registration status. In UPS there are 399 individuals in Hanoi and 323 in HCMC who have

stayed at the current residence for less than six months without possessing a *ho khau* in the city. Among these, the number of 'new comers' or people who arrived for the first time in Hanoi or Ho Chi Minh City less than six months before the survey was 146 and 133, respectively. Thus, short-term migrants are not necessarily new arrivals from the countryside as is often assumed in the migration literature. On average, short term migrants had first come to the city four years prior to the survey in Hanoi and three years in the case of Ho Chi Minh City. Although this figure conceals considerable variation within the group, it also signals an important fact about casual labour markets. Migrants move frequently within cities, within rural areas and between cities and rural areas as income earning opportunities arise and disappear.

Of the four groups, Group 1 contains the highest proportion of men, and the group consists almost entirely of single-person households (Tables 3 and 4). The average age of short-term unregistered migrants was not significantly different from that of other groups with the exception of long term registered respondents (Group 4).

Unregistered migrants, both short and long term, were less likely to have completed senior high school than members of the other three groups (Tables 5 and 6). Most had completed primary school, and about one-third of Group 1 respondents across the two cities had completed lower secondary school. It is noticeable in both cities that the unregistered short and long-term groups show a similar pattern of educational attainment, which is lower than that recorded by registered individuals, both short and long-term. This is most clear in relation to their experience of higher education. As noted below, registered individuals are more likely to be employed in stable or 'formal sector' employment. One common characteristic across all groups is that few respondents have received vocational or technical training.

Table 3. Four UPS groups, Hanoi

	Short-term, non-registered (1)	Short-term, registered (2)	Long-term, non-registered (3)	Long-term, registered (4)
Number of Individuals	399	175	569	3,054
Men	245	94	287	1,497
	(61%)	(54%)	(50%)	(49%)
Women	154	81	282	1,557
	(39%)	(46%)	(50%)	(51%)
Number of one-person households	344	22	378	54
Average Age	27.66	22.48	27.45	32.83
Men	28.00	22.53	26.97	31.91
Women	27.10	22.42	27.94	33.71
Average duration since first time moving to the city until Dec 2009 (months)	46.11		59.83	
Number of people who moved to the cityless than 6 months ago	146			

Table 4. Four UPS Groups, HCMC

	Short-term, non-registered (1)	Short-term, registered (2)	Long-term, non-registered (3)	Long-term, registered (4)
Number of Individuals	323	90	1,058	2,540
Men	204	51	518	1,186
	(63%)	(57%)	(49%)	(47%)
Women	119	39	540	1,354
	(37%)	(43%)	(51%)	(53%)
Number of one-person households	235	16	524	101
Average Age	23.91	20.88	26.60	32.12
Men	24.21	22.16	26.08	30.80
Women	23.39	19.21	27.09	33.27
Average duration since first time moving to the city until Dec 2009 (months)	38.28		75.80	
Number of people who moved to the city less than 6 months ago	133			

Table 5. Highest level of education, Hanoi

	Short-term, non-registered (1)	Short-term, registered (2)	Long-term, non-registered (3)	Long-term, registered (4)
No. of observations	394	132	551	2899
No qualifications (%)	4.57	7.58	4.54	16.66
Primary (%)	10.41	5.3	9.07	11
Lower Secondary (%)	37.06	9.85	27.4	23.87
Higher Secondary (%)	33.76	42.42	36.84	28.73
2-year college (%)	3.55	3.03	6.72	1.83
University (%)	10.66	28.79	14.88	15.8
Master (%)		3.03	0.54	1.52
PhD (%)				0.59
Highest Level of Vocational & Technical Training				
No vocational training (%)	82.49	78.03	76.95	82.96
Some vocational training (%)	17.52	21.97	23.04	17.05

Table 6. Highest level of education, HCMC

	Short-term, non-registered (1)	Short-term, registered (2)	Long-term, non-registered (3)	Long-term, registered (4)
No. of observations	309	63	1028	2430
No qualifications (%)	11.65	23.81	14.59	23.66
Primary (%)	32.36	14.29	25.19	22.26
Lower Secondary (%)	29.45	23.81	31.81	22.14
Higher Secondary (%)	19.74	22.22	20.43	20.74
2-year college (%)	1.29	1.59	2.63	1.52
University (%)	5.5	14.29	5.25	9.42
Master (%)			0.1	0.21
PhD (%)				0.04
Highest Level of Vocational & Technical Training				
No vocational training(%)	89.32	90.48	88.81	90.45
Some vocational training(%)	10.67	9.52	11.18	9.55

Information on housing conditions is given in Tables 7 and 8. Here the differences between registered and unregistered individuals come out most clearly. In both Hanoi and HCMC, unregistered individuals are more likely to live in shared rooms or dormitories, and many short-term unregistered migrants live at their place of work or in other improvised accommodation. Both short and long-term registered residents are more likely to live in single family dwellings. Very few unregistered individuals—either short-term or long-term residents—own their own homes, which his true by definition, since home ownership is one of the criteria for registration. More than half of unregistered individuals (inclusive of both short-term and long-term residents) live in shared accommodation or dormitories.

Nearly all non-registered individuals were active in the labour force over the past year, signalling the small number of dependents within the non-registered category. Short-term migrants without registration status worked longer hours, earned lower incomes, although the differences among the groups are not large (Table 10). Unregistered short-term migrants are more likely to hold a second job that is nearly as time-consuming as the first job, reflecting the tendency toward occupational multiplicity among casual and short-duration workers.

Large differences between registered and unregistered individuals are apparent in the summary statistics on type of employment presented in Tables 10 and 11. Unregistered individuals are less likely to be self-employed, and thus more likely to work for wages. Short-term unregistered respondents were the least likely to classify their occupations as skilled employment, and also the least likely to possess labour contracts. One of the main differences between registered and unregistered *short-term* residents is that the former are much more likely to be engaged in white collar or skilled labour. Skilled, formal sector work implies work contracts and in some cases benefits such as housing, which enables these individuals to obtain residency status in the city. Long-term registered respondents were also more likely to be employed in skilled or white collar jobs or to be self-employed than long-term non-registered respondents. Registered respondents, especially long-term residents, are also more likely to have state sector jobs. Only short-term unregistered migrants, and long-term registered residents, were involved in agriculture, the former as wage labourers and the latter as employers and labourers.

Table 7. Housing, Hanoi

	Short-term, non-registered (1)	Short-term, registered (2)	Long-term, non-registered (3)	Long-term, registered (4)
Total living area (m2)	23.35	71.79	27.44	77.26
Type of Household Dwelling				
Detached Unit Occupied by One	106	138	179	2584
Household	(31%)	(80%)	(34%)	(85%)
Detached Unit Occupied by	46	3	76	205
Several Households	(13%)	(2%)	(14%)	(7%)
Separate Apartment	12	16	31	226
	(4%)	(9%)	(6%)	(7%)
Apartment Shared with Several	0	0	3	4
HH	(0%)	(0%)	(1%)	(0%)
Room in a Larger Unit	14	6	14	15
	(4%)	(3%)	(3%)	(0%)
Shared Room or Dormitory	**110**	**8**	**203**	**17**
	(32%)	**(5%)**	**(39%)**	**(1%)**
Improvised/*Leu Lan*	**53**	**2**	**20**	**2**
	(16%)	**(1%)**	**(4%)**	**(0%)**
Ownership of This Dwelling				
Owned by HH Member(s)	28	108	62	2810
	(8%)	(62%)	(12%)	(92%)
Jointly Owned with Family	6	2	9	67
Members not in the HH	(2%)	(1%)	(2%)	(2%)
Rented	144	47	340	111
	(39%)	(27%)	(64%)	(4%)
Borrowed	54	11	74	38
	(15%)	(6%)	(14%)	(1%)
Other	**138**	**7**	**48**	**28**
	(37%)	**(4%)**	**(9%)**	**(1%)**

Table 8. Housing, HCMC

	Short-term, non-registered (1)	Short-term, registered (2)	Long-term, non-registered (3)	Long-term, registered (4)
Total living area in m2	27.43	75.88	32.1	85.44
Type of Household Dwelling				
Detached Unit Occupied by One	46	55	323	1984
Households	(15%)	(62%)	(32%)	(78%)
Detached Unit Occupied by Several	43	11	122	283
Households	(14%)	(12%)	(12%)	(11%)
Separate Apartment	3	2	21	118
	(1%)	(2%)	(2%)	(5%)
Apartment Shared with Several HH	0	0	2	22
	(0%)	(0%)	(0%)	(1%)
Room in a Larger Unit	11	2	45	22
	(4%)	(2%)	(4%)	(1%)
Shared Room or Dormitory	**176**	**19**	**489**	**106**
	(58%)	**(21%)**	**(48%)**	**(4%)**
Improvised/*Leu Lan*	**26**	**0**	**9**	**0**
	(9%)	**(0%)**	**(1%)**	**(0%)**
Ownership of This Dwelling				
Owned by HH Member(s)	15	54	162	2136
	(5%)	(60%)	(16%)	(84%)
Jointly Owned with Family	0	2	7	94
Members not in the HH	(0%)	(2%)	(1%)	(4%)
Rented	181	25	622	204
	(57%)	(28%)	(60%)	(8%)
Borrowed	14	4	37	34
	(4%)	(4%)	(4%)	(1%)
Other	106	5	216	72
	(34%)	(6%)	(21%)	(3%)

Table 9. Labour force participation

	Short-term, non-registered (1)	Short-term, registered (2)	Long-term, non-registered (3)	Long-term, registered (4)
HANOI				
No. of observations	392	127	538	2743
% working for income*	94.90	65.35	91.64	60.41
HCMC				
No. of observations	304	61	1001	2301
% working for income*	95.72	65.57	90.01	60.06

***In cash or in kind over previous 12 months**

Table 10. Most time-consuming work over past 12 months, Hanoi

	Short-term, non-registered (1)	Short-term, registered (2)	Long-term, non-registered (3)	Long-term, registered (4)
Position in most-time consuming job				
Employer/Owner	2	7	15	85
	(1%)	(8%)	(3%)	(5%)
Self-employed	10	5	41	396
	(3%)	(6%)	(8%)	(24%)
Wage/Salary Worker	344	69	430	1050
	(93%)	(83%)	(87%)	(63%)
Family business	13	2	6	124
	(4%)	(2%)	(1%)	(7%)
Type of Work				
Professional, white-collar, or skilled	102	51	223	875
	(27%)	(63%)	(45%)	(54%)
Manual Labour and Other Related	149	20	120	241
Jobs	(40%)	(25%)	(24%)	(15%)
Assembly and Other Operations	16	4	48	135
	(4%)	(5%)	(10%)	(8%)
Unskilled	105	6	100	381
	(28%)	(7%)	(20%)	(23%)
Industry in which this job belongs				
Agri/Forestry/Fishery	18	1	3	221
Industry/Construction	194	31	201	446
Trade/Services	160	51	289	990
Economic Sector to which Job Belongs				
State/collective	22	32	51	548
Private	94	17	170	300
Foreign	27	13	50	94
Household/Individual	229	21	225	721
Type of Contract for This Job				
Term-defined contract	82	23	164	275
	(22%)	(28%)	(33%)	(17%)
Unspecified duration contract	28	38	81	606
	(8%)	(46%)	(17%)	(37%)
No contract	261	22	245	773
	(70%)	(27%)	(50%)	(47%)
Average number of hours/day	*8.69*	*8.35*	*8.83*	*7.64*
Average number of days/week	*6.47*	*5.90*	*6.32*	*5.87*
Average wage or salary/month ('000 VND)	*2,765*	*3,612*	*2,835*	*3,652*
No. of observations	347	69	431	1052

Table 11. Most time-consuming work over past 12 months, HCMC

	Short-term, non-registered (1)	Short-term, registered (2)	Long-term, non-registered (3)	Long-term, registered (4)
Position in most-time consuming job				
Employer/Owner	3	1	18	77
	(1%)	(3%)	(2%)	(6%)
Self-employed	23	10	114	392
	(8%)	(25%)	(13%)	(28%)
Wage/Salary Worker	244	29	741	846
	(86%)	(73%)	(83%)	(61%)
Family business	13	0	20	61
	(5%)	(0%)	(2%)	(4%)
Type of Work				
Professional, white-collar, or skilled	81	19	297	781
	(28%)	(49%)	(33%)	(57%)
Manual Labour and Other Related	88	7	203	207
Jobs	(30%)	(19%)	(23%)	(15%)
Assembly and Other Operations	66	9	240	200
	(23%)	(23%)	(27%)	(15%)
Unskilled	56	4	161	178
	(19%)	(10%)	(18%)	(13%)
Industry in which this job belongs				
Agri/Forestry/Fishery	20	0	5	67
Industry/Construction	179	17	515	456
Trade/Services	92	23	381	859
Economic Sector to which Job Belongs				
State/collective	15	4	38	231
Private	110	19	332	322
Foreign	35	1	154	121
Household/Individual	131	16	377	708
Type of Contract for This Job				
Term-defined contract	68	12	305	286
	(24%)	(30%)	(34%)	(21%)
Unspecified duration contract	15	6	69	261
	(5%)	(15%)	(8%)	(19%)
No contract	204	22	524	832
	(71%)	(55%)	(58%)	(60%)
Average number of hours/day	8.68	8.30	8.96	8.11
Average number of days/week	6.35	6.18	6.36	6.16
Average wage or salary/month ('000 VND)	2,407	3,278	2,517	3,194
No. of observation	255	29	750	854

The four groups examined here are not homogeneous. Considerable variation can be detected within each group, as one would expect given the tremendous diversity of jobs, neighbourhoods, circumstances and levels of living in large cities such as Hanoi and Ho Chi Minh City. Nevertheless, some patterns do emerge. Short-term unregistered migrants are more likely to live in single-person households, in other words, without dependents and other family members, and they are more likely

to be men. They tend to live in shared rooms, dormitories or in improvised situations, for example sleeping at their place of work. They are very unlikely to own the dwelling in which they live. Most have completed lower secondary school but relatively few have progressed beyond the ninth year of schooling. They are more likely to work as unskilled wage labourers without labour contracts, and very few are self-employed. They work for private and household businesses on the whole, and rarely for the state sector. Registered respondents, both long and short-term, are more likely to be skilled workers or self-employed, and to possess labour contracts when they work for salaries or wages.

An Asset Index of Well-Being

Short-term unregistered migrants (Group 1) are missing from successive VHLSS samples. Having identified some of the characteristics of this group, our next task is to compare their levels of living with the other three groups formed from the UPS sample. If Group 1 is significantly poorer than the other groups, it is reasonable to conclude that VHLSS and other surveys that omit unregistered migrants underestimate the level of urban poverty in Vietnam. This has broad implications for the study of the extent of poverty in urban Vietnam and for policies to help individuals and families improve their living standards.

In order to test the hypothesis that Group 1 is poorer than the rest of the UPS sample, we compiled an asset index based on the ownership of durable goods, condition of the respondents' dwellings and educational qualifications. Asset indices have been shown to be accurate predictors of well-being (see Sahn and Stifel 2003 and Filmer and Pritchett 2001 for widely cited applications). They do so without the complications normally associated with income and expenditure data. Income data are notoriously difficult to collect from people who do not earn a regular wage, for example farmers, the self-employed and casual wage workers who have multiple jobs. Income is also known to fluctuate seasonally and for less predictable reasons, and these variations weaken the relationship between reported income and living standards. Consumption varies less than income, but estimating expenditure requires the collection of detailed information on spending from every member of the household. Long questionnaires require considerable effort on the part of enumerators and respondents but the information elicited is often of dubious quality (Browning, Crossley and Weber 2003). Yet shorter questionnaires that aggregate expenditure into broad categories tend to underestimate consumption, and often by a considerable margin (Pradhan 2001). Moreover, spending tends to fluctuate, not only with income but with the seasons (for example, school clothing), in response to life events (wedding and funerals) and unpredictably (health expenditures). These variations attenuate the link between spending and household welfare. Both income and consumption indicators require the application of location specific deflators, which may not be available or which are of poor quality. Substitution of regional or national deflators leads to errors as local price changes frequently vary considerably from larger regional or national trends.

Asset indices tend to be more stable than expenditure. Richer people tend to own more durable goods and live in better houses than poorer people. Moreover, the data are more accurate because they can be visually verified by enumerators. They do not require long questionnaires or price deflators. Asset indices reflect longer term trends in individual and household welfare given that the accumulation of durable goods takes place over an extended period of time. They are therefore useful for measuring living standards but do not provide information about changes in household behaviour in the short run (Filmer and Pritchett 2001).

Following Vyas and Kumaranayake (2006), we perform a principal component analysis (PCA) to construct our asset index. As noted above, the asset index consists of three categories: durable goods (for example, motorcycles, televisions and refrigerators), condition of the house (access to piped water and electricity, crowding, and building materials) and educational qualifications. These variables are on their own good predictors of living standards: as households and individuals

become wealthier they acquire durable goods, live in nicer places and invest in their own and their children's education.

As pointed out in Vyas and Kumaranayake (2006), PCA works best when variables are correlated, and when there is a variation across household asset distribution. Variables with low standard deviations would carry a low weight. For example, an asset which all households own or which no household owns (zero standard deviation) would be assigned a zero weight, and would not contribute to differentiation of well-being in the index.

Table 12 presents means, frequencies and standard deviations for the durable goods components of our analysis. The probability of ownership is sorted from high to low. For example, almost everyone owns a mobile telephone, and almost no one owns a car. No attempt is has been made to adjust for the quality of the goods in question.

Table 12. Probabilities of durable goods ownership

Durable Assets	Obs	Mean	Std. Dev.
Mobile telephone	8208	0.900	0.300
Electric cooker, rice cooker, pressure cooker	8208	0.854	0.353
Motorbikes	8208	0.823	0.382
Colour T.V set	8208	0.821	0.383
Gas cooker	8208	0.806	0.396
Refrigerator, Freezer	8208	0.633	0.482
Video player	8208	0.609	0.488
Fixed line telephone	8208	0.593	0.491
Bicycles	8208	0.488	0.500
Washing machine and dryers	8208	0.434	0.496
Computer	8208	0.391	0.488
Fruit juicing machine	8208	0.367	0.482
Water heater	8208	0.339	0.474
Internet connection	8208	0.269	0.443
Air-conditioner	8208	0.267	0.442
Multi-tier stereo	8208	0.263	0.440
Microwave oven	8208	0.181	0.385
Camera, Video camera	8208	0.165	0.371
Cars	8208	0.043	0.203

Similarly, we converted the categorical housing variables into binary form. Table 13 below presents the condition of housing and the average probability that an individual is living in a corresponding type. The highest educational qualification of the head of household is used as a measure of educational attainment.

Table 13. Probabilities for housing conditions

Condition of current dwelling	Obs	Mean	Std. Dev.
Type of Household Dwelling			
Detached Unit Occupied by One Households	8208	0.652534	0.476194
Detached Unit Occupied by Several Households	8208	0.096735	0.295614
Separate Apartment	8208	0.052266	0.222577
Apartment Shared with Several HH	8208	0.003777	0.061343
Room in a Larger Unit	8208	0.016569	0.127658
Shared Room or Dormitory	8208	0.147295	0.354422
Improvised/Leu Lan	8208	0.015595	0.123908
Major Material of the Roof			
Reinforced Concrete	8208	0.385843	0.486824
Tile (Concrete, Baked Clay)	8208	0.122929	0.328376
Sheets (Asbestos, Metal)	8208	0.471248	0.499203
Leaves, Thatched, Oil Paper	8208	0.009137	0.095158
Major Construction Material of the External Walls			
Reinforced Concrete	8208	0.010478	0.101829
Bricks/Rocks	8208	0.949318	0.219361
Wood, Metal	8208	0.02059	0.142015
Dirt/Lime/Thatch	8208	0.001097	0.033097
Bamboo Wattle/Bamboo Screen/Plywood	8208	0.016326	0.126732
Primary Material of the Floor			
Concrete	8208	0.016326	0.126732
Wood	8208	0.898757	0.301668
Tile	8208	0.049464	0.216848
Lino	8208	0.004752	0.068771
Clay/Earthen	8208	0.015716	0.124384
Ownership of This Dwelling			
Owned by HH Member(s)	8208	0.653874	0.475763
Jointly Owned with Family Members not in the HH	8208	0.022417	0.148045
Rented	8208	0.206871	0.405087
Borrowed	8208	0.029849	0.170181
% Have to Pay for Using the House			
Yes	8208	0.205653	0.404203
No	8208	0.783869	0.41163
Main Source of Drinking Water			
Individual Tap	8208	0.560916	0.496306
Bought (In Tank, Bottled, or in a Jar)	8208	0.102827	0.303751
Deep Drill Well with Pump	8208	0.299829	0.458211
Deep Well, Constructed Well	8208	0.01194	0.108621
Hand-Dug Well	8208	0.006701	0.081589
Rainwater	8208	0.005604	0.074656
Type of Toilet			
Septic Tank/Semi-Septic Tank	8208	0.894981	0.306597
Suilabh	8208	0.015351	0.122952

Condition of current dwelling	Obs	Mean	Std. Dev.
Double Vault Compost Latrine	8208	0.052144	0.222331
Toilet Directly Over the Water	8208	0.008894	0.093892
Other	8208	0.015473	0.123431
No Toilet	8208	0.00268	0.051705
Own-Use Toilet or Shared Toilet			
Shared Toilet in a Multiple Occupancy Unit	8208	0.823221	0.381505
Communal Toilet Serving a Locality	8208	0.152656	0.359678

Table 14 presents average asset indices for the four groups identified in previous sections of this paper. Group 1 (less than 6 months at current residence) has the lowest average well-being score. However, there is substantial variation within this group, which includes the poorest respondents as well as some relatively well off households and individuals. Long-term unregistered households, many of which would also be excluded from VHLSS, are also poorer on average than registered households and individuals. These finding are consistent in Hanoi and Ho Chi Minh City, and for the two cities taken together.

Table 14. Mean asset index scores by group and location

All sample - By group					
Both Cities	Obs	Mean	Std. Dev.	Min	Max
Group 1	722	-4.82	3.94	-19.09	4.84
Group 2	265	0.88	2.72	-8.95	5.23
Group 3	1627	-3.12	3.64	-19.09	5.01
Group 4	5594	1.49	1.94	-8.55	5.28
Hanoi	Obs	Mean	Std. Dev.	Min	Max
Group 1	399	-5.20	4.59	-19.09	4.84
Group 2	175	1.28	2.67	-8.95	5.23
Group 3	569	-3.41	4.80	-19.09	4.61
Group 4	3054	1.87	1.87	-8.55	5.28
HCMC	Obs	Mean	Std. Dev.	Min	Max
Group 1	323	-4.35	2.87	-19.09	1.75
Group 2	90	0.10	2.67	-5.60	4.79
Group 3	1058	-2.96	2.82	-19.09	5.01
Group 4	2540	1.02	1.92	-5.70	5.23

Table 15 presents t-tests of asset index group means. First, we compare asset index means for the entire Hanoi and Ho Chi Minh City samples and find that respondents in Hanoi were slightly better off on average than households in Ho Chi Minh City. This is consistent with the earnings figures reported in Tables 10 and 11 for the two cities. However, this doesn't mean that short-term migrants were better off in Hanoi. In fact, Group 1 respondents scored significantly lower on the asset index in Hanoi than in HCMC, although the difference is admittedly not great.

Table 15. T-tests for differences between group means

Group	Obs	Mean	Std. Err.	Std. Dev.	t-stat	Prob(|T|>|t|)
Counted*	5783	1.51	0.02	1.88	61.70	0.000
Not counted	2425	-3.60	0.08	3.86		
Group 1	722	-4.82	0.15	3.94	34.98	0.000
Others	7486	0.46	0.04	3.09		
With *Ho khau*	5859	1.46	0.03	1.99	61,23	0.000
Without *Ho khau*	2349	-3.64	0.08	3.82		
Hanoi	4197	0.46	0.06	3.81	13.40	0.000
HCMC	4011	-0.48	0.05	3.09		
Hanoi Group 1	399	-5.12	0.23	4.57	2.67	0.008
HCMC Group 1	323	-4.38	0.16	2.87		

*'Counted' refers to individuals who would normally be counted using the VHLSS sampling method, namely: 1) live at least 6 months in the current location; 2) do not live in a dormitory or improvised housing; or 3) do not live in single-member households. 'Uncounted' refers to people who do not meet these criteria.

Second, we construct a group that we call 'counted,' that consists of all respondents that would be included under the standard VHLSS sampling methodology. Counted households and individuals meet the following criteria: they have lived in the same location for at least six months; they do not live in a dormitory or improvised housing; and they do not live in single-member households. 'Uncounted' individuals and households do not meet all of these criteria, and therefore would be excluded from VHLSS. We find that the average asset index for uncounted households is significantly less than counted households. The difference in average possession scores between the two groups is extremely large. This finding explains the low urban poverty rates calculated on the basis of VHLSS data. The poor are simply missing from these estimates.

Next, we compare asset index means for Group 1 households and individuals—in other words, unregistered temporary migrants—to means for Groups 2, 3 and 4. Unregistered temporary migrants record significantly lower asset index scores on average. Finally, we compare all registered households and individuals (possessing a local *ho khau*) against unregistered households and individuals (no *ho khau*) and again find a significant difference in asset index means.

The comparison of asset index group means demonstrates convincingly that households and individuals that would have been excluded from successive VHLSS surveys are significantly less well off than those that would have been included. This finding explains the low rates of urban poverty recorded in VHLSS. For example, the 2008 VHLSS estimates an urban poverty rate for the nation as a whole of 3.3 percent. We conclude that a more inclusive sampling method, such as the one adopted in the UPS 2009, would produce a more realistic estimate of urban poverty.

Conclusions

Megacities like Bangkok, Jakarta and Shenzhen are surrounded by sprawling, peri-urban zones, most of which have sprung up over the past few decades. These areas are home to factories

and workshops and other enterprises that have attracted millions of migrant workers from rural areas and from other cities, and the neighbourhoods and squatter settlements in which they live. Over-crowding, under-supply of clean water and electricity, poor sanitation and limited access to health and education services in these areas present tremendous challenges to city governments across the region.

Despite growing awareness of the urgent need to address urban poverty in the region, most official poverty studies still report extremely low headcount rates of urban poverty. The World Bank believes that the poor make up only two percent of the urban population in the East Asia and Pacific region.

How do we square these opposing images of Asia's cities? Unfortunately, urban poverty is real, and it is the statistics, rather than our perceptions, that are incorrect. Part of the problem is that official sources adopt extremely low urban poverty lines, which generate low headcount rates of poverty. Another factor is that official surveys use sampling methods that systematically exclude migrant households and individuals.

In this paper we have reviewed results from Vietnam's Urban Poverty Survey (UPS), a survey conducted in Hanoi and Ho Chi Minh City in 2009. UPS used an innovative sampling method that captured migrants that are normally missed by the Vietnam Household Living Standards Survey (VHLSS), the survey that is used to generate official poverty rates. We examined some of the main characteristics of the 'missing migrants' included in UPS, and found that they were more likely to live on their own, in shared accommodation or other non-standard housing, and were more likely to work as wage labourers. They were less likely to have a labour contract than other workers, and on average they had lower levels of educational attainment than other groups in the sample.

We then constructed an asset index of well-being consisting of ownership of durable goods, physical characteristics of respondents' houses and educational attainment of household heads. On the basis of the asset index, we found that the missing migrants were significantly poorer than respondents that would have been included in VHLSS. In other words, VHLSS systematically excludes the poorest group of urban dwellers because of the peculiarities of its sampling methodologies.

This finding is significant for several reasons. First, if VHLSS were to adopt sampling methods that include short-term migrants in the sample it is highly likely that estimates of urban poverty in Vietnam would rise. Indeed, it is also likely that estimates of *rural* poverty would increase in view of the importance of mobility in the survival strategies of rural people. A revised sampling methodology would also result in more accurate estimates of inequality, both among households and between rural and urban areas.

Second, and more importantly, the inclusion of migrants in living standards surveys will help researcher gain a better understanding of the relationship between mobility, poverty reduction and development. Once the important role of mobility is recognized, policy makers will be less easily persuaded by geographical approaches to poverty that assume that poor people always live in poor areas, and that the secret to poverty alleviation is therefore to reduce the number of poor areas. We would be able to move beyond policies that target places to policies that target causes, for example access to stable employment, affordable health care and education and other essential services.

Finally, better coverage of migrants will help policy makers address the specific problems faced by the urban poor, including administrative obstacles to obtaining local residence status. The discussion of the Draft Capital City Law in the National Assembly has focused on the imposition of additional administrative requirements to prevent migrants from obtaining a *ho khau* in Hanoi. (Đức Minh 2010; Lê Kiên 2010). Early drafts of the bill, which have since been modified, required new residents of Hanoi to demonstrate that they had lived in the city for five years and earned at least twice the minimum wage. The attempt of Hanoi legislators to reduce urban poverty by ejecting the

poor from the city mirrors similar efforts in China. For example, the Beijing authorities have begun to lock migrants into their peri-urban neighbourhoods at night to reduce crime in the capital city. The policy, known as 'sealed management,' requires residents of sixteen wards heavily populated by migrants to obtain special permits to leave the area after 11 p.m. (Anna 2010). The belief that urban poverty can be reduced by confining the poor to urban and suburban areas is based on the erroneous assumption that the economic growth in Hanoi and Beijing is unrelated to the arrival of large numbers of migrants who work in the factories, on the construction sites and in the service industries in these cities. Policies that restrict population movement do not reduce poverty, but instead shift the social costs of urban poverty from the government to the poor themselves.

Social scientists can contribute to our understanding of the relationship between mobility, development and poverty reduction. But they must begin with accurate data, and must explicitly recognize the limitations of the data when making policy recommendations. The Urban Poverty Survey represents an important first step towards a more comprehensive and accurate accounting of population mobility in Vietnam. With some refinements, the methods used in this survey could be usefully applied to other social surveys including the VHLSS and labour force surveys. This would likely result in higher estimates of urban poverty. It would also produce concrete information on the living and working conditions of the urban poor, which would help government agencies to formulate policies to improve living standards and promote equality in Vietnamese cities.

References

Anna, Cara (2010) 'China Starts Gating, Locking, Lower Income Neighbourhoods,' *Huffington Post*, July 14. http://www.huffingtonpost.com/2010/07/14/china-starts-gating-locki_n_646268.html.

Breman, Jan (1996) *Footloose Labour: Working in India's Informal Sector*, Cambridge: Cambridge University Press.

Browning, Martin, Thomas F. Crossley and Guglielmo Weber (2003) 'Asking Consumption Questions in General Purpose Surveys,' *Economic Journal*, 113, F540-F657.

Cline, William R. (2010) 'Exports of Manufactures and Economic Growth: The Fallacy of Composition Revisited,' in Michael Spence and Danny Leipziger, eds. *Globalization and Growth: Implications for a Post-Crisis World*, Washington, DC: World Bank, p. 195-234.

Đạng Trung Kiên (2010) 'Nông dân đi…ở trọ,' Lao Đọng, November 4, http://www.laodong.com.vn/Tin-Tuc/Nong-dan-di-o-tro/19267

De Brauw, Alan and Tomoko Harigaya (2007) 'Seasonal Migration and Improving Living Standards in Vietnam,' *American Journal of Agricultural Economics*, 89:2, 430-447.

Đức Minh (2010) Dự án Luật Thủ đô: Nhiều tranh luận chưa ngã ngũ,' Pháp Luật, March 7, http://phapluattp.vn/20100306103716528p0c1013/du-an-luat-thu-do-nhieu-tranh-luan-chua-nga-ngu.htm.

Filmer, Deon and Lant Pritchett (2001) 'Estimating Wealth Effects Without Expenditure Data – or Tears: An Application to Educational Enrollments in States of India,' *Demography*, 38: 115–32.

Hardy, Andrew (2003) *Red Hills: Migrants and the State in the Highlands of Vietnam*, Singapore: NIAS Press and Institute for Southeast Asian Studies.

Kabeer, Naila (2000) *The Power to Choose: Bangladeshi Women and Labour Market Decisions* in London and Dhaka, London: Verso.

Kim Tuyên (2010) 'Công nhân tự 'tăng ca,' Tuoi Tre, March 24, http://tuoitre.vn/Chinh-tri-Xa-hoi/Phong-su-Ky-su/369907/Cong-nhan-tu-%E2%80%9Ctang-ca%E2%80%9D.html.

Krishna, Anirudh (2007) 'For Reducing Poverty Faster: Target Reasons Before People,' *World Development*, 35:11, p. 1947-1960.

Lê Kiên (2010) 'Dự thảo Luật thủ đô mới nhất: Bỏ quy định cụ thể về nhập hộ khẩu,' Tuổi Trẻ, February 21, http://tuoitre.vn/Chinh-tri-xa-hoi/Phap-luat/364517/Du-thao-Luat-thu-do-moi-nhat-Bo-quy-dinh-cu-the-ve-nhap-ho-khau.html.

Nguyen Thu Phuong, Tran Ngo Thi Minh Tam, Nguyen Thi Nguyet and Remco Oostendorp (2008) 'Determinants and Impacts of Migration in Vietnam,' DEPOCEN Working Paper Series No. 2008/01,

http://depocenwp.org/upload/pubs/TranNgoMinhTam/Determinants%20and%20Impacts%20of%20Migration%20in%20Vietnam_DEPOCENWP.pdf

Phan Diep and Ian Coxhead (2010) 'Inter-provincial migration and inequality during Vietnam's Transition,' *Journal of Development Economics*, 91, p. 100-112.

Pincus, Jonathan and John Sender (2008) 'Quantifying Poverty in Viet Nam: Who Counts?' *Journal of Vietnamese Studies*, 3:1, 108-150.

Pradhan, Menno (2001) Welfare Analysis with a Proxy Consumption Measure

Evidence from a repeated experiment in Indonesia,' Cornell University Food and Nutrition Policy Program, March, http://www.cfnpp.cornell.edu/images/wp126.pdf.

Ravallion, Martin ,Shaohua Chen and Prem Sangraula (2007) 'New Evidence on the Urbanization of Global Poverty, World Bank Policy Research Working Paper No. 4199, April, http://ssrn.com/abstract=980817.

Sahn, David and David Stifel (2003) 'Exploring Alternative Measures of Welfare in the Absence of Expenditure data,' *Review of Income and Wealth*, 49: 463–89;

Seema Vyas and Lilani Kumaranayake (2006) 'Constructing Socio-Economic Status Indices: How to Use Principal Components Analysis,' Health Policy and Planning, 21:6, 459-468.

Thái Phương (2009) 'Thân phận nữ công nhân sau ánh đèn khu công nghiệp,' Vietnamnet, September 8, http://vietbao.vn/Viec-lam/Than-phan-nu-cong-nhan-sau-anh-den-khu-cong-nghiep/20867395/271/.

Todaro, Michael (1970) 'Migration, Unemployment and Development: A Two Sector Analysis,' American Economic Review, 60:1, 126-142.

Topalova, Petia (2007) 'Trade Liberalization, Poverty and Inequality,' in Ann Harrison, ed., Globalization and Poverty, Chicago: University of Chicago Press, p. 291-336.

UNFPA (2010) Internal Migration: Opportunities and Challenges for Socio-Economic Development in Vietnam, Hanoi, July.

Warr Peter (2008) 'Poverty Reduction Through Long Term Growth: The Thai Experience,' Working Paper 2008/19, Canberra: Australian National University, Research School of Pacific and Asian Studies, Working Papers in Trade and Development, August,

http://rspas.anu.edu.au/economics/publish/papers/wp2008/wp_econ_2008_19.pdf.

Wu, Fulong, Chris Webster, Shenjing He and Yuting Liu (2010) Urban Poverty in China, Cheltenham: Edward Elgar.